1414

Hedd yr Ynys Excavation, Lôn Fron, Llangefni, Anglesey

Final Excavation Report

Cadw

Llywodraeth Cymru
Welsh Government

Ymddiriedolaeth Archaeolegol Gwynedd
Gwynedd Archaeological Trust

Hedd yr Ynys Excavation,

Lôn Fron, Llangefni, Anglesey

Final Excavation Report

Project No. G2455

Report No. 1414

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Prepared for: Cadw

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Cover photograph: volunteers hard at work with drawings of finds inset

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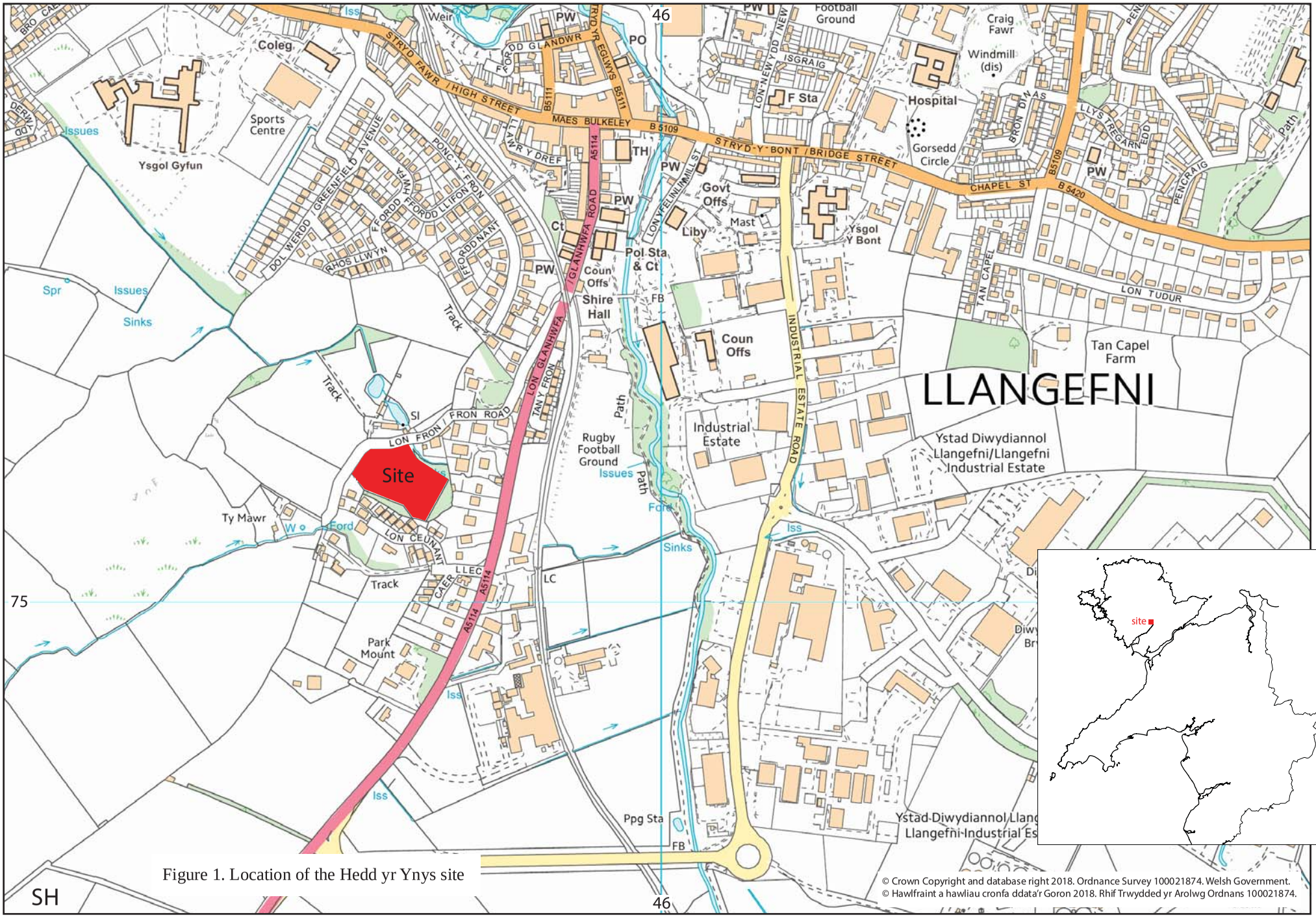


Figure 1. Location of the Hedd yr Ynys site

G2455 HEDD YR YNYS EXCAVATION 2016

HEDD YR YNYS, LÔN FRON, LLANGEFNI (PRN 32799, SH 4566 7518)

GAT report 1414, Event PRN 45046

SUMMARY

A volunteer excavation was undertaken in July 2016 by Gwynedd Archaeological Trust, grant aided by Cadw, to investigate geophysical anomalies identified in a field on the southern outskirts of Llangefni, Anglesey (centred on SH 456 752). The area was chosen for investigation because of a discovery in the 19th century of an early medieval cemetery somewhere near this location. Two previous projects had tried to locate this cemetery and the excavation was designed to investigate geophysical anomalies possibly relating to the cemetery.

The excavation failed to find any trace of the cemetery but demonstrated that the geophysical survey was accurate in detecting archaeological features. Most of the features consisted of drainage gullies or field boundaries of unknown but presumably fairly late date (17th century or later). Probably, though not certainly, in the 17th and 18th centuries large pits were dug, of uncertain function. Prior to that, probably in the 16th or earlier 17th centuries, there were several small sub-rectangular ditched enclosures. One of which was well-drained and may have been a hay rick or similar feature. Some pit digging and other activity was associated with these and possibly there was some smithing in the area but not very close to the site.

Of most significance is the early medieval radiocarbon date (6th or 7th century AD) from a small feature towards the southern side of the trench. This may be associated with other small pits in the area. Charred cereal grains in this feature demonstrate cultivation of cereals in the area at this time. Towards the middle of the site a deposit of pale clay and surrounding slight features may possibly indicate the location of a structure of the same period. This had a reused saddle quern top-stone set into the ground, probably for use as a bake-stone. However the full significance of these features is not known. Metal-detecting undertaken as part of the project recovered a large number of finds from the excavation trench and field but most of these were 19th or 20th century in date. A small number of Roman objects were recovered including a trumpet brooch and a 3rd century coin and this Roman activity was supported by a small number of Roman pot sherds. Medieval activity was represented by a 13th century seal matrix and a lead spindlewhorl.

Cynhaliwyd cloddiad gwirfoddol ym mis Gorffennaf 2016 gan Ymddiriedolaeth Archaeolegol Gwynedd, gyda chymorth grant gan Cadw, i ymchwilio i anghysondebau geoffisegol a ganfuwyd mewn cae ar gyrion deheuol Llangefni, Ynys Môn (yn canolbwyntio ar SH 456 752). Dewiswyd ymchwilio i'r ardal hon oherwydd bod mynwent o ddechrau'r Oesoedd Canol wedi'i darganfod yn rhywle ger y lleoliad hwn yn ystod y 19eg ganrif. Roedd dau brosiect blaenorol wedi ceisio dod o hyd i'r fynwent hon a diben y cloddiad oedd ymchwilio i anghysondebau geoffisegol a allai fod yn gysylltiedig â'r fynwent.

Ni lwyddwyd i ddod o hyd i olion o'r fynwent yn ystod y gwaith cloddio, ond gwelwyd bod yr arolwg geoffisegol yn gywir yn yr ystyr fod nodweddion geoffisegol wedi'u canfod. Rhigolau draenio neu ffiniau caeau oedd y mwyafrif o'r nodweddion, ac er bod eu dyddiad yn anhysbys gellid tybio ei fod yn eithaf hwyr (17eg ganrif neu'n ddiweddarach). Ni ellir dweud yn sicr, ond mae'n debyg fod pyllau mawr wedi'u cloddio yn ystod yr 17eg a'r 18fed ganrif. Nid yw'n hysbys beth oedd eu swyddogaeth. Cyn hynny, yn ystod yr 16eg ganrif neu yn gynnar yn yr 17eg ganrif mae'n debyg, roedd nifer o lociau ffosog bach is-betryalog. Roedd un o'r rhain wedi'i ddraenio'n dda ac mae'n bosib mai tas wair neu nodwedd debyg ydoedd. Roedd rhywfaint o gloddio pyllau a gweithgarwch arall yn gysylltiedig â'r rhain ac, o bosib, roedd rhywfaint o ofannu'n digwydd yn yr ardal, ond ddim yn agos iawn i'r safle hwn.

Y peth mwyaf arwyddocaol yw'r dyddiad radiocarbon o ddechrau'r Oesoedd Canol (6ed neu 7fed ganrif OC) a gafwyd o nodwedd fechan tuag ochr ddeheuol y ffos. Gall hon fod yn gysylltiedig â phyllau bach eraill yn yr ardal. Mae grawn golosgedig yn y nodwedd hon yn dangos bod grawn yn cael eu tyfu yn yr ardal bryd hynny. Tua chanol y safle, mae'n bosib fod dyddodyn clai lliw golau a nodweddion bychain o'i amlygych yn dangos lleoliad adeiledd o'r un cyfnod. Roedd hwn yn cynnwys carreg uchaf breuan gyfrwy wedi'i hailddefnyddio, wedi'i gosod yn y ddaear, i'w defnyddio fel maen pobi fwy na thebyg. Fodd bynnag, nid yw holl arwyddocâd y nodweddion hyn yn hysbys. Mae gwaith gyda datgelyddion metel a wnaed fel rhan o'r prosiect wedi arwain at nifer fawr o ganfyddiadau o'r ffos a maes cloddio, ond roedd y mwyafrif o'r rhain yn dyddio o'r 19eg a'r 20fed ganrif. Canfuwyd nifer fechan o wrthrychau Rhufeinig, gan gynnwys tlws trwmped a darn arian o'r 3edd ganrif, ac roedd nifer fechan o deilchion Rhufeinig i gefnogi'r gweithgarwch Rhufeinig hwn. Y nodweddion a oedd yn dangos gweithgarwch canoloesol oedd matrics seliau o'r 13eg ganrif a throellen gwerthyd.

1. INTRODUCTION

A volunteer excavation was undertaken by Gwynedd Archaeological Trust (GAT), grant aided by Cadw, to investigate geophysical anomalies identified in a field on the southern outskirts of Llangefni. The field is located on Lôn Fron (centred on SH 456 752) about 100m to the west of the A5114 and immediately to the south of a house called Hedd yr Ynys (figure 1).

The area was chosen for investigation because of a discovery in the 19th century of an early medieval cemetery (PRN 2680) somewhere near this location. Two previous projects carried out by GAT in 2002 and 2012-13 included investigations to try and locate this cemetery. The first consisted of geophysical survey and trial trenching in a field to the north of Lôn Fron, but produced no evidence for burials (Davidson *et al* 2002). A geophysical survey was carried out in the current field in 2012 revealing a range of archaeological anomalies including two small sub-rectangular enclosures interpreted as possibly early medieval mortuary enclosures (Flook 2013, 54-58).

The current work aimed to investigate the geophysical anomalies to establish whether this was indeed the site of the reported cemetery. The proximity of the site to Llangefni, potentially large area that could be opened, supportive landowners and guarantee of a certain number of features to investigate made this an ideal site for a community excavation. It is also close to the Tudur Ward Communities First area in Llangefni, making access to the site by people living in that ward relatively easy. One of the major objectives, in addition to clarifying the nature of the archaeology, was to provide as many people as possible with the opportunity to work on a genuine archaeological site, and to open the site for other visitors so that the awareness of archaeology in the area could be raised. This project aimed to encourage participation in conservation projects and provide vocational training, as well as contributing to new research.

2. BACKGROUND

In the early 19th century a cemetery was found near Fron, Llangefni. The original report was published in 1829 and read as follows:

> '*While some workmen were lately demolishing a boundary hedge between Glan Hwfa farm and Fron, in the parish of Llangefni, Anglesey, a great number of graves were found, composed of stones for sides and ends, and some covered over, containing human bones; there were about thirty entire graves, infants and adults, besides detached parts of others, with fragments of bone of more apparent antiquity*' (Gomme 1887, 401).

This find was also noted by Angharad Llwyd, who claimed forty skeletons were found. These appeared "to have been hastily interred", and in an adjoining field a "great number of human bones are scattered in every direction" (Llwyd 2007, 134).

The stone-lined graves described in Gomme's more detailed and less fanciful version are suggestive of an early medieval cemetery, perhaps dating as early as 6th or 7th centuries AD. Nothing more is known about this find, most importantly its exact location.

In 2002 Gwynedd Archaeological Trust, grant aided by Cadw, investigated a field near Fron to try and find this cemetery. A geophysical survey was carried out of the field, which revealed the remains of several field boundaries, and trial trenches were dug to investigate these and test for the presence of graves (figure 2). The boundary ditches were confirmed and furrows running parallel to them were found but no traces of graves (Davidson *et al* 2002, 43-44, 77-78).

Archive work by Alison Brigstocke of Talwrn Archaeology Group subsequently indicated that a field immediately south of the house called Hedd yr Ynys might be a more likely candidate. In 2012 Roland Flook of Gwynedd Archaeological Trust under took a geophysical survey of the Hedd yr Ynys field as part of the SW Anglesey Landscape Survey Project funded by Cadw and Ynys Môn Council (figures 3 and 4). This revealed various old field boundaries running across the field but also two small sub-circular and sub-rectangular enclosures (features 12 and 13 on figure 4). These have small pit-like features inside and look rather like mortuary enclosures that are found in some early medieval cemeteries (Flook 2013, 54-58).

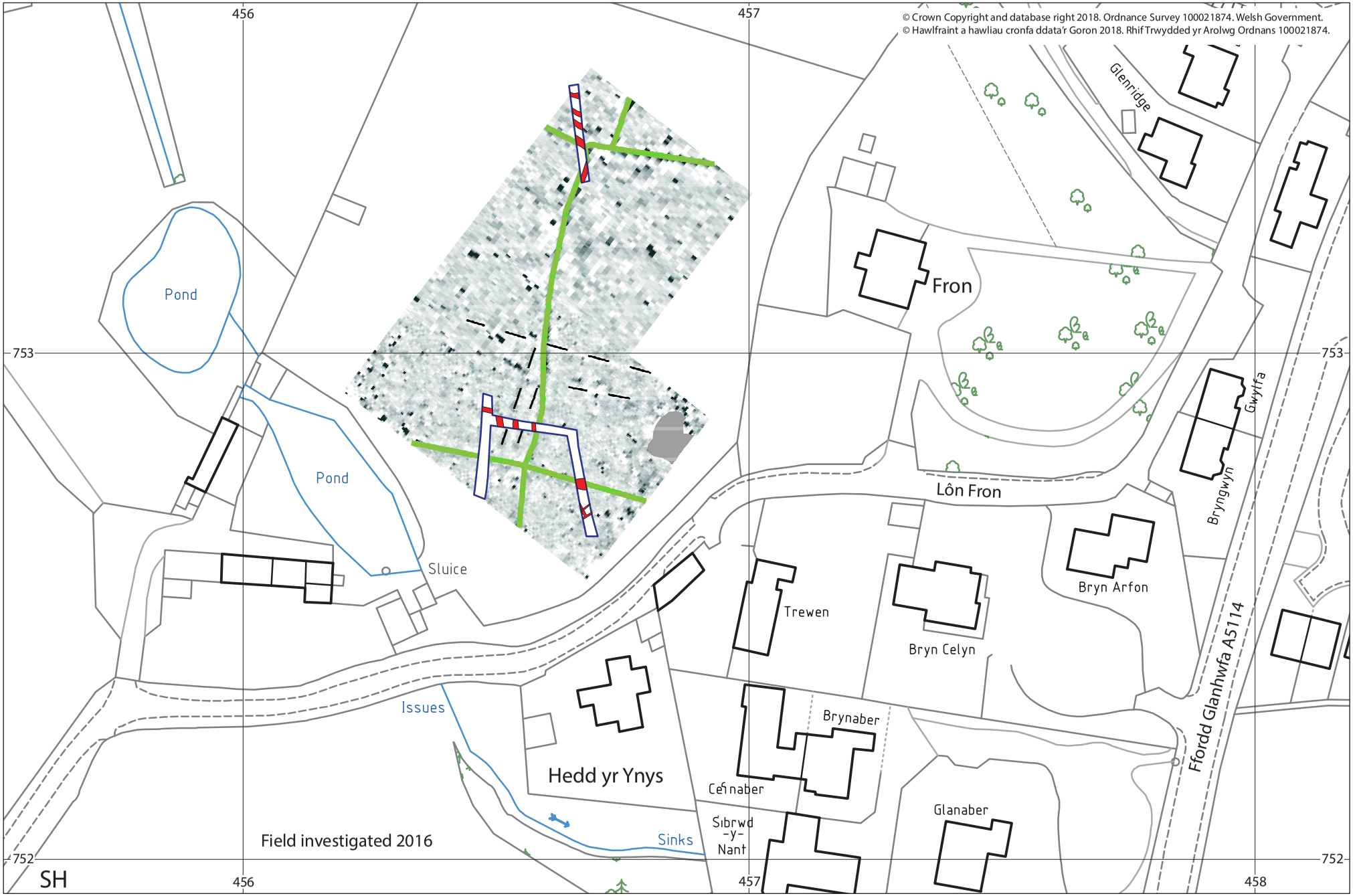


Figure 2. 2002 geophysical survey and trial trenches west of Fron: former field boundaries picked out in green and excavated ditches and furrows in red.

Other features revealed by the geophysical survey, including enclosures and parts of curvilinear and rectangular features, indicated the multi-phase use of the site. A metal-detector survey discovered several pieces of worked copper alloy sheet that were probably modern, whilst field walking located a sherd of probable Roman coarse ware.

The geophysics features were allocated PRN 32799, and this PRN will be used to refer to the findings of the current excavation as this is a direct investigation of the features located by the geophysical survey.

Some early medieval cemeteries have special graves indicated by mortuary enclosures. These enclosures are generally defined by a shallow ditch marking out a square or rectangular enclosure, often with a gap in one side which appears to be an entrance. It is generally assumed that soil from the ditch would have been heaped over the burial inside the enclosure forming a low mound or barrow, so these features are sometimes known as square barrows.

Between one and three graves are generally found inside mortuary enclosures and other graves often seem to have been positioned around these enclosures, using them as a focus. Mortuary enclosures of this sort have an origin in late Roman cemeteries but in North Wales are usually assumed to date to about 6th to 9th centuries AD; although very few have actually been dated. An extensive cemetery with mortuary enclosures was excavated by Gwynedd Archaeological Trust at Llanbeblig, Caernarfon in 2010 and 2011. A radiocarbon date from the ditch of one of these enclosures showed that it was in existence by the 7th century AD (Kenney and Parry 2013).

The identification of the anomalies at Hedd yr Ynys as mortuary enclosures was not certain as the rectangular feature was larger than most mortuary enclosures and few of these enclosures are sub-circular, so the other feature was not typical. However it was clear that there was considerable activity in the field as revealed by the geophysical survey and the likelihood was that this related to activity dating to the medieval period at the latest.

The site of Hedd yr Ynys lies at the northern end of Malltraeth Marsh. Before the Cob was built across the Malltraeth Estuary in 1812, the Afon Cefni canalised and the marshes drained, the whole area was frequently inundated by the sea. Llangefni grew up at the head of the marshes where the road could cross on dry land but there were many fords across the Afon Cefni and the marshes. The site of Hedd yr Ynys lies to the south of the early centre of the town of Llangefni on raised ground that would have overlooked the end of the marsh (figure 5). It is also adjacent to routes out of the town to the south. This would have been a favourable location for occupation in most periods. The slope of the hill means that the site faces south-east, making it a warm and fairly sheltered location suitable for occupation at any period.

At present the field is surrounded on three sides by modern urban development and is under improved pasture. The bedrock under this area is metamorphic schist of the Gwna Group, with some quartzite and igneous intrusions nearby forming part of the same group. The bedrock is covered by Devensian till including outwash sands and gravels. The geological map shows a band of limestone running through Llangefni a little to the east of the site (Geology of Britain Viewer) (figure 6). However it appears that there are outcrops of this close to the surface beyond the plotted limit as some patches of limestone were visible on the site.

3. METHODOLOGY

3.1. **Excavation**

A trench was located in the eastern corner of the field over the location of the densest archaeology as indicated by the geophysical survey (figure 4). In particular it was located to investigate the possible mortuary enclosures. The trench measured 38m by 25m, and was the largest area that could be stripped in the time available. A Safe Dig Survey was commissioned from PBS Utilities Ltd to check that there were no services in the area of the trench. The only service in the field was the 4 inch water pipe that was clearly visible on the original geophysical survey. This had apparently been installed in 1954. The excavation trench was positioned to be well away from this pipe. In addition a Cable Avoidance Tool was used to scan the area of the trench prior to digging. This was operated by a trained operator and did not reveal any hidden cables.

The topsoil and ploughsoil was stripped with an 18 tonne mechanical excavator under constant archaeological supervision (plate 1). The machine used a toothless ditching bucket throughout and a dumper was used to move the spoil to a storage area south of the trench (plate 2). Turf, topsoil and ploughsoil were stored separately so that

Figure 3. Grey-scale geophysical plot of the Hedd yr Ynys field from GAT report 1127

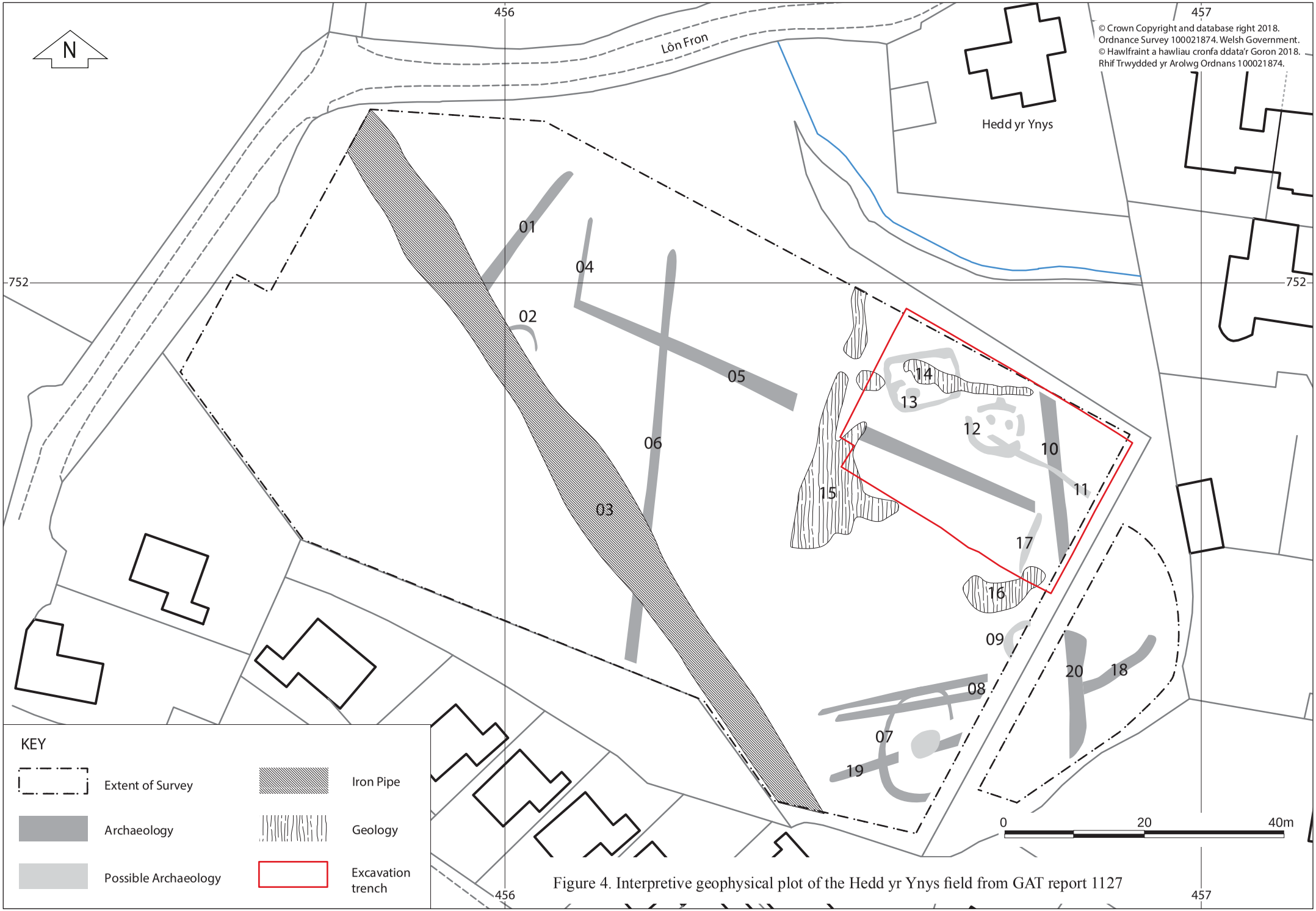


Figure 4. Interpretive geophysical plot of the Hedd yr Ynys field from GAT report 1127

Figure 5. Lidar data for the northern end of the Malltraeth Marshes (low-lying marsh land in light brown, Hedd yr Ynys shown as a red square)

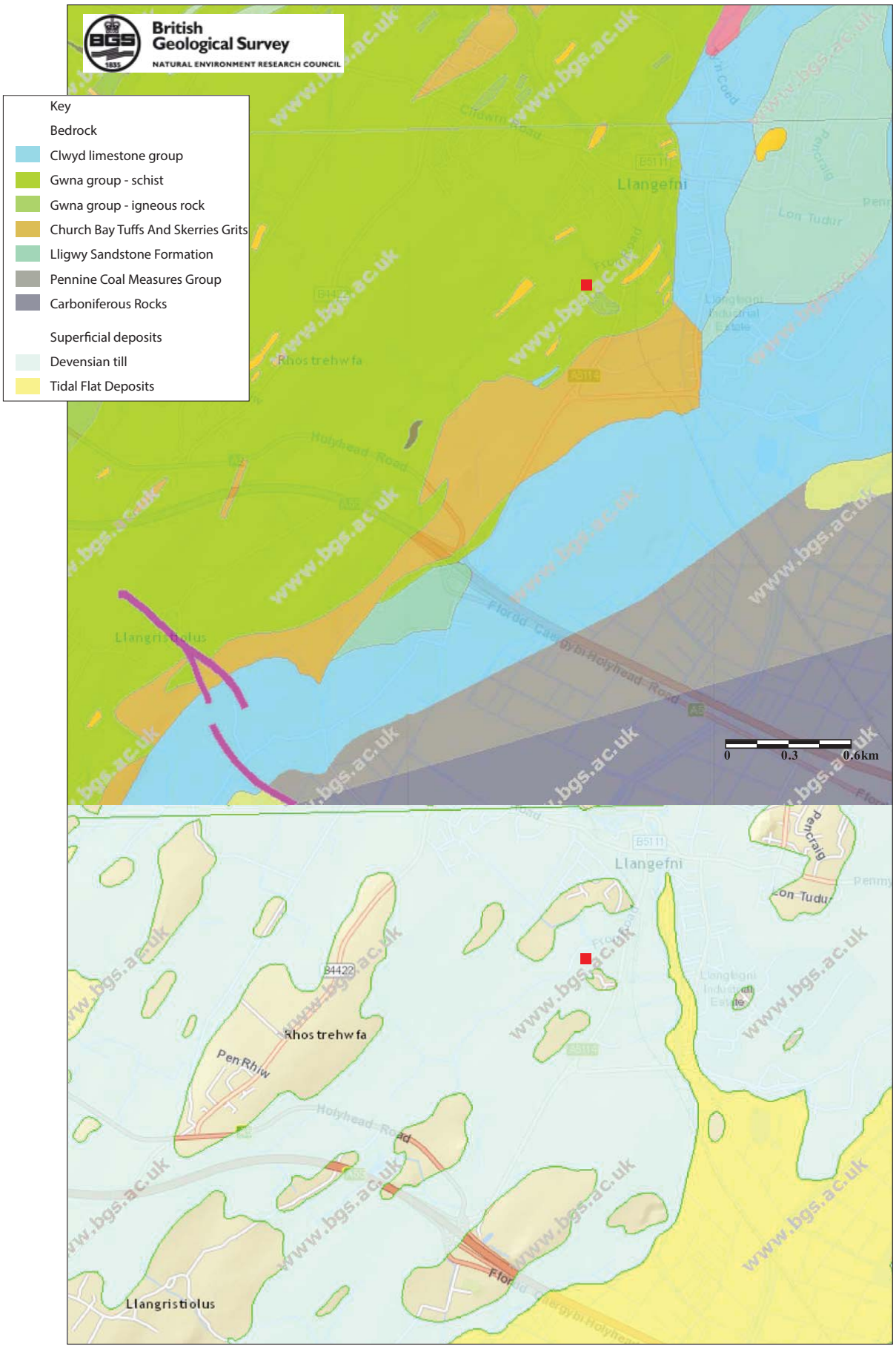


Figure 6. Geology of area around Hedd yr Ynys from Geology of Britain Viewer (bedrock top, superficial deposits bottom, site marked with red square)

they could be replaced in order when backfilling the trench. Spoil was stored well back from the edge of the trench.

Soil was removed in thin spits by the machine allowing the archaeologist to monitor closely what was removed. Stripping stopped when either natural sub-strata had been reached or archaeological features or deposits were visible, particularly collections of stones. At the end of the excavation the soil was replaced and compacted by the machines (plate 3). The turf was mixed into the topsoil and spread evenly over the surface of the trench and in addition grass seed was applied to speed-up the recovery of the field.

The stripping took place on 30th June and 1st July and the backfilling took place on 22nd and 23rd July.

As much of the stripped trench as possible was cleaned by hand, in some places more than once to expose and define features. A part of the south-western side of the trench was not cleaned due to a lack of time but this area had been clearly visible during stripping and it was seen that there were no major features within this area.

Once features had been defined their outlines were plotted on with a survey quality Trimble Global Positioning System (GPS) unit. As many features as possible were sampled by the hand excavation of sondages into or across them. Small or significant features were half sectioned or occasionally fully excavated. Features in the northern corner of the trench were prioritised for investigation as this had the highest density of features but as many as possible elsewhere were sampled with large ditches being given the lowest priority. The timescale and nature of the project meant that not every feature could be sampled. The trench limits were mapped using the GPS equipment and it was also used to establish the height of the Temporary Bench Mark used to calculate levels, which were taken using an automatic level, which the volunteers were trained to use.

Sondages were dug by hand by the volunteers with close monitoring by GAT staff. Photographs were taken using a digital camera set to highest resolution in raw format. Although some recording was done by volunteers during the first two weeks most recording was reserved to the last week when more experienced volunteers helped with the hand drawing of plans (at 1:20 scale), sections (at 1:10 scale) and the writing of notes on proforma context sheets.

All finds were retained and where they were from the fill of a feature or sondage they were recorded by context number. When particularly significant finds were recovered within or beyond features they were given three dimensional locations using the Trimble GPS.

Bulk soil samples were taken from deposits containing charcoal for potential radiocarbon dating and analysis of plant remains. Where the features were small they were sampled 100%, but from larger features 20 litres of soil was taken. No human remains were found.

Context numbers start from 1001, with 1000 assigned to unstratified finds. This numbering was adopted in case another season of work might be carried out on the site, in which case that could use the numbering from 2001. Photograph, finds and sample record numbers all start from 001.

The excavation ran from 4th to 21st July 2016, with more inexperienced volunteers in the first 2 weeks and a smaller team of experienced volunteers in the last week to complete recording. Three GAT staff were present during the first two weeks and two staff during the last week.

3.2. **Metal-detector survey**

As the trench was being mechanically stripped the exposed soil surface was scanned with metal-detectors (plate 4). This was done once the turf was removed and again when the topsoil had been removed. All finds were bagged and labelled and their precise location recorded using a Trimble GPS unit.

When the trench was exposed down to natural or archaeological levels the surface was scanned and any signals marked with white labels marked to indicate iron or non-ferrous signals. This allowed excavators to look out for metal objects when the deposits were excavated by hand. The scanning of the open trench also resulted in the discovery of a Roman coin within a clump of mud from a boot on a particularly wet and muddy day. The context of this find was lost but at least the find itself was recovered which would have been impossible without the metal-detector as the mud completely obscured the coin. Regular checks of the spoil heap ensured no other losses of important finds.

Plate 1. 18 tonne mechanical excavator stripping ploughsoil from the trench

Plate 2. Use of a dumper to move spoil efficiently

Plate 3. Backfilling the trench

Plate 4. Volunteer metal-detecting the ploughsoil in the trench

During the excavation a thorough search of the rest of the field was carried out. This was scanned repeatedly by metal-detectors and finds within the ploughsoil were dug up. Very recent objects were discarded but most finds were collected and their locations recorded using a Trimble GPS unit, so that all finds have accurate three dimensional information.

The metal-detecting was carried out by volunteers highly experienced in detecting using their own good quality equipment. The metal-detecting team consisted of Beaver Hughes, Neil Martins and Ian Harrison Brown with some assistance from Archie Gillespie.

3.3. **Public engagement**

Volunteers

One of the major objectives of the project was to provide the opportunity for as many people as possible to experience working on a genuine archaeological excavation. The opportunity to volunteer was advertised by contacting everyone on the GAT database of volunteers and those who previously expressed an interested in volunteering, as well as the Friends of GAT. However a wider range of volunteers was sought by a piece in the Daily Post requesting volunteers. This was extremely successful, attracting many applications from a wide range of people. The project was also advertised through The Gwynedd Volunteer Centre on their website (www.volunteering-wales.net). Fliers were produced and these were displayed in the Communities First Office and at a Volunteering Information Event held by Medrwn Môn at the Town Hall, Llangefni on 9th June 2016.

The response from potential volunteers was considerable. The deadline for applications was 17th June and confirmation of the days they could work was sent out on 20th June. An attempt was made to accommodate as many volunteers as possible, which meant limiting most volunteers to no more than 5 days. Initially 64 volunteers were offered places on the excavation. A small number of these were experienced volunteers who had previously worked on many GAT sites and two were metal-detectorists, but of most the volunteers had little or no experience.

Some volunteers offered places later cancelled and generally their time was covered by asking other volunteers to extend their hours, although a small number of additional volunteers were invited to join the project. The final total for volunteers involved in the project was therefore 56 individuals (including a support worker attending with one volunteer). A total of 1387.5 hours were worked by volunteers during the excavation (including some voluntary hours worked by Jane Kenney).

The volunteers were divided into age groups as shown in the table below.

Age group	**No. of volunteers**
16-17	4
18-25	6
26-30	4
31-40	6
41-49	6
50-59	8
60+	22
Total	**56**

As usual the largest proportion of the volunteers fell into the oldest age groups but 17.8% of the volunteers were 25 years old or under.

Plate 5. Volunteers undertaking the initial trowelling of the site

Plate 6. Volunteer excavating feature [1009]

Plate 7. Volunteers excavating sondages through ditch [1019]

Plate 8. Volunteers digging and recording features

Plate 9. Very hot dry conditions

Plate 10. Wet conditions

Plate 11. Still smiling

From 4th to 15th July the focus was on volunteers with little or no previous archaeological experience, although some experienced volunteers also assisted. Volunteers generally started by learning trowelling techniques (plate 5) then most were moved on to excavation of features (plates 6 and 7). Some also were given the opportunity to learn drawing skills (plate 8) but the numbers involved meant that training in detailed recording for most people was not possible as there were too few professional staff. All volunteers were given a full health and safety induction and were closely monitored during excavation. The weather was generally favourable but work did continue through both very hot dry weather (plate 9) and one day of wet and miserable weather (plate 10), and the volunteers are to be praised for their determination in continuing working with a smile even when conditions were difficult (plate 11).

In the final week (18th to 21st July) a smaller team of experienced volunteers assisted GAT staff to complete the excavation and recording. Some had done little planning and recording previously and training was given in these skills.

Normally during an excavation such as this visits by children from local schools would be arranged. However uncertainties about the availability of the GAT Outreach officer meant that schools were not contacted until shortly before the dig. Three of the closest schools were contacted to ask if they would like to visit the site. These were two primary schools (Ysgol y Graig and Ysgol Corn Hir) and the secondary school (Ysgol Gyfun). Due to the proximity to the end of term and difficulties in availability of staff only children from Ysgol Corn Hir were able to visit the site. On 11th July 30 pupils from Ysgol Corn Hir attended the site and saw the archaeologists at work. They also saw and discussed the finds from the site. The school visit was led by Rhys Mwyn (plate 12).

Plate 12. Rhys Mwyn discussing finds from the site with children from Ysgol Corn Hir

Open Day

An Open Day was held on the 17th July, allowing the public to visit the site. This was advertised by fliers displayed in the Communities First Office and at a Volunteering Information Event held by Medrwn Môn, through contacting the Friends of GAT and previous volunteers, through the Daily Post and through a piece in Y Glorian, the local Papur Bro for Llangefni. The latter was particularly effective at attracting local people. The event was also mentioned on Welsh language radio.

People were required to book on specific tours so that numbers could be predicted and controlled, but inevitably some people did turn up on the day without booking and joined the next appropriate tour. Parking was arranged in a County Council carpark to avoid too many cars travelling down the narrow lane to the site, but the Morgans allowed one of their fields to be used for parking for those unable to walk.

There were 5 tours in English throughout the day and 3 tours in Welsh, one an unplanned addition due to the number of people attending (plates 13 and 14). 151 people booked on tours and approximately 20 people turned up without booking so about 170 people attended the event. A marquee held displays on the site and other sites in the

Plate 13. Dave Hopewell describing the site to a tour

Plate 14. Welsh and English tours running simultaneously on site

Plate 15. Inside the marquee

Plate 16. Having tea outside the old mill

area, including some of the finds from the site (plate 15). The displays were bilingual and a volunteer generously gave her time to translate the text into Welsh (this time is in addition to the excavation time listed above).

Julia Morgan set up a tea room in the old mill building opposite the site and her friends supplied numerous cakes and sandwiches which were available in return for a donation to Digartref (a charity providing support for the homeless in NW Wales). This provided refreshments for the Open Day visitors and raised well over £600 for the charity. The fine weather made it very pleasant to sit on the lawn, surrounded by flowers having tea (plate 16).

In addition to the Open Day a tour was arranged for the Talwrn Archaeology Group. Thirty members of the group came on 4.30pm on 20th July to see the site and they were also able to view the displays created for the Open Day and to see some of the best finds.

Website and blog

A webpage was set up on the GAT website for the project, providing a focus for enquiries and information. A blog was maintained on the GAT website (http://www.heneb.co.uk/heddyrynys/blog.html) during the excavation so that people could follow the progress of the dig. The blog was available in both English and Welsh with numerous images. The information and photographs were also released on Facebook and Twitter.

3.4. **Report, Dissemination and Archiving**

This report presents the findings of the excavation, the specialist reports on artefacts and ecofacts, and interprets the site as far as is possible from available evidence. It also presents detailed plans and sections of features. The post-excavation work carried out follows proposals presented in the preliminary site report (Kenney 2017) and in the RA1 submitted to Cadw.

This report has been converted into a publication report to be published in the Transactions of the Anglesey Antiquarian Society.

To ensure a wider audience a summary report has been written, aimed at a more popular level to be made available on the GAT website and sent out to volunteers that worked on the site and other interested parties. This summary report has been translated into Welsh.

A talk was given on 12th December 2017 at Canolfan Ebeneser, Llangefni. The aim of this was to present the results of the excavation to the local people and volunteers. The talk was advertised in the papur bro, Y Glorian, in other local media, by informing the volunteers who worked on the site, by posters in Llangefni, and through social media. Despite the level of promotion and the offer of free tea and biscuits only 25 people attended, but this was mainly due to heavy rain on the night on Anglesey and snow and ice on the mainland discouraging people from going out. The talk was also given to the Friends of GAT in on 24th January 2018.

The artefacts from the excavations belong to the landowners, Wynne and Julia Morgan. Their agreement has been obtained in writing for the finds to be donated to Oriel Ynys Môn. The finds have been boxed in appropriate archive quality boxes; an accession number has been obtained and used to label the boxes.

The digital archive, with appropriate metadata will be submitted to the Royal Commission on the Ancient and Historical Monuments of Wales (RCAHMW) who can provide long term active curation of the digital files as well as access to the public.

The site records on paper and drawing film will be held by Anglesey Archives. A copy of the final report will be submitted to the Gwynedd Historic Environment Record (HER) and will be made available on the Archwilio website (www.cofiadurcahcymru.org.uk) as well as on the GAT website (www.heneb.co.uk).

3.5. **Copyright**

4. RESULTS

Descriptions of all contexts are listed in appendix IV. See figure 4 for the location of the trench and figure 7 for the features within the trench. Figure 8 shows the features revealed in the excavation overlaid on the geophysical plot. Details of the north-western end of the trench are shown on figure 9 and those of the south-eastern end on figure 10, and sections are presented on figures 11 to 36, with the locations of the sections marked on figures 9 and 10.

4.1. **Topsoil, ploughsoil and natural**

Figure 7

The topsoil (1001) was a dark brown silt with occasional small stones and was about 0.15m deep. The ploughsoil (1002) was a mid-brown clayey silt with a few stones, which was barely 0.05m deep in places at the north-western end of the site, but reached about 0.2m deep at the eastern end.

Along the north-eastern side of the trench features were initially obscured by a slightly thicker deposit of ploughsoil than occurred over the rest of this part of the trench, although this deposit was never more than 0.1m deep, in addition to the overlying ploughsoil. In the northern corner it was recorded as (1005) and (1006) and further south-east as (1016). In all cases it was relatively rich in finds including post mediaeval pot sherds and iron objects, which presumably collected in this slight slope down from the higher gravelly deposits. The pottery suggests that this deposit built up in the late 17th or early 18th century. The iron objects were generally not closely datable but a wire hook (SF205.11) from a coat may be 17th century in date.

The natural sub-strata over the area of the trench were very varied. Patches of broken limestone bedrock were exposed in places, but much of the area was covered in glacial boulder clay and gravels. The boulder clay, which covered the majority of the site, was a pale yellow silty clay containing small and medium stones, but this clay also appeared in occasional patches of grey and red brown. Overlying the boulder clay in the northern corner of the trench was a red-brown gravel with clay matrix (1057). This was up to 0.6m deep where its depth could be seen, though over most of the area it was much shallower. It contained c.20% small stones with occasional medium stones up to 0.3m long, some of which lie fairly flat and were suggestive of archaeological features, but on close inspection were seen to be firmly embedded in the natural deposits. There were also patches of similar gravel in the eastern part of the trench.

Towards the western side of the trench was an orange-brown clayey silt with few stones (1079). This overlay the boulder clay and appears similar to silt deposits, generally assumed to be post-glacial wind-blown loess, that are seen in many areas on Anglesey. In the southern corner of the trench was an extensive deposit of dark grey-brown silt (1098). This was not investigated but possibly was the result of flooding filling a hollow in this area or maintaining an area of boggy ground.

4.2. **Small ditched enclosures**

Figures 9 and 10

The northern part of the site was difficult to untangle as many of the intercutting features had identical fills making it impossible to see where one feature cut another. This and the lack of time to do more than just sample each feature made it difficult to determine exactly what was happening. However, it was clear that the rectangular enclosure identified by the geophysical survey was present (figure 8). This was revealed to be a shallow ditch [1008] about 0.6m wide and up to 0.35m deep (sections figures 11-13). This ran nearly north-south before turning a gently curving corner to run west-south-west to east-north-east (plate 17). The east-north-eastern end petered out but it is likely that it originally joined another ditch [1025] running perpendicular from the south-south-east. This may well have continued as another small ditch [1125] cut by the larger ditch [1019] or by pit [1055]. The junction of the ditches was where the limestone showed through and it is possible that the ditches were shallower here and did not cut into the rock, so traces of the junction have been lost.

Ditch [1008] had a dark brown clayey silt fill (1007), but part of its northern stretch also contained about 30% large angular and sub-angular stones up to 0.26m long (1070) (plate 18). The stones seemed to be randomly distributed and not positioned to line the feature or form any structure. The northern side of this enclosure was confused by later features, especially a stone-filled land drain [1058]. The enclosure [1008] had several pits and other features within it but it is difficult to determine if any of these were related to the enclosure and they are described below.

The fill of ditch [1008] produced a single find (SF127) (figure 44). This is a slate object, ground and polished to an accurate rectangular section, with a neat facetted point on one end. Its date is very uncertain but is suggested that

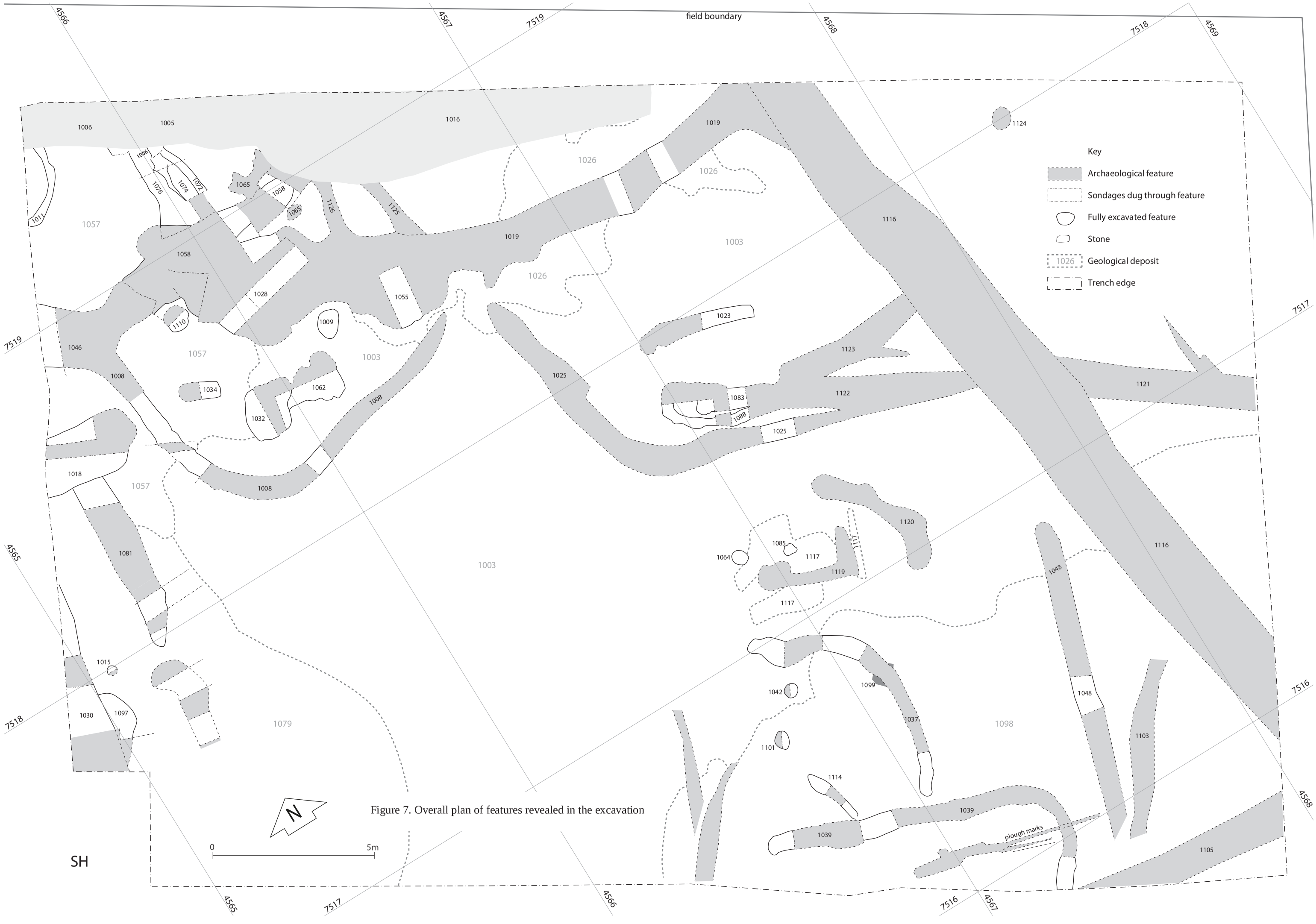


Figure 7. Overall plan of features revealed in the excavation

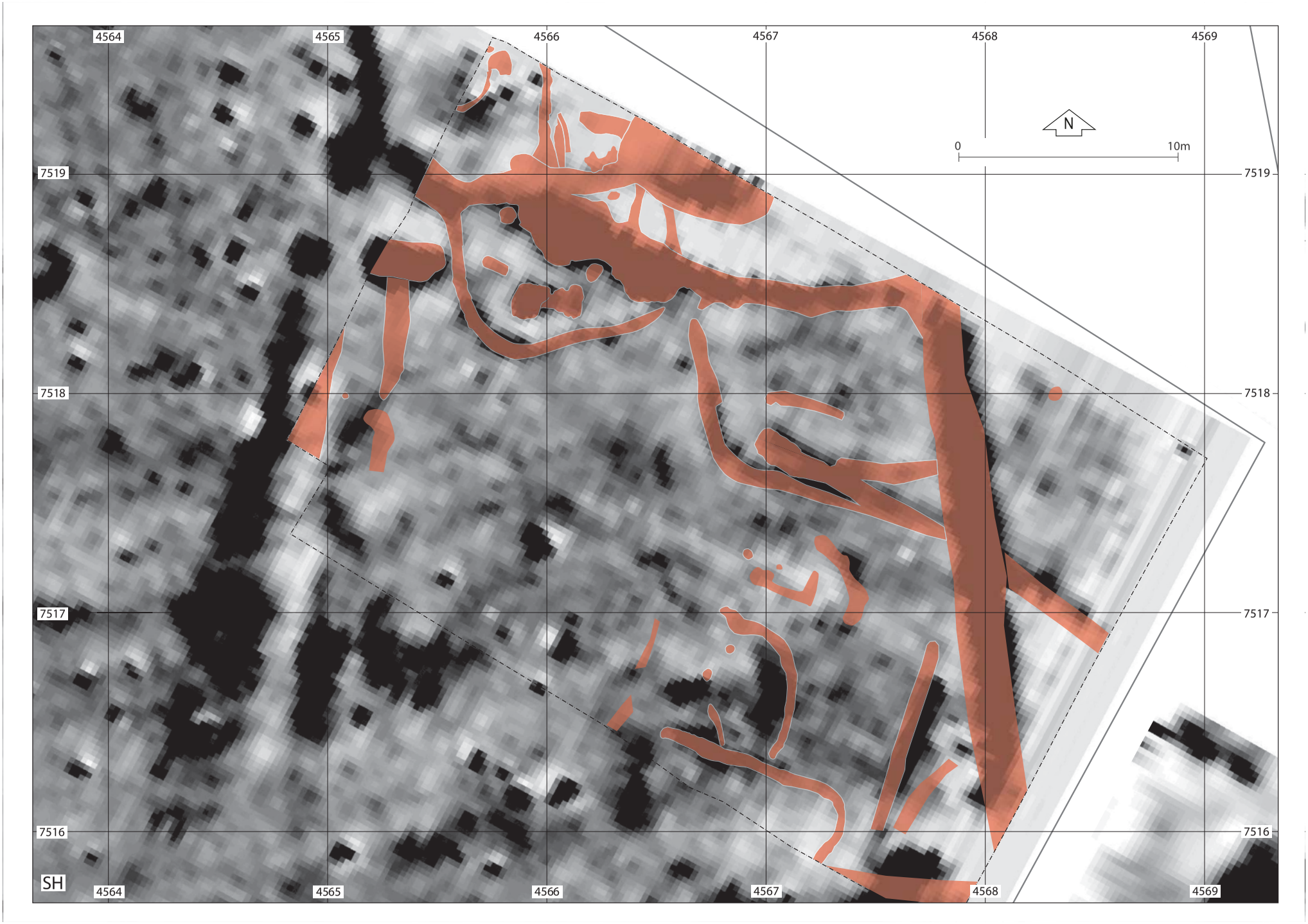


Figure 8. Detail of geophysical survey with outline of features overlaid in red

Plate 17. Curving corner on ditch [1008]

Plate 18. Stony fill (1070) in northern part of ditch [1008]

Plate 19. Sondage across ditch [1025], showing the ditch running south-east until probably cut by ditch [1122]

Key

Trench edge

Sondage

fig 20 — Section line with figure no.

Stone

1098 — Context no. for natural deposits

1064 — Cut number

1113 — Fill or deposit number

In situ finds with find number

4565 4566 4567

7519 7518

N

0 5m

fence/ field boundary

1112 1077 1078 fig 28 1011

fig 26 1092 1052 1067 1095 1066 1052 1003 1094 1093 fig 27 1086 1090

1057 1074 1072 1076

fig 21 SF172 1065 fig 22 1058 1058 1090

1043 1043 1065 1046 1108 1126

1027 1109 1110 1027 fig 18 1125

1070 1057 1028 1027 1056

1017 fig 13 1008 1034 fig 29 fig 17 1019

1017 fig 23 1009 1054

fig 19 fig 20 1018 1057 1031 1061 fig 33 1026

1070 fig 12 1032 fig 25 1020 1021

fig 24 1062 1055 1019 fig 34

1081 1008 1026

SF127

1007 fig 11

1025

1015 1023

1030 1097 fig 33

SH

4566 4567

Figure 9. Detailed plan of features in the north-western part of the trench

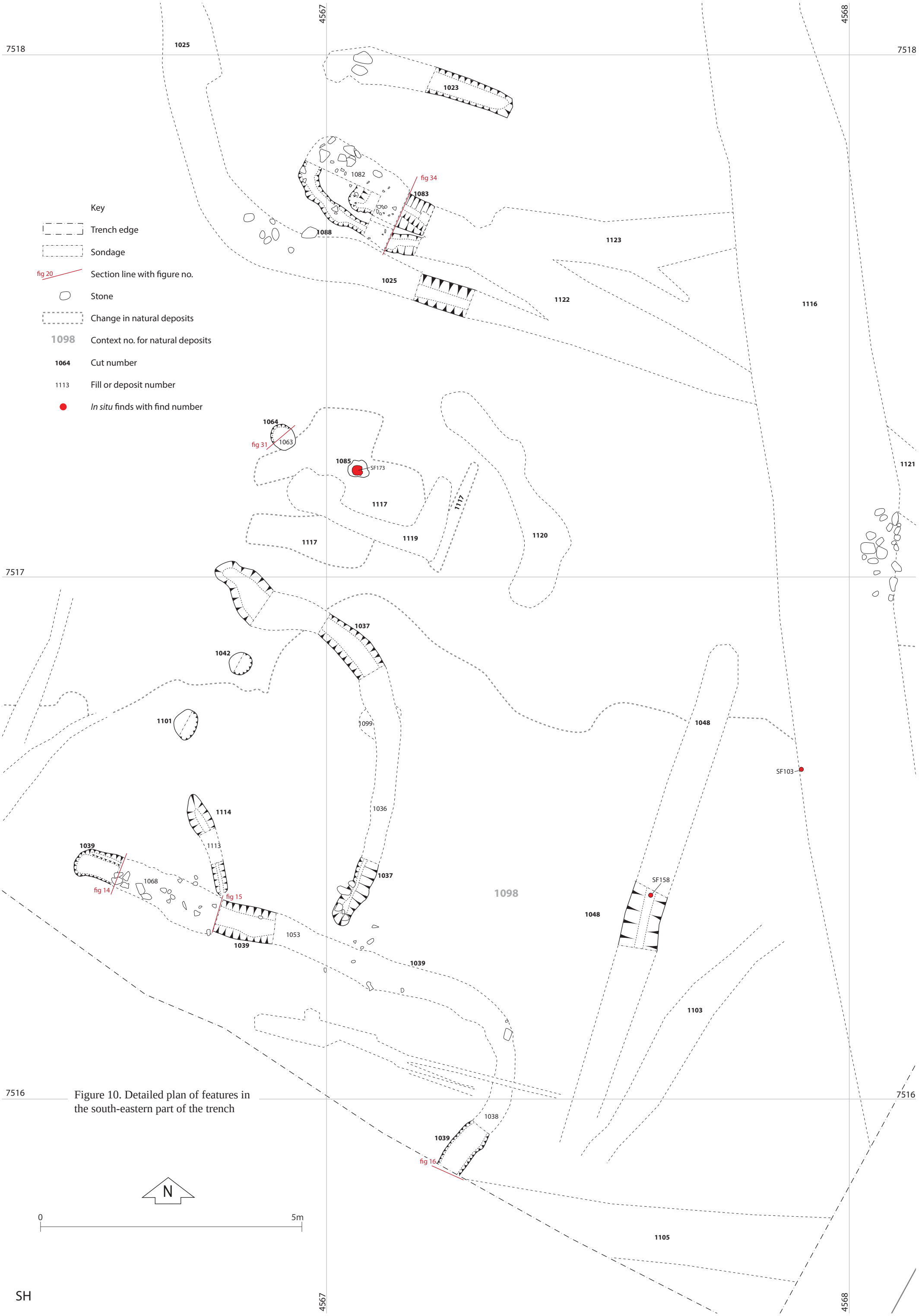


Figure 10. Detailed plan of features in the south-eastern part of the trench

this may have been a post medieval decorative pendant or handle

Ditch [1025] formed part of the feature seen as a sub-circular enclosure on the geophysical plot. The slight anomalies forming the northern part of the circle were seen to be nothing more than variations in the natural and no sub-circular feature was present. Ditch [1025] which was 0.5m wide and 0.18m deep where it was sampled (plate 19) ran north-north-west to south-south-east before turning a corner at a wider angle than [1008] and running south-east before probably being cut by [1122]. Where sampled its fill (1024) was a dark grey silty with occasional stones, but further north the fill contained more clay and had a pink-red hue.

To the north of the eastern part of ditch [1025] was a short length of ditch [1023] (plate 20) which was almost parallel to that part of [1025] and of very similar character, being 0.48m wide and 0.1m deep. Its south-eastern end was a fairly rounded terminus but it may merely have been rising up slightly and the rest of the ditch may have been lost (plate 21). The north-western end was not investigated but appeared to run into a posthole indicated by several fairly large stones. Other features in this area seemed to be later than [1025], although the sequence in which the ditches cut each other was not closely investigated.

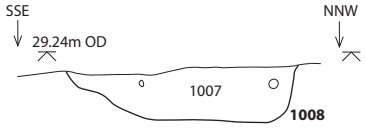


Figure 11. ENE facing section of ditch **1008**

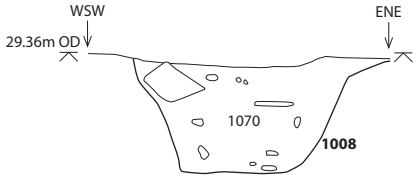


Figure 12. ESE facing section of ditch **1008**

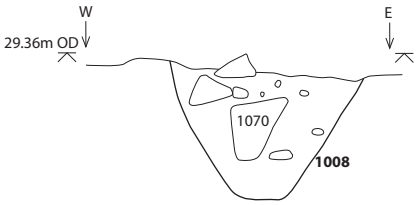


Figure 13. S facing section of ditch **1008**

Figure 14. NW facing section of ditch **1039**

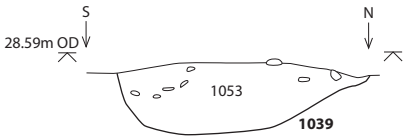


Figure 15. E facing section of ditch **1039**

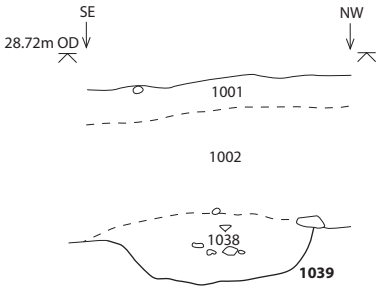
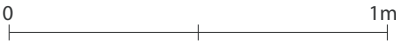


Figure 16. NE facing section of ditch **1039**



There was also a straight ditch that turned a rounded corner in the southern part of the trench. This ditch [1039] was about 0.6m wide and 0.2m deep (plates 22 to 24, sections figures 14 to 16). It ran from a well-defined rounded western terminal (plate 22) south-east until it turned a neat rounded corner to then run south-west under the trench baulk. The fill was generally a dark grey-brown clayey silt with relatively few stones but in its south-western end where it went under the baulk the fill contained *c*.30% small and medium stones. These were randomly distributed and did not form a lining. A few pieces of flint from the fill of the ditch (SF183, SF220) are presumably residual. There was also a fragment of roofing slate (SF199), a lump of hearth lining (SF182), a pebble of iron ore (SF214) and traces of hammerscale (SF216).

Another similar ditch [1037] (plate 25) ran almost perpendicularly north from [1039]. This was about 0.38m wide and 0.18m deep and it did not quite touch ditch [1039]. Ditch [1037] ran roughly north-east then curved very gradually towards the north-west and faded out in a confused and probably heavily eroded northern end. Its fill (1036) was a dark grey-brown clayey silt very similar to that of [1039] but with few stones.

The ditches in the southern part of the trench were associated with other features. Within the area defined by

Plate 20. Ditches [1023] and [1025] with the area between them cleaned

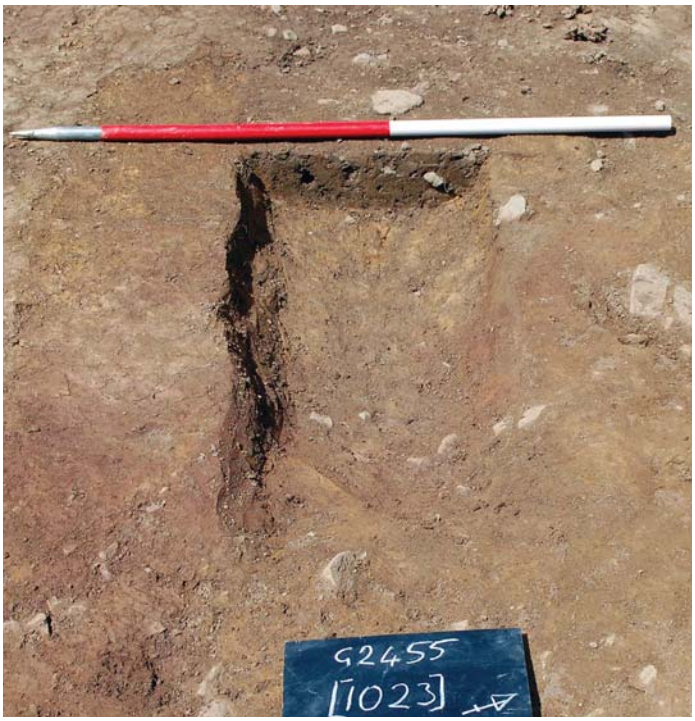


Plate 21. Eastern terminal of ditch [1023]

Plate 22. Western terminal of ditch [1039]

Plate 23. Ditches [1039] and [1037] as first exposed during troweling

Plate 24. Sondage against baulk at southern end of ditch [1039]

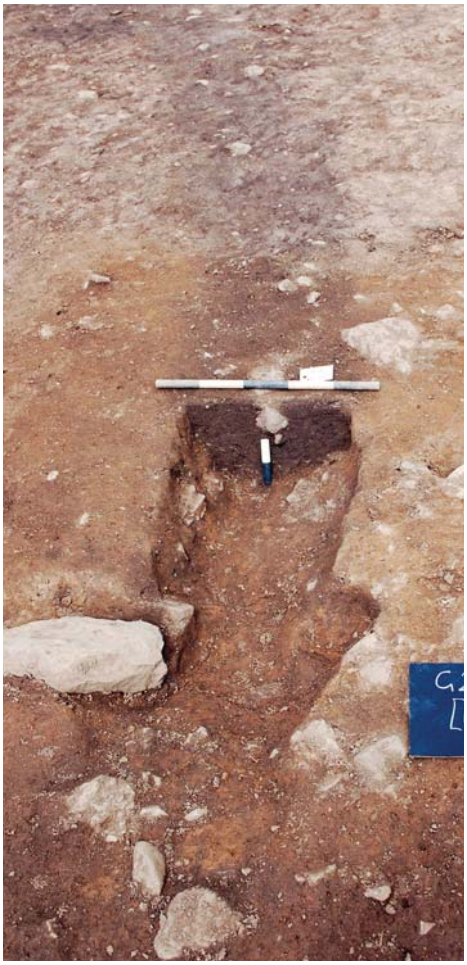


Plate 25. Southern end of ditch [1037]

Plate 26. Small pit [1042] half sectioned

ditches [1037] and [1039] were two small pits ([1042] (plate 26) and [1101]), no more than 0.48m in diameter and 0.12m deep. The latter had a charcoal-rich fill, consisting of oak and willow or poplar charcoal and also contained a small number of charred cereal grains of indeterminate species. There was also a slightly curving gully [1114], 2m long and 0.44m wide but only 0.06m deep where investigated. This may have been an animal burrow but it could have been related to ditch [1039] which it did not quite reach.

Ditch [1037] also cut a small sub-oval patch of charcoal in dark brown clayey silt with small pebbles and fragments of burnt clay. This patch (1099) was only 0.06m deep and could not be said to be within a cut but the density of charcoal showed that this was a genuine anthropogenic feature. The layer was sampled and as well as unidentifiable charcoal fragments contained charred cereal grains, although their species could not be determined, as well as some charred weed seeds.

4.3. **Large pits**

Figure 9

The northern corner of the site contained numerous features in addition to the enclosure described above. Feature [1055] seems to have been a large pit possibly about 3m in diameter. A sondage dug into this showed that it was at least 1.2m deep and the lowest part of the pit was not reached (plate 27, figure 17). It had been cut through the fractured limestone bedrock, so its original excavation would have been a considerable task. It was filled by layers of brown clayey silt with occasional stones but no evidence of rubbish or ash having being dumped into it. It seems to have filled by ploughsoil, but there was no evidence of erosion of the sides or development of turf layers as if it had been left open for any length of time. Adjacent to this was another pit [1028], also poorly defined but probably oval in plan, measuring about 3m by 4m. A sondage showed that this was about 0.7m deep and dug into gravel and boulder clay (plate 28, figure 18). The northern limit of this pit could not been seen in the deposits but is suggested by the limit of the strong signal on the geophysical plot (figure 8).

The size and shape of the pits are so confused because a ditch [1019] also ran through this area but all these features have indistinguishable fills. A patch of stones (1056) with a fairly straight edge seemed to form a boundary between the ditch and the pits. Interpreting this is difficult but as there were stones in the ditch fill and much less in the pit fills it appeared that (1056) was a part of the upper fill of the ditch and defined a short length of its southern edge. In this interpretation the ditch cuts through the pits, but the relationship is far from certain. More excavation in this area would be needed to fully define the pits and clarify the relationship with the ditch.

A pit of similar size (over 2.45m long by 1.9m wide and 0.85m deep) was located against the western baulk of the trench (plate 29, figures 19 and 20). Evidence from the geophysical survey suggests that this feature [1018] should be interpreted as being part of an elongated oval pit. Both [1028] and [1018] had uniform brown clayey silt fills. Pit [1018] did seem to have a step left in its eastern side, possibly for access.

Pit [1028] contained a late 16th or early 17th century sherd of Midlands Purple ware and a fragment of a highly fired 17th century yellow ware, but also a fragment of late 17th to early 18th century slipware. Pit [1018] contained a possible Cistercian-ware sherd, which could be of late 16th or early 17th century date, and a single abraded fragment of a North Devon gravel-free hollow ware of probable 17th century date. However it also produced four blackware fragments, representing at least one mug and a chamber pot or jug, and four dish and hollow ware sherds decorated with trailed white slip, which are of late 17th or early 18th century date. The sherds suggest the pit fills were deposits of mixed date, possibly including old midden material. It is hard to be sure of the date of the pits themselves, though the fills are fairly homogenous with no evidence for gradual infilling of pits left open for a long period. The pits may have been dug in the late 17th or early 18th century and been filled with material, some of which was much older. Alternatively the later sherds could have been introduced by animal burrowing and the pits could date to the 16th century, but the quantity of later fragments from pit [1018] argues against that.

North of [1018] was a feature that initially appeared to be possibly a continuation of ditch [1019]. This feature [1046] was sectioned against the western baulk of the trench. In section it had a V-shaped profile, was 1.8m across and 0.75m deep (plate 30, figure 21). The base of the feature was very narrow, appearing similar to an "ankle-breaker" typical of Iron Age defensive ditches. A close inspection of the geophysical plot, as well as the depth, suggests that this feature was not part of ditch [1019] but was a separate feature about 4.5m long, aligned north-west to south-east (figure 8). It could therefore be interpreted as another large pit, albeit with an unusual profile. Stones (1043) within the upper part of this feature may indicate the continuation of the stone-filled land drain [1058], which has caused considerable confusion in this area. There was insufficient time to thoroughly investigate the relationships between all the features in this area so this could not be established by excavation.

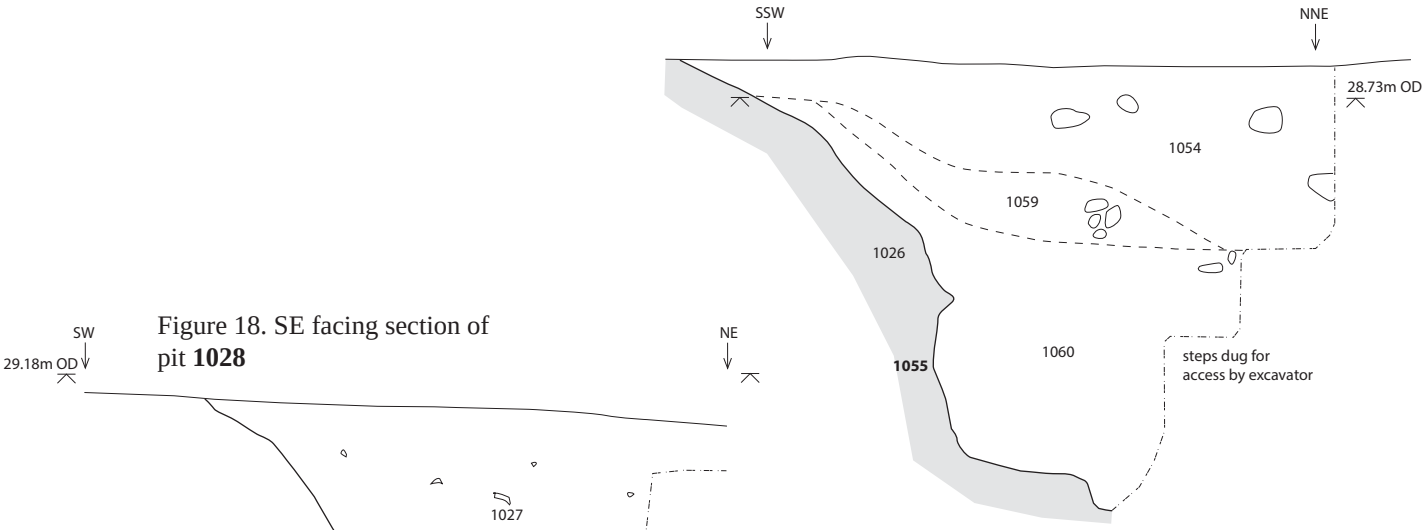


Figure 17. ESE facing section of pit **1055**

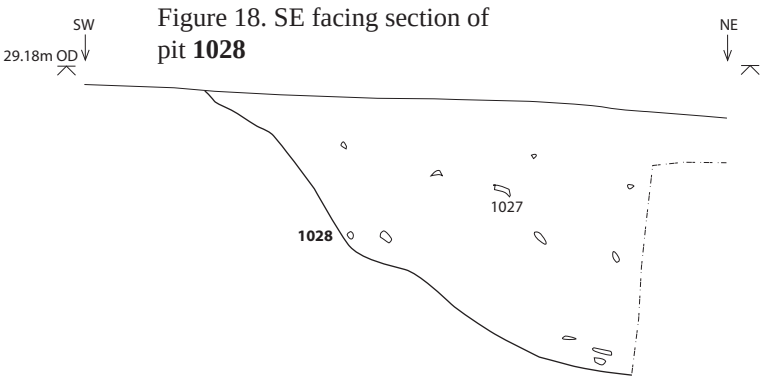


Figure 18. SE facing section of pit **1028**

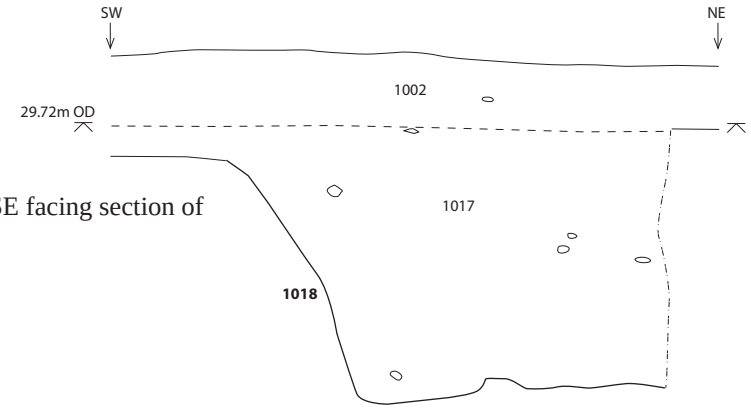


Figure 19. SE facing section of pit **1018**

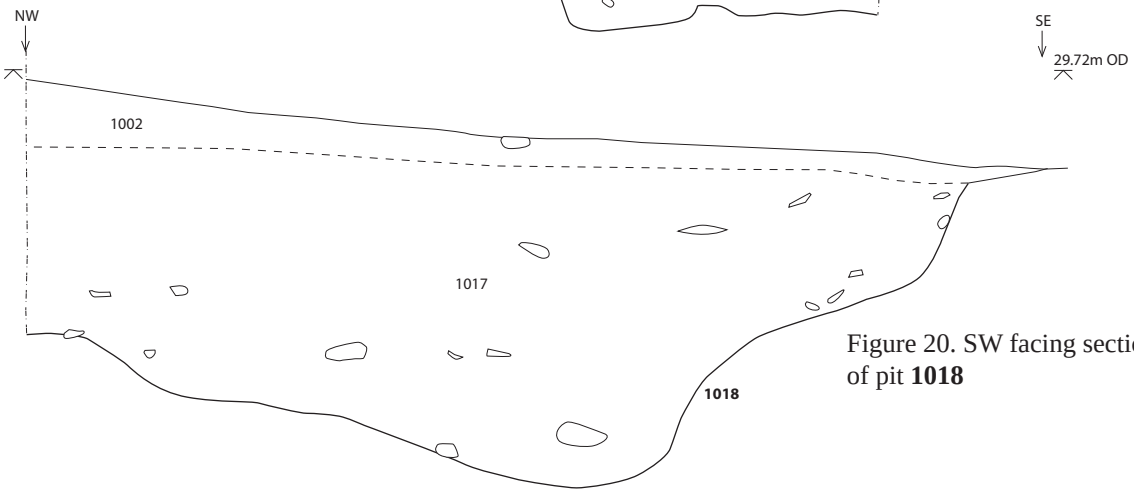


Figure 20. SW facing section of pit **1018**

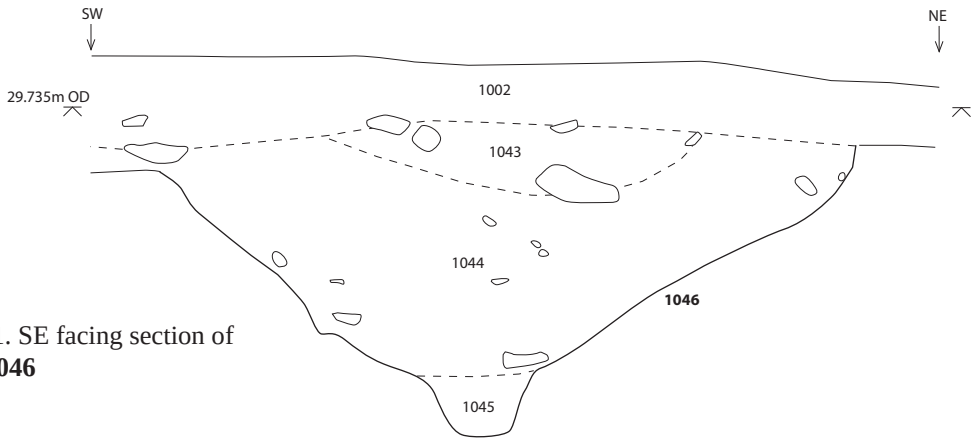


Figure 21. SE facing section of feature **1046**

Plate 27. Sondage into pit [1055]

Plate 28. Sondage into pit [1028]

Plate 29. Half section of pit [1018]

Plate 30. Section of sondage through feature [1046] showing V-shaped profile

Plate 31. Section of land drain [1058]

Plate 32. Stones (1050) filling land drain [1058]

Plate 33. Feature [1034] half sectioned

Plate 34. Pit [1032] half sectioned

Plate 35. Hollow [1062] half sectioned

4.4. **Other features in the northern part of the site**

A stone-filled land drain [1058] ran across the northern corner of the site. It cut through a group of potentially early gullies and cut the fill of a large hollow [1090]. It may have run through the upper fills of [1046] but no cut for this drain could be seen in the section of this feature and the stones present were restricted to the surface, whereas elsewhere the stone fill of the drain was found at considerable depth. It probably also cut through the northern edge of pit [1028]. This drain has caused much confusion in making features hard to define or in cutting them off so that their original plan cannot be recorded. The drain was about 0.9m wide at the top but became narrow and steep-sided lower down (plate 31, figure 22). The stones filling it (1050) were up to 0.4m in length, with some placed on edge (plate 32). They included a piece of conglomerate of the sort used to make quern stones and a piece of fossilised coral from the limestone. In some places, though, the stones used were much smaller, and the drain was very poorly defined where it cut through other features.

Inside the area defined by ditch [1008] there were several smaller features. A small rectangular feature [1034] measuring 1.29 by 0.51m and 0.21m deep, resembled a child's grave (plate 33, figure 23), but there was no stone-lining or any other evidence of the use of this feature a grave. It was aligned north-west to south-east rather than east-west but the alignment of early Christian graves is variable and this was well within the usual variation. However it was not aligned on ditch [1008] and is not central to this, making it highly unlikely to be a grave within a mortuary enclosure. It is also very unlikely that the only grave within a mortuary enclosure would be a child's grave. It is likely that feature [1034] was not a grave, had some other function and was probably unrelated to ditch [1008].

A sub-oval pit [1032] measuring 1.7m by 1.4m and 0.44m deep was also located in this area. This had an uneven base with a flat shelf, possibly where it had hit limestone and a deeper hollow on the northern side (plate 34, figure 24). The sides did not seem steep enough for this to be a posthole and there were no post-packing stones or other evidence that it might have held a post. To the east of this feature was a shallow hollow [1062] that may have been an area of natural erosion but the erosion may possible have been caused by the use of the pit if it was repeatedly approached from the eastern side (plate 35, figure 25).

Pit [1032] produced a single sherd probably from a thrown slipware dish of late 17th to early 18th century date, which may date this activity. It also produced two small worked flint pieces, one possibly part of a convex scraper (SF193), but these are assumed to be residual.

One feature that was almost certainly a posthole was [1009]. This was a deep, steep-sided oval cut, becoming almost circular in its base, which had a flat bottom (plate 36, figure 29). This feature measured 0.86m by 0.64m and was 0.88m deep. It was filled by large stones (1004) up to 0.3m long many of which were laid flat although some were set near vertically round the edge of the cut. The stones seemed to have been placed to fill the cut as

Plate 36. Posthole [1009] fully excavated

Plate 37. Stones (1004) filling posthole [1009]

Figure 22. ENE facing section of drain **1058**

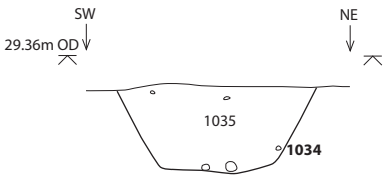


Figure 23. SE facing section of feature **1034**

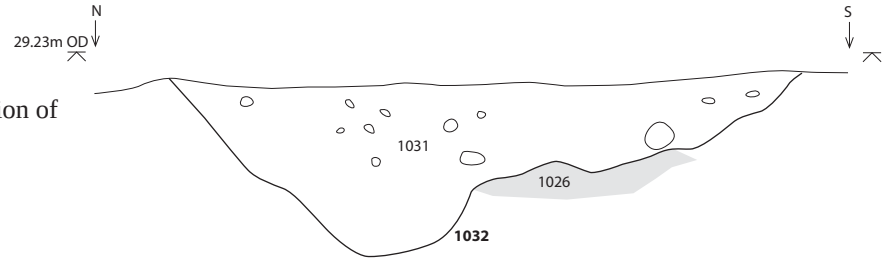


Figure 24. W facing section of pit **1032**

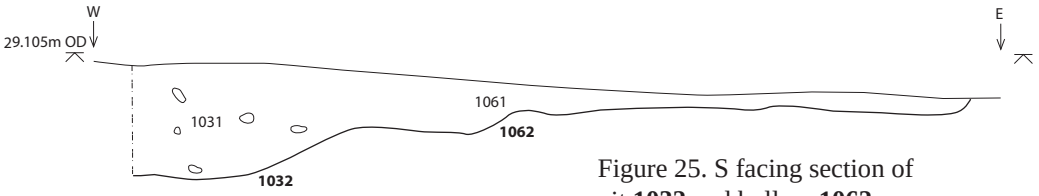


Figure 25. S facing section of pit **1032** and hollow **1062**

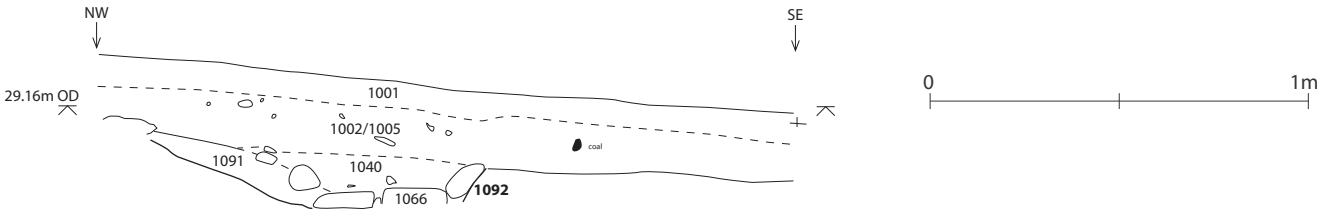


Figure 26. SW facing section through deposits overlying drain 1066 in cut **1092**

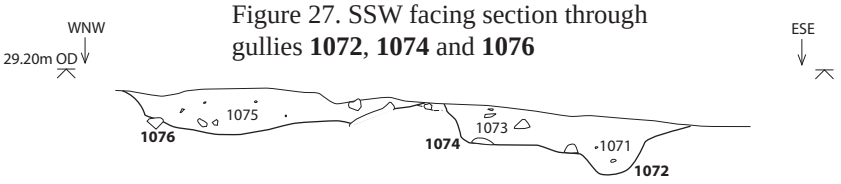


Figure 27. SSW facing section through gullies **1072**, **1074** and **1076**

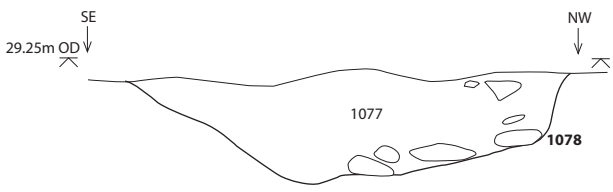


Figure 28. SW facing section through pit **1078**

Plate 38. Stone-capped drain (1066)

Plate 39. Section through stone-capped drain (1066) showing its construction

Plate 40. Section along trench baulk over drain (1066) showing the shallowness of the ploughsoil

closely as possible (plate 37, figure 30). The stones were not packing stones as there was no room at all for a post, but the hole was so steep-sided and carefully dug that it seems unlikely that it was for any other purpose than as a posthole. It is proposed that the post, which must have been about 0.3m in diameter, had been removed and the stone used to fill the hole as completely as possible.

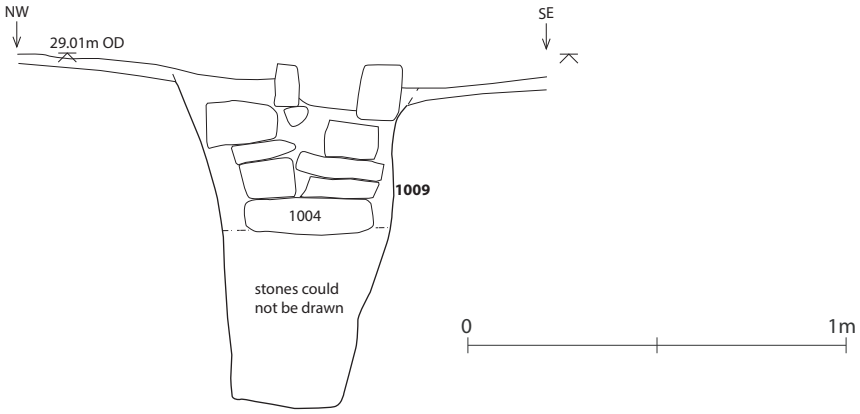


Figure 29. SW facing section of posthole **1009** (Stones in lower part of section could not be drawn as it was impossible to remove half of them. The profile of the posthole base was drawn after removing all the stones.)

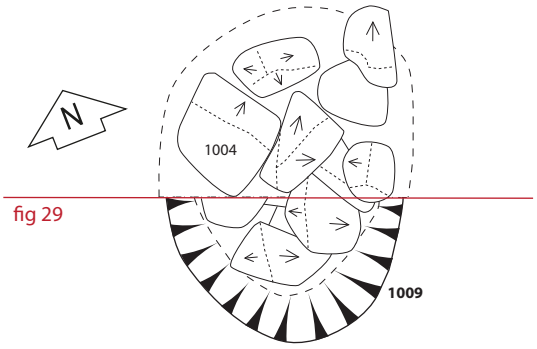


Figure 30. Plan of posthole **1009** with stone 1004 in place

Another possible posthole [1110] was located to the north-west. This was roughly circular, about 0.6m in diameter and about 0.4m deep. It had several medium sized stones within its brown clayey silt fill but nothing that could be firmly identified as packing stones. Its base was irregular and the sides not very steep so it was not entirely convincing as a posthole. Both [1009] and [1110] were so close to the edges of the large pits [1028] and [1055] that they could not have functioned as postholes while the pits were open and they must belong to different phases of activity, with [1009] and [1110] possibly earlier than the pits.

In the very northern corner of the trench was the most complex group of features on the site. A shallow gully [1076] ran almost precisely north-south, leading into a broader cut [1092] that held a shallow stone-lined drain (1066). The drain was composed of flat, mainly limestone, slabs as capstones resting on small side stones with only a narrow gap underneath for water (plates 38 and 39). This gap was entirely filled with dark silt (1051), which when sampled and processed proved to contain charred cereal grains and chaff. Most were unidentifiable but there were some oats, was well as charred weed seeds. This drain had been cut into a very clean pink clay (1052) and the same clay (1040/1091) had been redeposited over some of the slabs, making the drain, and especially its cut, hard to locate (figure 26). The redeposited clay contained post-medieval finds, including a sherd of pottery dating to the late 17th to early 18th century (plate 40). Metal objects recovered from this deposit were also probably post medieval in date and included a spike (SF229) (figures 41 and 43) probably from a fibre processing comb.

Adjacent to [1076] was another shallow gully [1074] with a deeper, steep-sided slot [1072] dug along its eastern side (plates 41 and 42, figure 27). Slot [1072] contained occasional stones that might have been the remains of packing and curved slightly to the west. These features were cut at their southern ends by the land drain [1058]. Also in this corner were other flat slabs ((1067) and (1094)) not set in a cut and not forming capstones for a drain (plate 43). These seemed to form a surface, which partially covered what appeared to be a cut feature [1086] (plate 44), but there was not time to investigate this. The slabs also had smaller stones (1095) associated with them that may have formed part of the surface. It is probable that this surface was continued to the south in the form of layer (1065), which was a thin and eroded deposit of small stones embedded in the top of the natural clay (plate 45). This surface and the possible ditch [1086] were cut by the land drain [1058] and a large hollow [1090].

Later prehistoric activity seems to be suggested in this area by the presence of an unfinished spindlewhorl (SF172) embedded in layer (1065) and a possible hammerstone (SF185) from the fill of the land drain [1058]. Fragments of quern stone (SF184) from deposit (1056), probably fill of ditch [1019], probably also originated from nearby.

In the very corner of the trench was a rather irregular pit [1078] measuring 1.2m by 1.0m and 0.3m deep (plate 46, figure 28). This had some stones in its base but these were not deliberate enough to be certainly lining stones. Next to this was a very slight circular hollow [1112] containing one stone set on edge and one piece of conglomerate.

Plate 41. Gully [1076]

Plate 42. The end of gully [1076] with gullies [1072] and [1074]

Plate 43. Slabs (1067), possibly forming a surface

Plate 44. Surface of feature [1086] exposed

Running from the southern side of [1078] was a slight curving gully [1011] that proved difficult to follow (plate 47). This had some stones in its fill and ran over some flat stones embedded in the natural. It is likely that this feature was an animal burrow but it could be the slight remains of a more significant feature.

Part of the north-eastern side of the trench was taken up by what appeared to be a roughly oval hollow [1090] which cut through all the features in this area except for the land drain [1058] that was dug through the fill of the hollow. The edges of the hollow were cleaned up and defined on the north-western and south-western sides and partially investigated with small sondages that showed them to be fairly gradually sloping and the base to be at least 0.26m deep, but probably much deeper towards the middle of the feature. The south-eastern side was obscured by a layer of ploughsoil (1016), which there was not sufficient time to remove. The geophysics shows a dark anomaly in this area that may relate to the deeper parts of the hollow and it is suggested that this feature is about 7.5m long (figure 8). The way that this feature truncates other features in the area suggests that it is a deliberately dug feature rather than a natural hollow.

4.5. **The central part of the trench**

Immediately north of ditch [1037] was a small group of potential features. As work was focused on the complex of features in the northern part of the site this area could not be inspected in detail. It was cleaned and some of the features were investigated, but much remained unclarified.

The most prominent feature in this area was a zone of very pale, firm clay (1117), initially assumed to be part of the natural variation in the boulder clay (plate 48). Running though this was an amorphous, roughly L-shaped, very shallow feature [1119]. This was only briefly investigated and may have been the result of ploughing rather than a definite feature. To the east of the pale clay was a linear patch of brown clayey silt (1120) with some small stones and patches of charcoal. This was not investigated, so it is uncertain whether this is the fill of a feature. On the western side of the pale clay was a small, very shallow pit or hollow [1064], 0.51m in diameter and 0.07m deep (plate 49, figure 31). Its fill had a high proportion of charcoal, which proved to be purely oak, and also contained small pieces of slag, including hearth lining (SF191, SF219).

In the centre of the pale clay was a slight circular hollow [1085], *c*.0.3m in diameter and only 0.08m deep. This was almost entirely filled with a near circular stone object (SF173) (plate 50), and the hollow presumably had been dug to hold this object (see figure 10 for general location and figure 32 for detailed plan). Find SF173 was a large split cobble the flat face of which had been used for grinding and was originally the top-stone for a saddle quern. It had been reused and set in the shallow hollow with the ground face set horizontally and facing up. It seems to have been used as a bake-stone; the face being discoloured from burning.

The discovery of the possible bake-stone deliberately placed within the pale clay suggests that this area may be more significant than it initially seemed. This type of object would typically be set into the floor of a dwelling. The area of pale clay could therefore perhaps be interpreted as being a house floor, though there was no suggestion that it was a thin or superficial layer laid down as a floor.

Plate 45. Land drain [1058] cutting through stony surface (1065)

Plate 46. Pit [1078] and feature [1112]

Plate 47. Slight gully [1011]

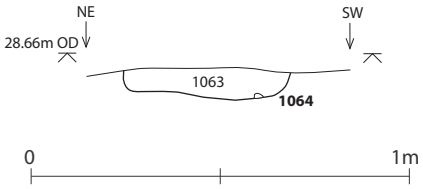


Figure 31. NW facing section of pit **1063**

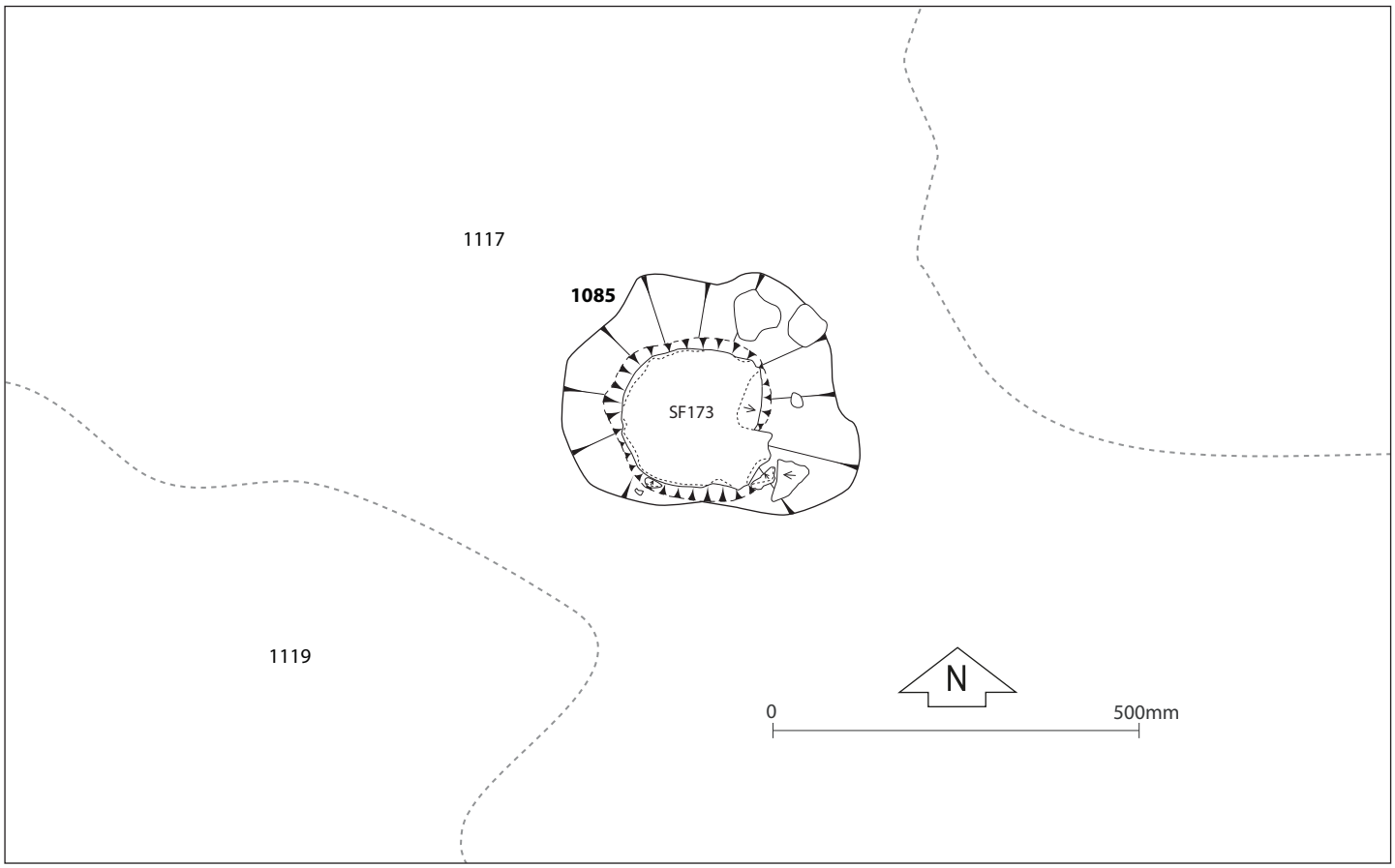


Figure 32. Plan of hollow 1085 with stone object SF173

4.6. **Ditches**

Many of the features on the site were ditches or furrows of various types. As discussed above a ditch [1019] ran almost east to west across the northern part of the site into the area with the large pits ([1028] and [1055]). The ditch was about 1.4m wide and was investigated in two sondages which were up to 0.35m deep. The ditch in one sondage had a fairly V-shaped profile but in the other was much more U-shaped, so the profile of the ditch seemed to be variable, possibly a result of parts of it being cut through limestone (plates 51 and 52, figures 33 and 34). The fill was a brown clayey silt with some stones very similar to the fills of other features in the area. As discussed above the ditch probably cuts the fill of the pits, but this relationship is far from certain.

Running across the eastern corner of the trench was a broad ditch-like feature [1116], about 2.4m wide (plate 53). The brown clayey silt fill contained few stones but there was a group of stones on the eastern side. Feature [1116] was not investigated but is probably a large buried culvert (see below).

Feature [1116] cut through a straight ditch running north-west to south-east [1121/1122], which on the western side of [1116] appeared to cut through the end of ditch [1025]. Ditch [1122] was probably a continuation of [1083],

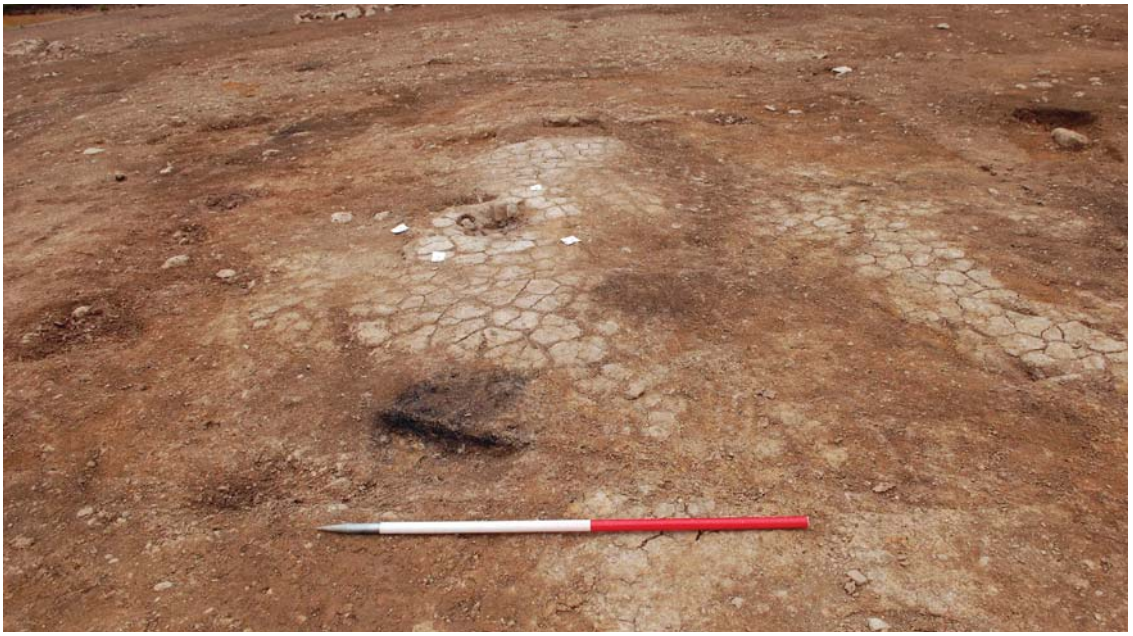


Plate 48. Area of pale clay (1117) with possible features [1119] and (1120) and hollows [1064] and [1085]

Plate 49. Half section of small pit/hollow [1064]

Plate 50. Bake-stone (SF173) in hollow [1085]

a ditch with a V-shaped profile, about 0.53m deep, that appeared to have a fairly square western terminal (plates 54 and 55, figure 35). Ditch [1122] seems to have been cut by another ditch [1123]. This relationship was not very clear but reddish clay lumps in the fill of [1123] indicated that this continued through [1122]. Ditch [1123] appeared to continue into a narrow slot investigated by sondages. This slot [1088] was *c*.0.4m wide and up to 0.2m deep. It curved round towards the north and terminated in an area that was not fully investigated (plates 54 and 55). Further excavation would be necessary to be certain which of these features joined together and what the relationships between them were.

Plate 51. Section of sondage through ditch [1019] with fill (1020)

Plate 52. Section of sondage through ditch [1019] with fill (1021)

Plate 53. Culvert ditch [1116]

Plate 54. Section through ditches [1083] and [1088]

Plate 55. Parts of ditches [1083] and [1088] fully excavated

Plate 56. Ditch or furrow [1030]

Plate 57. Small posthole [1015]

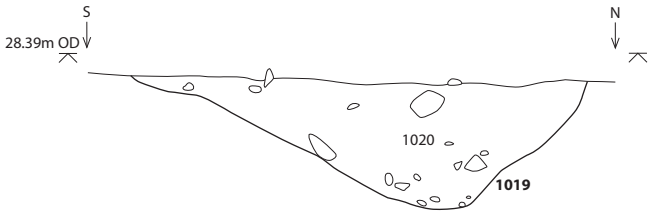


Figure 33. E facing section of ditch **1019**

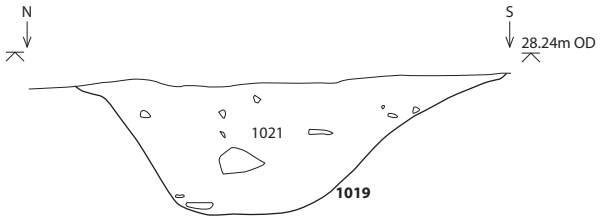


Figure 34. W facing section of ditch **1019**

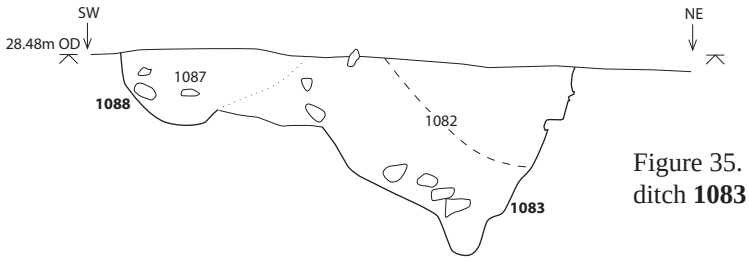


Figure 35. SE facing section through ditch **1083** and gully **1088**

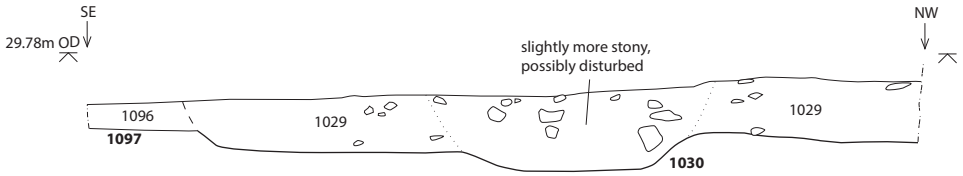


Figure 36. NE facing section through feature **1030**

Three ditches were located in the south-eastern corner of the trench ([1048], [1103], and [1105]) with only [1048] investigated. The small sondage dug through this revealed it to be very shallow, only 0.08m deep and about 0.7m wide. Part of a worked flint flake (SF158) was recovered from the fill of this ditch. A small sub-circular patch of charcoal [1124] in the eastern corner of the site was not investigated.

There were other slight ditches along the western side of the site. Running south from pit [1018] was a straight, very slight feature [1081]. At its northern end it was fairly regular with very gently sloping sides and a flat base, rather confused by roots in places, but further south it was more irregular and poorly-defined. At its deepest it was only 0.12m deep and it faded out at its southern end, however an even more poorly-defined feature [1013] roughly continued its line further south after a gap. Feature [1013] was little more than an area of root disturbance and it was very difficult to define any edges. It did contain a single abraded sherd of a late 17th to early 18th century slipware dish. Although the relationship was not clear it seems likely that pit [1018] cut the linear feature [1013/1081], with the sherd being introduced to the fill of the latter when the pit digging activity was going on. Parallel to [1081] was another slight feature just visible where it appeared from under the north-western side of the trench. This feature [1030] was over 6m long and up to 0.25m deep (figure 36). The sides were fairly well-defined and the base was generally flat but with some hollows in it (plate 56). It cut through a shallow hollow [1097], which is probably natural. Between [1030] and [1081] was a small posthole [1015], measuring 0.3m by 0.15m and 0.29m deep. Its fill was stony but there were no obvious packing stones (plate 57).

4.7. **Finds**

Summary of finds

Object type	No of items
Bone	7 (no. of bags)
Ceramic (post medieval)	97
Ceramic (Roman)	6
Cu alloy	50
Flint and chert	32
Glass	1
Iron	104
Lead alloy	40
Other metal	11
Silver	2
Slag	12
Other Stone	9

See appendix I for a more detailed list of finds.

Roman pottery

There are five fragments of Roman pottery and one possible ceramic spindlewhorl that may be of Roman date (figure 37). These have been studied by Gill Dunn; see appendix V for full report.

One sherd (SF178) was recovered from the spoil heap, but was probably from the ploughsoil as all the rest were found in either topsoil or ploughsoil, with one sherd (SF552) being found during the metal-detecting survey in 2013. The sherds found in the excavation trench also all came from the ploughsoil and were found above or close to ditches and other features in the middle of the trench (figure 38).

The possible clay spindlewhorl was found by hand excavation at the very base of the ploughsoil and it seems unlikely that it had moved very far as it is a delicate object and would have been broken if subjected to movement by ploughing. The sherds were well-weathered and had been mixed into the ploughsoil so they could have been introduced to the soil in manure in the Roman period and may not necessarily date the immediate archaeological features.

The material appears to date to the first and second centuries AD and does suggest some activity of this period in the area but their origin is uncertain and, except for the possible spindlewhorl, it is hard to relate them directly to activity on the site.

Post-medieval pottery

There are 95 sherds of post-medieval pottery, a small number of fragments of clay pipes and a single fragment of glass. These were assessed by Jonathan Goodwin of Stoke-on-Trent City Renewal Services (see appendix VI for report and catalogue).

The assemblage includes material from the late 16th to the late 19th centuries, with most of the stratified sherds being no later than the early 18th century. The earlier finds represent a range of wares typical of the periods, including blackwares and slipwares, with some yellow wares and mottled wares. The earliest sherd a Midlands Purple-type ware, probably of the late 16th or early 17th century, was found in the large pit [1028], but this also contained a late 17th or early 18th century slipware fragment. A possible Cistercian-ware sherd of at least late 16th or early 17th century date was found in pit [1018] (figure 39). Some of the earlier assemblage is possibly from Buckley but others sherds are certainly from Staffordshire. The origin of other sherds in the assemblage is difficult to determine but one small sherd is from North Devon. A fragment of stoneware is from the Rhineland and a sherd of Oriental porcelain was recovered from the topsoil.

The majority of the later finds are unstratified finds from the topsoil and are characterised by refined, decorated pearlwares and whitewares, in tea and tableware forms. Most of the later sherds are from Staffordshire.

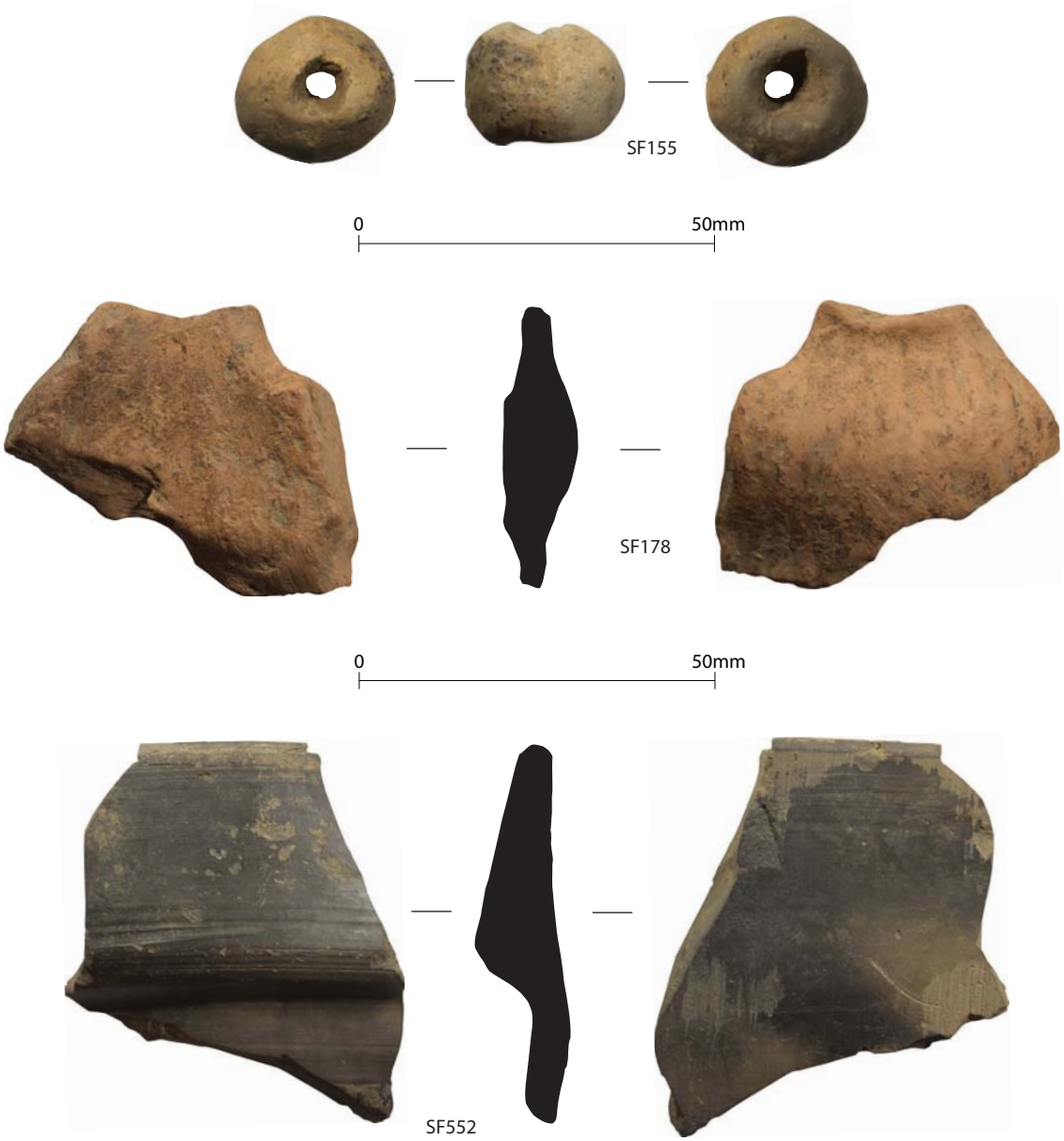


Figure 37. Roman ceramics.
SF155 – fire clay object, possible spindlewhorl; SF178 – decorated sherd of Cheshire Plain type fabric (from spoilheap); SF552 – grey ware rim sherd from 2012 metal detecting survey

Figure 38. Distribution of finds across the trench

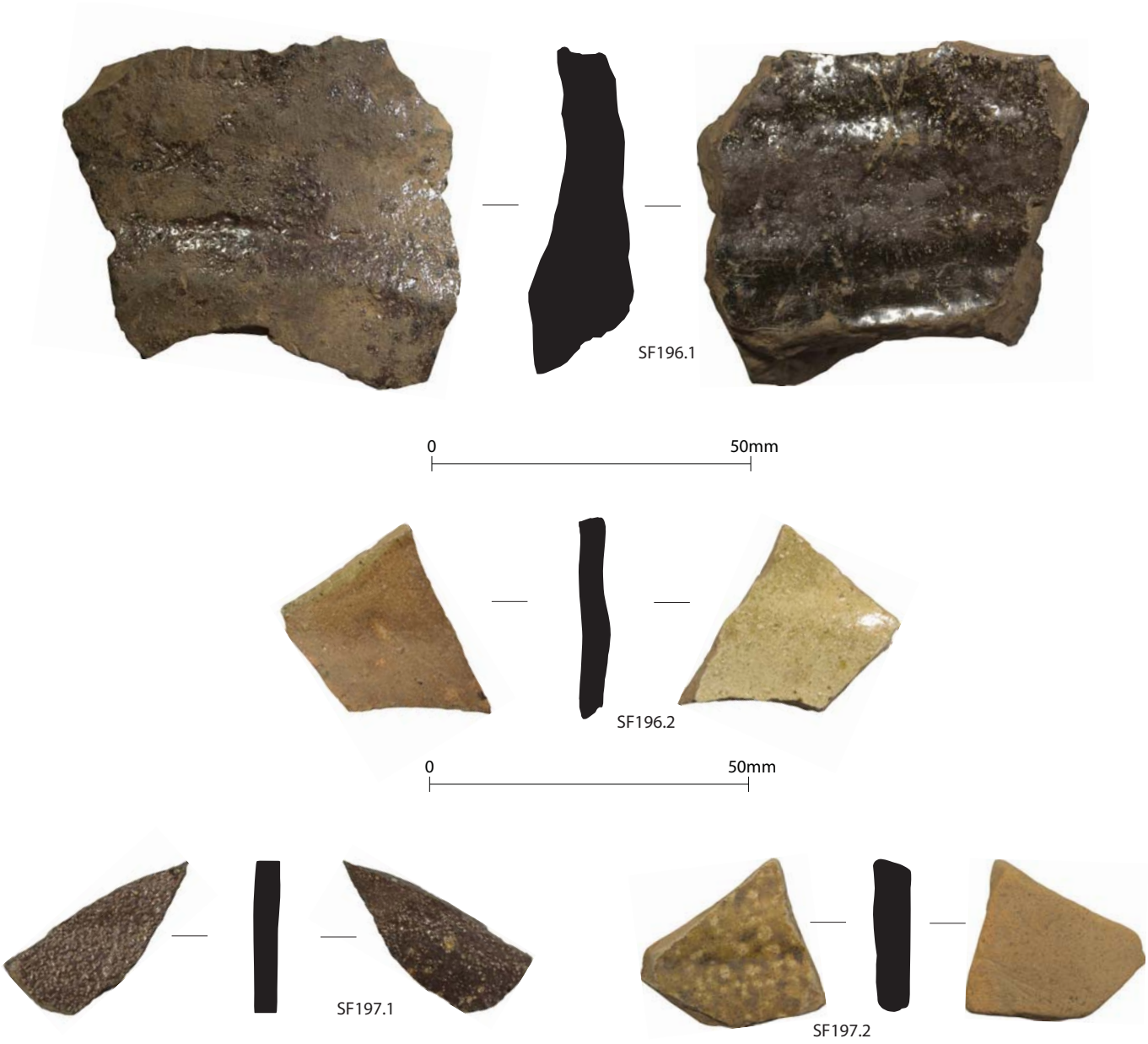


Figure 39. Earlier post-medieval pottery.
From pit [1028]: SF196.1 - Midlands Purple-type ware sherd, SF196.2 – yellow ware sherd From the fill of pit [1018]: SF197.1 – possible Cistercian ware sherd, SF197.2 – North Devon gravel-free ware sherd.

Archaeometallurgical Residues

The assemblage of archaeometallurgical residues was assessed by Tim Young of GeoArch, see appendix VII for full report and catalogue. The assemblage is very small but contains both macro and micro residues, including pieces of hearth lining and tiny quantities of hammerscale. These are probably from blacksmithing and may indicate that charcoal-fuelled blacksmithing was undertaken nearby. The materials are not datable except being pre-industrial. The concentration of this material in gully [1039] suggests that this may have been closest to any blacksmithing activity but there is not enough to indicate that this gully is directly related to blacksmithing or that it surrounded a smithing area.

Metal objects

Two hundred and five metal objects were recorded and assessed by Quita Mould, see appendix VIII for full report. All the iron objects were x-rayed to assist in identification and the recognition of early objects. The x-rays were carried out by Phil Parkes of Cardiff Conservation Services, who also conserved a Roman brooch (SF69), buckle pin (SF76) and lasting nail (SF231) to stabilise them for archiving.

The majority of the metal objects were recovered by metal detecting from the excavation trench and the wider

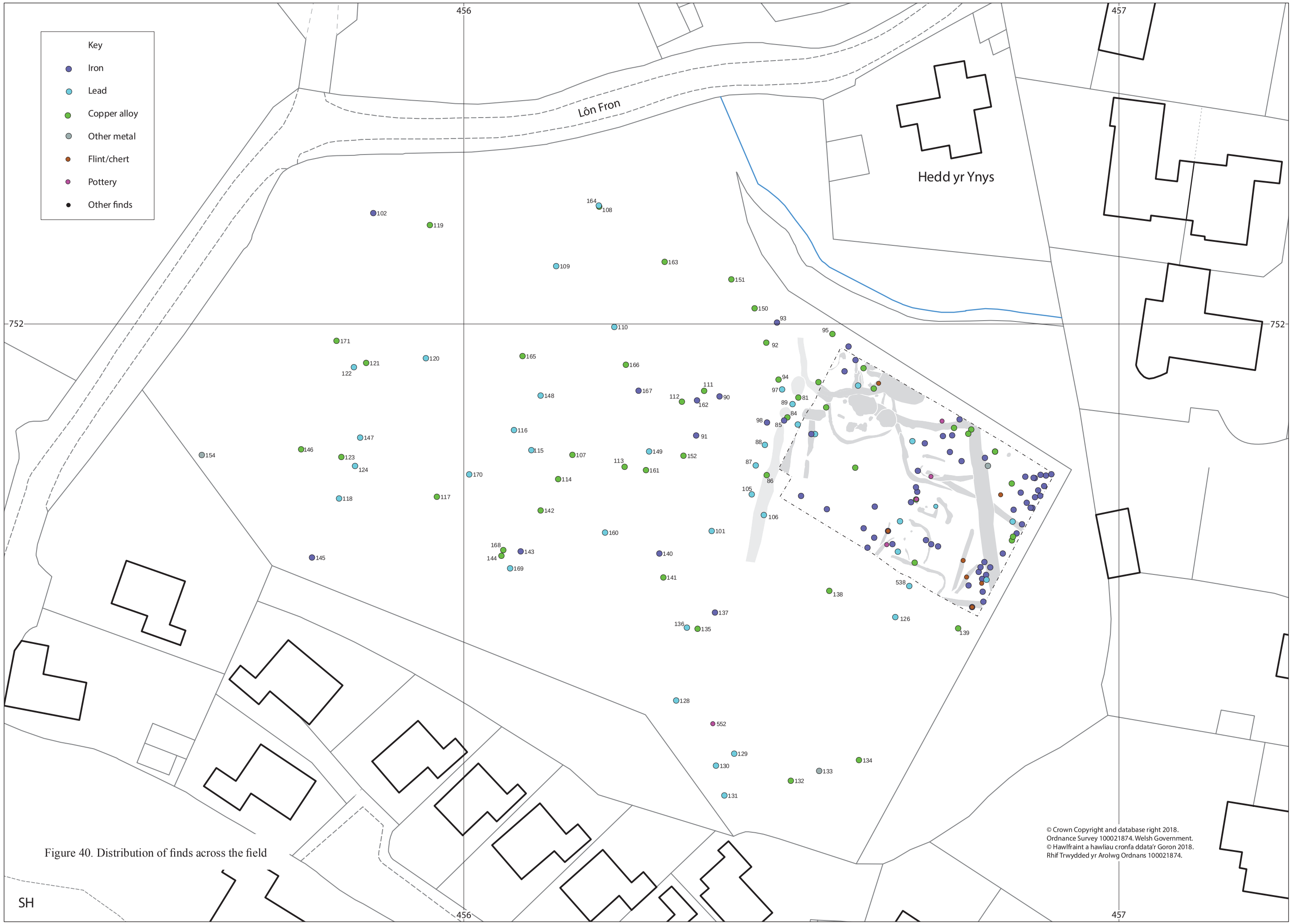


Figure 40. Distribution of finds across the field

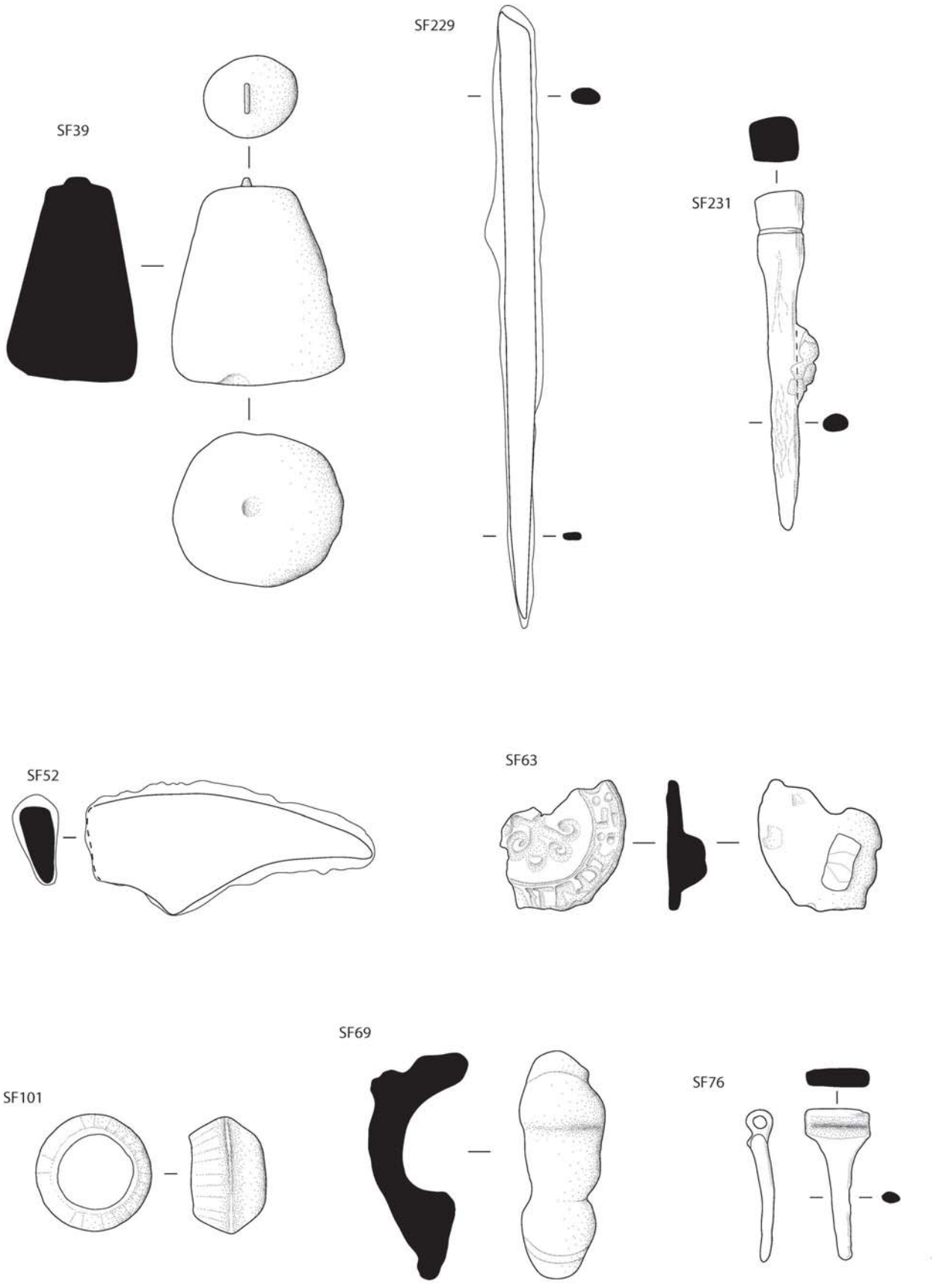
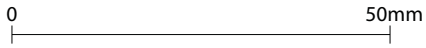


Figure 41. Drawings of selected metal objects. SF39 – lead weight, possibly Roman; SF229 – spike from flax heckle or wool comb; SF231 – lasting nail; SF52 – part of blade of a curved knife used for leather-working; SF63 – 13th century lead seal matrix; SF101 – lead spindlewhorl, probably medieval; SF69 - part of a Roman trumpet brooch; SF76 – pin, probably from an 18th century shoe buckle



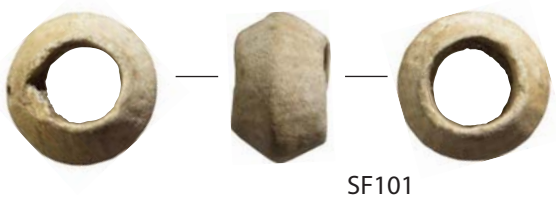


Figure 42. Earlier metal objects: SF175 - a radiate of Carausius (AD 286-93); SF69 - part of a Roman trumpet brooch; SF76 – pin, probably from an 18th century shoe buckle; SF63 – 13th century lead seal matrix; SF101 – lead spindlewhorl, probably medieval; SF39 – lead weight, possibly Roman but probably later.

Figure 43. Later metal objects:
16th to 17th century: SF126 – musket ball; SF229 – spike from flax heckle or wool comb; SF231 – lasting nail.
18th century: SF149 – pewter spoon handle; SF28 – spindle for tongue of shoe buckle; SF154 - decorative pewter finial.
19th century: SF36 – American dime perforated.
20th century: SF148 – handle of honestone dated 1914; SF24 – Teddy Tail League badge. Generically post medieval: SF146 – copper alloy buckle, SF144 - button.

field. The finds distribution does not show any significant patterns of metal finds with most being quite evenly distributed (figure 40). There was a significantly higher proportion of iron objects recovered from the trench than from the rest of the field and this can be explained by repeated detecting of the trench as layers of topsoil and ploughsoil were removed. This has led to the recovery of more iron objects, which are presumably less easily detected through topsoil than copper or lead alloy objects. As iron objects are likely to be much more common than the other metals the trench gives a more accurate representation of the actual proportions than the rest of the field. The variation in iron object density within the trench is largely due to varying durations of time spent detecting different strips across the trench.

The majority of the material recovered was 19th or 20th century in date and appears to be the result of domestic rubbish disposal, along with coins and small personal items being the result of casual loss. Some finds are offcuts of copper and lead alloy sheets and lead alloy pipes and represent the waste from making items from these materials. However this was likely to be taking place in the surrounding farms and the waste deposited in manure spreading. Metalworking tools and a small amount of possible bar iron point to some small-scale ironworking, probably blacksmithing, in the vicinity. Unsurprisingly a small number of items represent agricultural activity (coulter tip from a plough, broken scythe blade, horseshoes, donkey shoe).

Roman and medieval finds were few (figures 41 and 42). A coin (SF175), a radiate of Carausius (AD 286-93), was found in the trench, but this was recovered during metal detecting from a lump of mud from a boot so it cannot be used to date any specific features. Part of a Roman trumpet brooch (SF69) was recovered from the topsoil but within the northern corner of the trench. A copper alloy pin (SF76) found fairly close by proved not to be from this or any other brooch but to be probably a post medieval two-piece buckle. A lead suspension weight (SF39), the same weight as a Roman *dextans* weight, is not of the usual form for a Roman suspension weight and is likely to much later in date and the closeness to a Roman measurement of weight may be a coincidence.

Two objects from the topsoil (SF63 and SF101), SF63 found in the area of the trench, can be safely dated to the medieval period. SF63 is part of a lead alloy seal matrix of 13th century type, and suggests the presence in the area at that period of an individual important enough to require a personal seal. A small lead alloy biconical spindlewhorl (SF101) is likely to be of medieval date.

A small number of objects may date to the early post medieval period (16th-17th centuries) (figure 41 and 43), including an iron wire hook (SF205.11) from a hook and eye clothing fastening commonly used on 17th century buff leather coats; a lead musket shot (SF126) and an iron rotary key (SF72), and a copper alloy socket from a candlestick (SF208.3). An iron spike (SF 229), possibly from a flax heckle or wool comb, was recovered from the clay deposit (1040) covering drain [1066]. Nails with rectangular-sectioned, faceted heads and 'headless' nails and flat-headed nails with angular-sectioned shanks have been used from the Roman period onward and could be of medieval or early post medieval date. The most interesting of these earlier nails is one (SF231) that may be a lasting nail used in shoe manufacture. A broken blade with a curving and sharply pointed tip (SF52) has the distinctive shape characteristic of a knife used to cut leather. Both these items may suggest leather working in the area.

Other objects, such as a pewter spoon handle (SF149) and copper alloy and pewter shoe buckles (SF28, SF133 and SF76), can be dated to 18th century. Of the 19th century items an American silver dime (SF 36) dated 1838 is of interest as it is perforated and was presumably worn round the neck or the wrist. This may be a keep-sake from a family member who emigrated to America (figure 43).

Many objects dated to the 20th century but of these some preserve social history (figure 43). A broken very fine stone set in a lead handle fitting (SF148) is probably a honestone used with a cut-throat razor. It is marked with the date 1914. Some badges were found, one of which was a badge of the Teddy Tail League (SF24). Teddy Tail was a cartoon mouse appearing in the first daily cartoon strip in a British newspaper that ran in the Daily Mail from 1915 into the 1960s. Children could join the Teddy Tail League and received a badge and learn Teddy Tail's secret sign (Cadogan 2008).

Flint and stone objects

The full report on these finds by George Smith forms appendix IX, see figure 44.

There are 31 items of flint, chert or crystal quartz. Fifteen of these pieces are natural and unworked, but the rest are either worked or possibly worked with three retouched pieces. The retouched pieces are a complete small

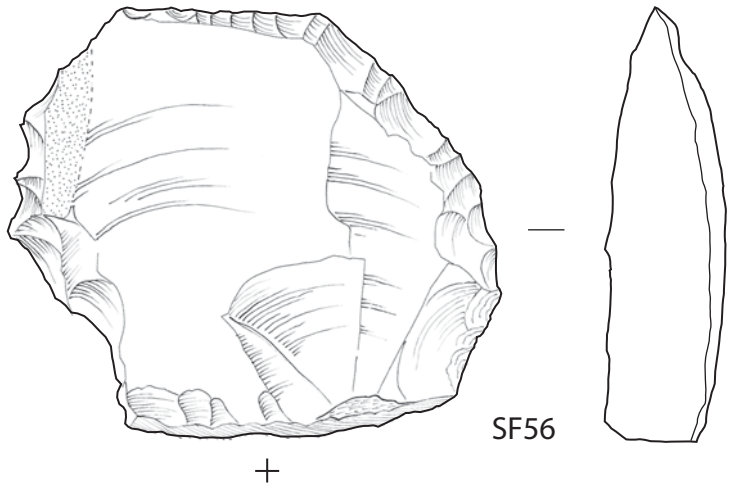
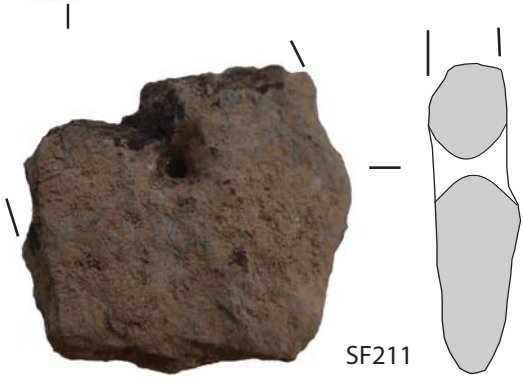
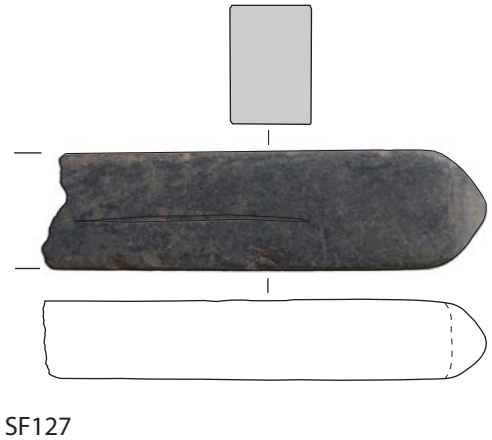


Figure 44. Stone objects: SF56 – flint scraper; SF103 – polishing stone; SF211 - perforated piece of shale; SF127 – slate object; SF172 – unfinished spindlewhorl





convex scraper (SF56) and two fragments of similar scrapers (SF 193.1 and SF 210.1). There are no cores or core-trimming pieces, which might indicate flint working on the site. The flint is from small pebbles from glacial or beach gravels with some local black chert. The two pieces of crystal quartz found were considered to be natural unworked pieces.

The pieces were widely scattered in the topsoil and occasionally within features, in which they are usually assumed to be residual. There is no concentration that could suggest a particular activity area. Scrapers are usually indicative of settlement sites but the scarcity of other worked flint makes a prehistoric settlement within the area of the trench unlikely.

Eight other stone items were recorded. Again these objects came from widely scattered locations making any association between them unclear. A polishing stone fragment with a groove worn down the face (SF103) and a perforated piece of shale (SF211) came from the ploughsoil. A slate piece (SF127), ground and polished to an accurate rectangular section, with a neat facetted point on one end, was found in the fill of the enclosure ditch [1008]. This was not dated but was considered to be possibly late post medieval. An unfinished spindlewhorl (SF172) embedded in surface (1065), a hammerstone found in the land drain [1058] and fragments of quernstones probably from the top of ditch [1019] suggest later prehistoric activity in the northern corner of the site but the finds, except possibly the spindlewhorl are disturbed from their original contexts.

The only piece definitely recovered from a primary context was the possible bake-stone (SF173), found, probably

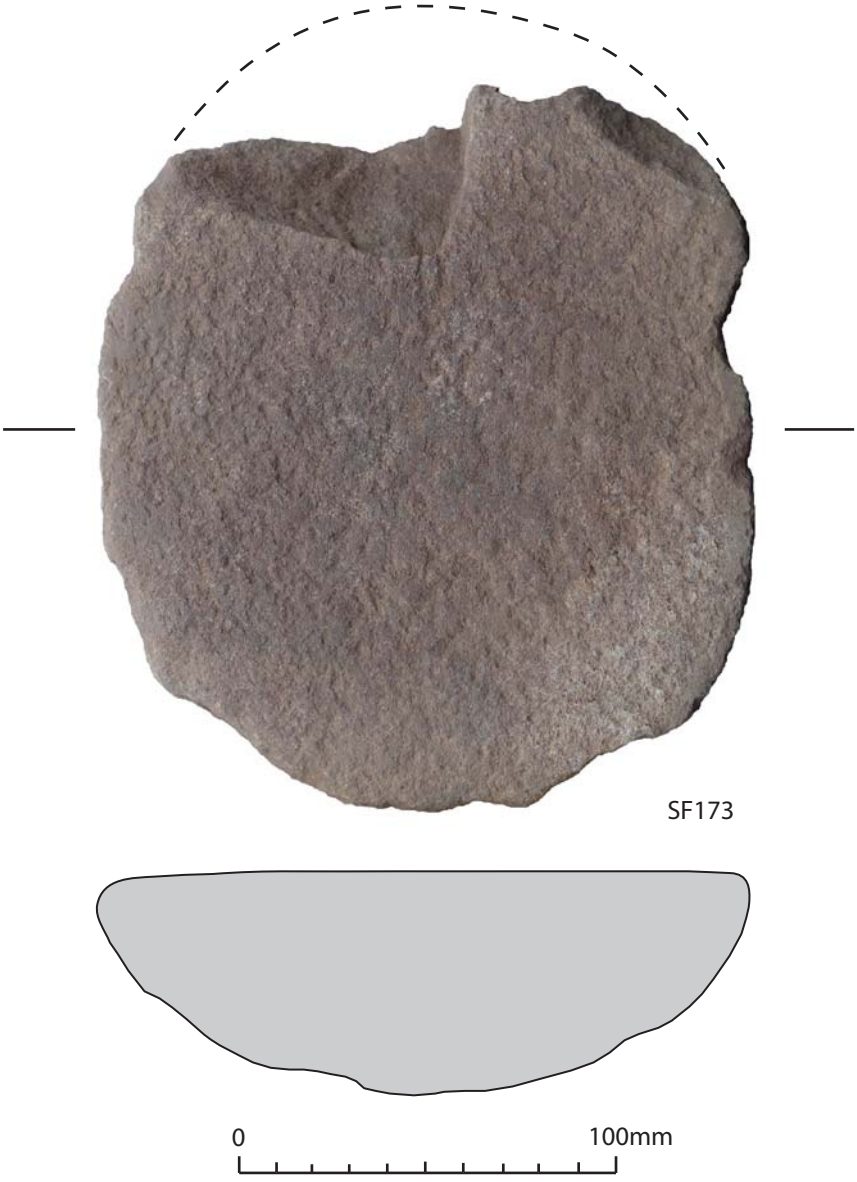


Figure 45. Bake-stone/saddle quern topstone (SF173) from hollow [1085]

in its working position, in a shallow hollow [1085]. This was originally a top-stone for a saddle quern that had been reused (figure 45). It is likely that it was therefore originally of Iron Age date but the date of its reuse is less certain.

Bone

The bones were assessed by Sian James, the full report forms appendix XI. Most of the bones recovered were tiny burnt fragments, recovered from wet sieving, and too small to be identifiable to species. They are however indicative of domestic waste as they probably originate from cooking. The largest fragment (SF 202), part of a lumbar vertebra of a cow came from layer (1006), the lower ploughsoil on the eastern edge of the site. A fragment from a long bone of a sheep/goat-sized animal (SF213) was recovered from the fill of ditch [1083]. The assemblage was too small and scattered to provide any significant conclusions about animal husbandry practices

4.8. **Charred plant remains**

Only a small number of contexts contained charcoal or the possibility of small artefacts so only seven bulk soil samples were taken. These were from the fills of ditches [1037] and [1039] because slag had been recovered by hand from these features and the samples could test for the presence of fine metal-working debris. The other samples were taken from charcoal-rich deposits, except one from the primary fill of feature [1046], which had some flecks of charcoal but was worth sampling in case any material suitable for dating could be recovered. Details of the soil samples and their processing are given in appendix III.

The bulk soil samples were processed through a floatation tank using a mesh size of 250 microns to capture the floating fraction. The heavy residue was wet sieved through a mesh of 500 microns. Both the flots and the residue were dried and the flots were bagged up for specialist assessment. The residue was sorted by hand to recover remaining ecofacts and any small artefacts. All the samples were checked with strong magnets to collect any magnetic debris, particularly metal-working debris. The finds have been included in the list of finds from the site.

The charred plant remains and charcoal were assessed by Rosalind McKenna (see appendix X for methodology and detail). Charred plant remains were generally poorly preserved. The most abundant items were indeterminate cereal grains, which were present in six of the samples; oat was identifiable in one sample (from the fill of drain [1066]). There was also a small amount of cereal chaff in two samples, which may indicate the use of cereals at the site. Arable weeds were found in four of the samples, and charred hazel nut shell fragments in two samples. The samples suggest the accidental burning of cleaned grain.

The cereal grains from the fill of ditch [1039] suggest domestic activity in this area. Larger numbers of cereal grains were recovered from deposit (1099) cut by ditch [1037], again indicating domestic activity. The fill of pit [1101], not far from (1099), also had a small number of cereal grains.

Charcoal was present in all the samples but only identifiable in three samples. The sample from the fill of pit [1063] contained only oak charcoal. This sample had the highest density of charcoal. The other two samples with identifiable charcoal were more typical of normal waste from domestic fires; the fill of hollow [1101] was dominated by willow/poplar charcoal with some oak, but the fill of ditch [1039] contained some hazel as well as oak. Oak and hazel are good fuel woods and willow/poplar is good kindling, and the presence of bark on some pieces suggests fuel wood rather than timber for construction.

4.9. **Radiocarbon dates**

The number of radiocarbon dates that could be obtained was limited by the availability of suitable samples. Few of the features contained charred material so only 7 bulk soil samples were taken. One of these, from the basal fill of feature [1046], contained only a small quantity of unidentifiable charcoal and 3 indeterminate cereal grains, so this was considered not worth dating.

A sample from the fill of drain (1066) contained significant quantities of cereal grain including oats. It was initially considered as possibly relating to a roundhouse or similar structure, so this was considered a priority for dating. Two dates were obtained on material from this sample.

Two samples were obtained from different parts of ditch [1039], one of the small enclosure ditches at the southern part of the site. It was considered important to establish the chronological relationship between the features in the northern and southern parts of the trench, so one date was obtained from each of these samples to get a rough date on the overall activity relating to this ditch.

The date from the ditch is checked by two dates from a charcoal-rich deposit (1099) cut by another ditch in this area (1037). This deposit contained cereal grains, so it appeared to be related to domestic activity in this area.

All material dated was charred cereal grain, so only short-lived material was used, and only single items were dated. The material was submitted to the Scottish Universities Environmental Research Centre (SUERC) for accelerator mass spectrometry (AMS) dating.

The resulting dates are listed below with the full dating certificates in appendix XII.

Table of radiocarbon dates from Hedd yr Ynys

Lab No	Context No	Context Description	Material/ species	Radiocarbon Age (BP)	$\delta^{13}C$ (‰)	Calibrated date (95.4% probability)
SUERC-74652	1051	Fill of drain (1066)	charred grain: *Avena* sp. (oat)	288 ± 25	-25.1	cal AD 1514 (61.5%) 1600; cal AD 1616 (33.9%) 1662
SUERC-74653	1051	Fill of drain (1066)	charred grain: *Avena* sp. (oat)	329 ± 29	-24.2	cal AD 1479-1643
SUERC-74654	1068	Fill of ditch [1039]	Charred cereal grain (indeterminate species)	1433 ± 29	-22.0	cal AD 574-655
SUERC-74655	1038	Fill of ditch [1039]	Charred cereal grain (indeterminate species)	144 ± 29	-22.4	cal AD 1668 (16.2%) 1710; cal AD 1717 (29.0%) 1782; cal AD 1797 (34.0%) 1890; cal AD 1910 (16.2%) 1947
SUERC-74656	1099	Charred deposit cut by enclosure ditch [1037]	Charred cereal grain (indeterminate species)	1468 ± 28	-24.0	cal AD 549-644
SUERC-74660	1099	Charred deposit cut by enclosure ditch [1037]	Charred cereal grain (indeterminate species)	1468 ± 29	-23.6	cal AD 548-645

All of the features that produced material for dating were isolated with no stratigraphic relationships or clear archaeological interpretations linking them no attempt has been made to use Bayesian analysis to interpret the dates. The small number of dates can only give a fairly rough indication of the date of activity on the site. The dating of two features was, however, critical to the interpretation of the site. The fill of the capped drain (1066) produced dates suggesting use in the 16th or 17th century AD. If the drain had been constructed much earlier it would be highly unlikely to still be open for this late material to penetrate. The two dates are also statistically indistinguishable so it is safe to suggest that the radiocarbon dates represent the date of the use of the drain. It was clearly not part of a roundhouse or other early structure.

The two dates from ditch [1039] are entirely different and it is suggested that the earlier date (SUERC-74654) is from residual material, while the later date (SUERC-74655) suggests that the ditch was being backfilled probably in the 17th or 18th century AD. This later date might also be intrusive and it cannot be claimed that this feature has been dated with any confidence.

The two dates from context (1099) are statistically indistinguishable and allow this to be confidently dated to the 6th or 7th centuries AD. The material dated by SUERC-74654 from ditch [1039] probably originated from the same phase of activity and later became incorporated in the ditch fill. This does demonstrate that there was early medieval activity on the site, which was probably domestic in nature as the deposit included numerous charred cereal grains but further excavation and dating would be necessary to firmly establish which other features might be associated with this activity.

5. DISCUSSION

Figure 46

5.1. **Possible Romano-British activity**

The interpretation of the archaeology revealed and excavated at Hedd yr Ynys is made difficult by the scarcity of dating evidence from the features themselves and the difficulty in identifying stratigraphic relationships where the fills of many of the features are indistinguishable. The finds are also not particularly helpful as most of the early finds are from the topsoil or ploughsoil. The geophysical survey provides additional information to help interpret what was excavated (figure 8).

The preliminary report (Kenney 2017) argued that some of the features in the northern corner of the site might represent parts of a roundhouse. This interpretation was based on the appearance of the capped drain (1066), which was similar to those sometimes found inside roundhouses. The dates from the fill of this drain conclusively rule out this interpretation and show that the drain was in use in the 16th or 17th century AD. Many of the features in this area were probably in use at the same time as the drain and are discussed below. No features can be attributed to the Roman period.

The Roman brooch and coin do, however, suggest some Roman activity in the area. These, along with the five Roman pot sherds, might have been deposited on the fields during manuring, with the manure coming from a settlement nearby. As there were few other geophysical anomalies in the Hedd yr Ynys field it is unlikely that there was a settlement elsewhere in the field and there is little other evidence to pinpoint a likely area. However the south-facing slope near the head of the Cefni Estuary would be an ideal place for a settlement, so this is still to be found.

5.2. **Medieval activity**

Although the project originally aimed to find an early medieval cemetery none of the geophysical anomalies interpreted as possible cemetery features have proved to be so and no graves were identified. The only possible grave was feature [1034] and the weight of the evidence suggests that this is unlikely to have been a grave. It can therefore conclusively be stated that there was no early medieval cemetery in the excavated area. However individual graves are difficult to identify on geophysical surveys so it is not impossible that the cemetery discovered in the 19th century exists elsewhere in the field.

The excavation was unable to locate the cemetery but there was clearly some early medieval activity in the investigated area. Only the charred patch (1099) can be proved to be early medieval in date as it produced radiocarbon dates of cal AD 549-644 (SUERC-74656) and cal AD 548-645 (SUERC-74660), placing it in the 6th or 7th century AD. This deposit contained charred cereal grains and appears to have been the result of domestic activity. Two other small pits in this area ([1042] and [1101]) might have been related to the same activity rather than associated with the later ditches. Another small pit to the north [1064] could also be associated. The presence of some slag in this pit, along with oak charcoal, is perhaps suggestive of small scale industrial activity. Pit [1064] was on the edge of the group of features towards the centre of the trench. The pale clay (1117) in this area was initially interpreted as a natural glacial deposit but such pale, firm clay was not present elsewhere in the site and it is possible that it was either deliberately deposited or that the natural clay was altered by the activity above it.

The location of the bake-stone (SF173) set in the middle of the clay is suggestive of it being placed inside a structure. The slight linear features around this area could possibly be remains relating to such a structure. Due to the lack of time to investigate this area such interpretation can only be very tentative. This area would repay further excavation, especially if it can be proved that these features are of early medieval date. Without further excavation it can be said that there may have been a small structure that could possibly have been of early medieval date but neither statement can be proved. It is possible that deposit (1099) was associated with activity further to the south and that the bake-stone was used at an entirely different period.

It is unfortunate that this area could not be more thoroughly investigated during the excavation. However the objective of the excavation as to investigate the small enclosures seen on the geophysics plot so the focus of the work was on the clearer, complex features in the northern corner of the trench and there was insufficient time to investigate everything.

A small number of artefacts indicate later medieval activity in the vicinity but like the Roman material this is most

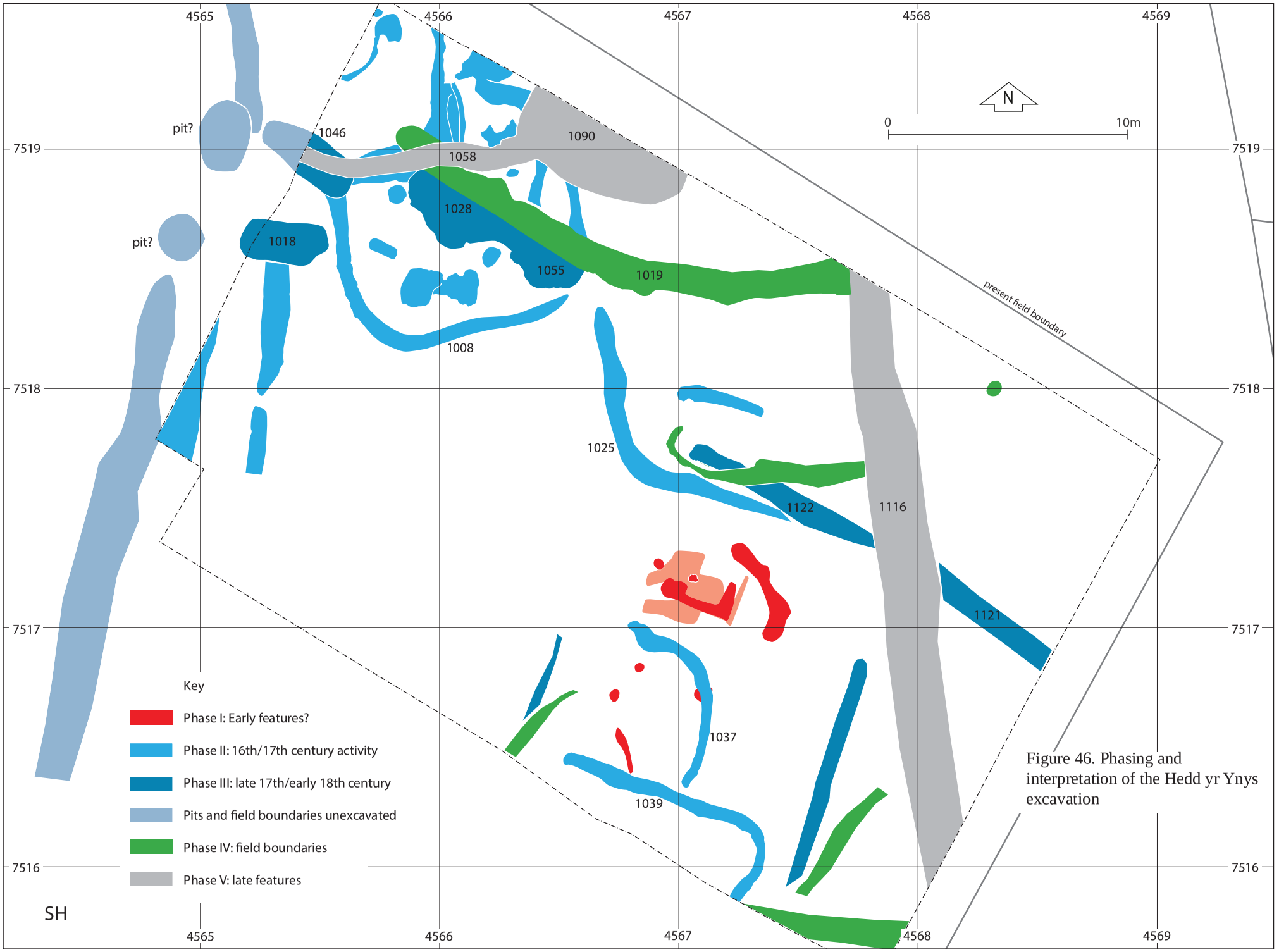


Figure 46. Phasing and interpretation of the Hedd yr Ynys excavation

likely to have been deposited on the fields from elsewhere or dropped accidentally. The 13th century lead seal matrix (SF63) and the lead spindlewhorl (SF101) are almost certainly casual losses. There are not enough finds to suggest a settlement nearby, though it seems probable that this area was settled in the medieval period, with Glanhwfa Bach, just to the east of the trench, likely to have had a medieval origin (figure 47). The seal matrix does suggest that someone of some importance did live in the vicinity.

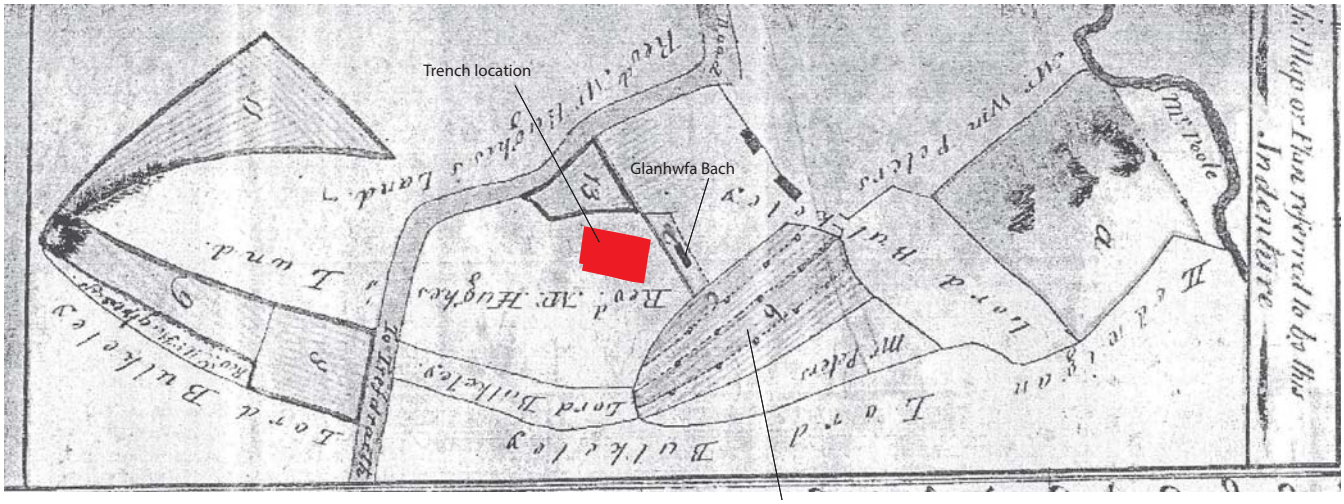


Figure 47. 1809 estate map with surviving remnants of a medieval open field system and a house adjacent to the trench (from a copy made by Alison Brigstocke) (Baron Hill 4007, Land Exchange of 1809)

5.3. 16th and 17th activity/ small enclosures

The small sub-rectangular enclosure in the northern corner of the excavation was a focus for activity. It was initially speculated that this and related features were Romano-British in date. However two consistent dates of cal AD 1514-1662 (SUERC-74652) and cal AD 1479-1643 (SUERC-74653) from the fill of the capped drain (1066) running north from the enclosure suggests a much later date for this activity. The drain was shallow and would have filled in quickly if not maintained so the date obtained is likely to indicate the latest period of use of the drain.

The relationship between the drain and adjacent gullies ((1074) and (1072)) with the small enclosure [1008] is not entirely clear. Gully [1076] runs almost perpendicularly from the probable northern side of the enclosure and seems to drain it into the capped drain; the other gullies presumably being earlier efforts at draining this area. These all run down towards the stream to the north of the trench. The position of these features suggests that they were used with the small enclosure and that it was important to keep this area well-drained. The layers of stone and cobbling ((1067), (1094) and (1065)) to the north of the enclosure are also assumed to have been in use with it, providing a consolidated surface just outside the enclosure. The presence of an unfinished spindlewhorl embedded in cobbling (1065) does still raise the possibility of Iron Age or Roman-British activity in this area but the nature of such activity is not clear.

Although it is hard to prove, it is assumed that the smaller features inside the enclosure are also related to its use; such as the postholes [1009] and [1110] and the pits [1032], [1034] and [1062]. A small sherd of late 17th to early 18th century date from pit [1032] could suggest that these features are later than the enclosure in date but the sherd may be intrusive.

Even if they are all contemporary the features give no clear idea about the use of the enclosure. It is suggested that the area might have been used as a small yard for storing hay or straw or other products. The postholes may therefore have supported posts for hay stacks, though a central position with the enclosure would have been more likely in this case. Certainly posthole [1110] seems too close to the northern side of the enclosure for this function.

Ditch [1039] in the southern part of the site is even harder to date as the two radiocarbon dates from this feature were so disparate that it seems probable that neither related to the use of the feature. The earlier date (cal AD 574-655 (SUERC-74654)) must be residual from early medieval activity in the area indicated by the date on feature (1099). It is possible that the later date (cal AD 1668-1947 (SUERC-74655)) is on intrusive material and that this ditch and the enclosure it defines remains undated. The similarity of this feature and gully [1037] to the northern enclosure [1008] does suggest that all these might be contemporary. The small amount of metal-working

debris from ditch [1039] could indicate smithing in the area but the quantities are low. It therefore cannot be demonstrated that this ditch enclosed an area for smithing.

These small enclosures can therefore only be suggested as being possibly 16th or 17th century in date and probably used for some undefined agricultural function, perhaps small paddocks and rick yards.

5.4. **Large pits**

The large pits [1018], [1028] and [1055] would seem to be likely to date to the late 17th or early 18th centuries according to the few sherds of pottery found within them. Some of the sherds are earlier but it is likely that they came from a deposit of mixed age such as a midden. However, these finds relate to the infilling of the pits not to their use. The steep sides of the pits do suggested that they were not left open for long periods. The fills also do not indicate weathering layers originating from the weathering of the pit sides, so it is suggested that they were backfilled fairly soon after being dug. Some midden material may have been included in the backfill but the lack of animal bone from these deposits perhaps argues against this. The pottery may therefore just have been present in the ploughsoil used in the backfilling and can give no more than a *terminus ante quem* date for the backfilling. Pit [1055] produced no finds but it seemed to be of a similar character to the other pits and is probably roughly contemporary. The pits seem to have cut through the small enclosure, although direct stratigraphic relationships are hard to prove.

The function of these pits is unknown. They do not seem to have been used for digging clay or gravel as they did not target good sources of either and pit [1055] was largely dug through limestone. They do not seem to have contained rubbish as the amount of finds from them was small. If domestic rubbish had been dumped in them animal bone would almost certainly have been included and the presence of limestone on the site would have caused the preservation of any bone, yet none was found in these pits. Neither was there any charcoal or ash or other debris. However the pot sherds of mixed date do hint at the redeposition of a deposit of mixed date, possibly a midden deposit. The pits could perhaps be interpreted as pits for tanning leather. If this were so, sediment would be expected in the base of the pits, along with typical finds from tanning sites, such as discarded horn cores and hooves, but no such traces were found. The presence of a lasting nail and leather cutting knife in the field could support the suggestion of leather working in the area.

As pit [1055] was over 1.2m deep the digging of this pit represents a considerable effort. There is a slight possibility that this feature was not an anthropogenic pit but a natural sink hole in the limestone. However the presence of [1028] and [1018], which were dug through clay and gravel and could not have been sink holes, suggests that this is not the answer.

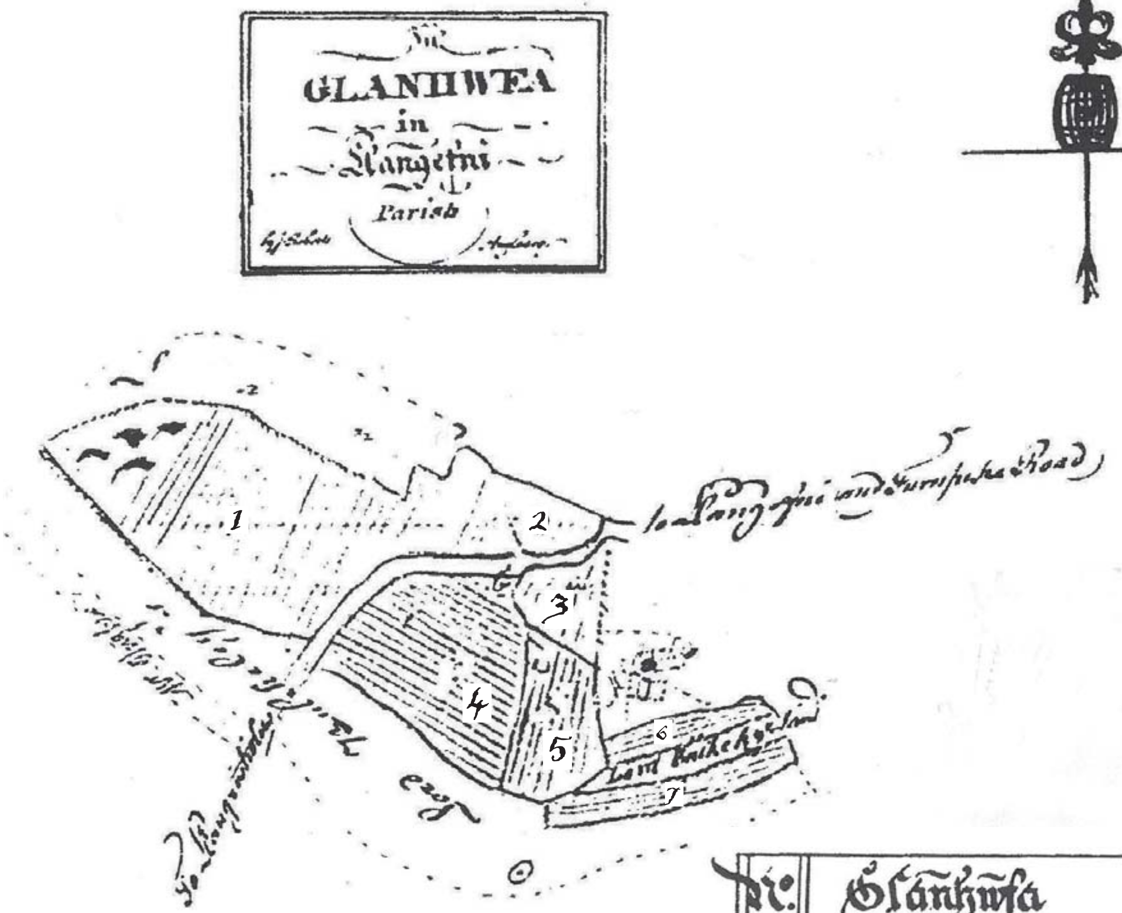
The geophysical survey suggests that feature [1046] was also a pit of this sort. It was of similar depth to the others but its V-shaped profile makes it very unusual for a pit and more excavation would be necessary to explain this feature.

It is possible that there were two more large pits in this area as the geophysical survey indicated two large sub-circular anomalies just west of the excavation trench. These have previously been interpreted as possible large postholes relating to the entrance of an Iron Age enclosure, but the lack of Iron Age dates or finds makes the interpretation of these as more large late pits more likely.

5.5. **Ditches**

As well as the ditches of the small enclosures the excavation trench was covered in ditches of a variety of sizes and depths. An estate map of c.1800 (figure 48) is important in interpreting the ditches. This shows a field boundary running almost north-south across the current field in a location which suggest that features [1030] and [1081/1013] may represent the remains of this boundary, along with a geophysical anomaly running north-north-east to south-south-west just west of the limits of the trench. This anomaly was not investigated in the excavation because it was interpreted on the original survey as a geological signal. The excavation has shown the signal to be exactly the same as genuine features, such as ditch [1019] and the several large pits in the area. This supports that idea that this anomaly is a ditch. There is a gap in this feature suggesting a possible field entrance. This feature was probably associated with the boundary shown on the estate map or with the headland to the west. The tithe map of 1841 shows this boundary removed and the field part of Fron land rather than Glanhwfa (figure 49).

The 1800 map has furrows, aligned roughly north-north-east to south-south-west, running across the field to the east of this boundary. Feature [1048] is almost certainly one of these furrows, but few other features follow this



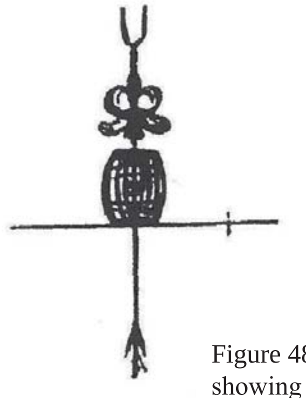
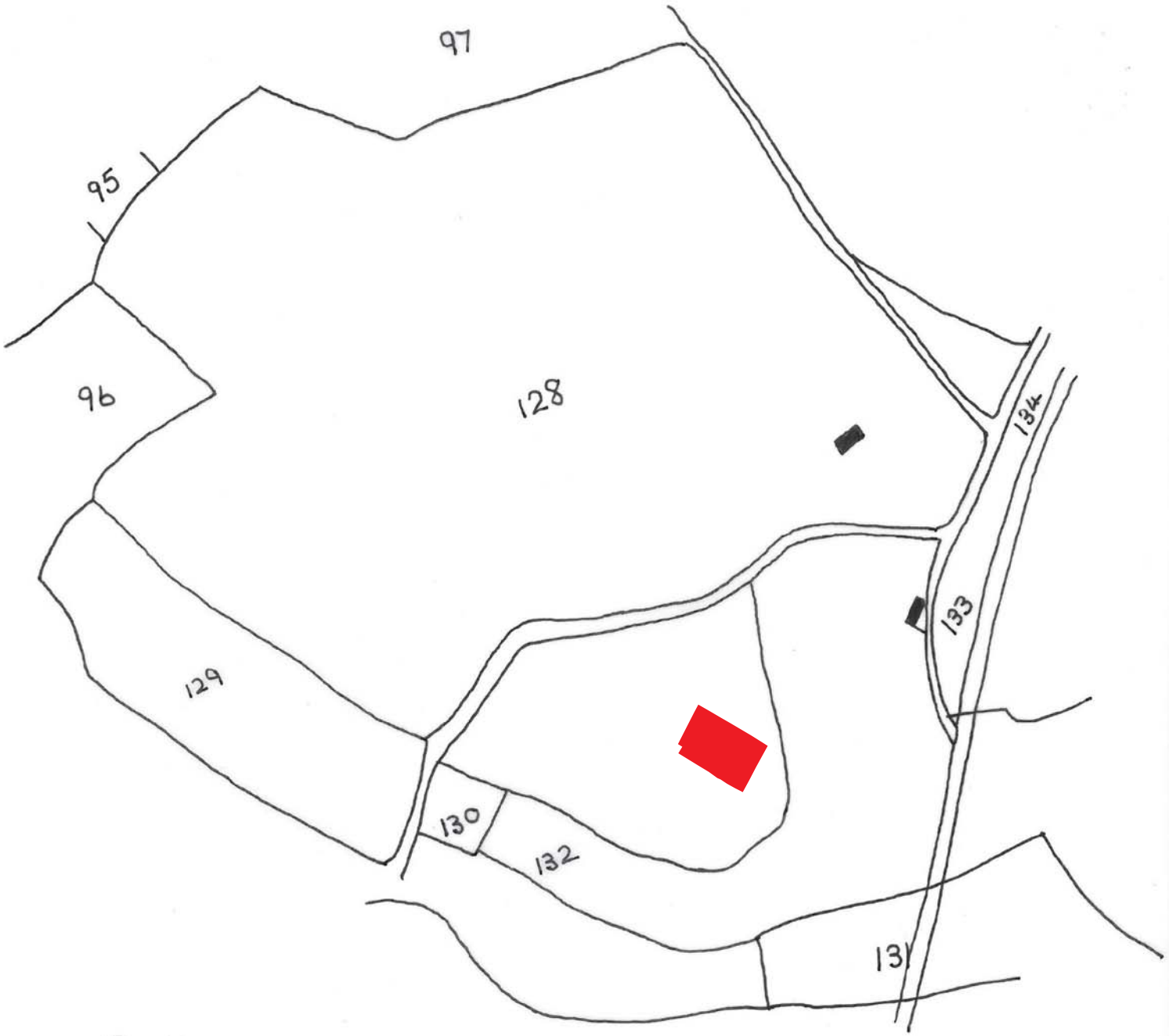


Figure 48. Baron Hill estate map probably dating to about 1800, showing Glanhwfa land (the trench is in field 5) (from a copy made by Alison Brigstocke)

No.	Glanhwfa	Arable			Meadow			Pasture			Content
		A.	R.	P.	A.	R.	P.	A.	R.	P.	
1	Cae Brynllwyd	4	-	-	-	-	-	-	1	8	
2&3	Candryll	-	3	14	-	-	-	-	-	-	
4	Cae Ty croes mawr	2	-	-	-	-	3	-	-	-	
5	Cae Ty croes bach	-	3	28	-	-	-	-	-	-	
6&7	Lleiniau Berw	-	2	20	-	-	-	-	-	-	
8&9	Cae Cefni	-	1	17	2	-	-	-	-	23	
		8	2	39	2	-	3	-	1	31	11.0.39 Total



Nº	Owner	Land name	Occupier
95	Henry Hughes	Llain Hir	Wm. Jones
96	Rev. Evan Wms.	Ty Mawr	Rev. Evan Williams
97	Griffith Richard	Tyn y Gamdda	Catherine Davies
128	Henry Hughes	Vron	Wm. Williams
129	Henry Hughes	Part of Vron	Wm. Williams
130	Lord Bulkeley	Llain yr Odyn	Rowland Hughes (Hse & garden)
131	John Evans	Quillet in Glanhwrfa	Robert Hughes
132	Lord Bulkeley	Glanhwrfa	Robert Hughes

Figure 49. Tracing of the 1841 tithe map by Alison Brigstocke (trench location in red)

alignment. Intriguingly a semi-circular mark is seen on the map almost exactly where the rectangular enclosure [1008] was located. This may be a random mark but its position and form does suggest that it may be representing the enclosure and could provide evidence that this continued in use into the start of the 19th century.

It is notable that the largest ditch-like feature [1116] runs north-north-west to south-south-east, across the line of the furrows on the map. No large field boundary is shown here and it is unlikely that the late 17th /early 18th century field layout was much different to the late 18th century plan. Feature [1116] is perfectly parallel with the eastern boundary of the field before the modern fence was inserted to fence of an area for woodland. This eastern boundary was straightened and on its current alignment by 1889, and must be a 19th century improvement. It seems very likely that feature [1116] was created after the boundary had been straightened and was also part of the 19th century improvements of the field. As it runs towards the stream it is most likely to be the trench for a large stone culvert. An example of similar width was investigated near Holyhead and seen to contain a stone culvert in its base running in that case to a marshy area (Kenney *et al* 2011, 120).

Ditch [1019] does not fit with the map evidence but seems unlikely to be a very early feature. The western end of it line remains unclear but it is unlikely to run into feature [1046] as was considered possible during the excavations. It probably terminates just beyond the northern side of the small enclosure, but more excavation would be required to confirm this. The relationship between this ditch and the large pits is impossible to prove without further excavation but there is a small hint that the ditch was later. The presence of a stony deposit (1056), which seems to be in the ditch fill, suggests the line of the southern side of the ditch as it cuts through the infilled pits.

If feature [1116] is a buried culvert ditch [1019] is unlikely to be contemporary. In order to function as drainage system the culvert would have smaller culverts or stone-filled drains running into it, not an open ditch.

The estate maps indicate enclosed medieval strip fields just east of the site. These are the relics of a medieval open field system which presumably covered this whole area. The furlong boundaries within the open fields would probably have been defined by ditches. However the relationship with the rectangular enclosure suggests that ditch [1019] is much later than the medieval period. It is likely that the alignment of the fields in the 18th century approximately reflects the medieval layout, so the 18th field was probably a cut down part of a small furlong with lands running nearly north-south and there is no reason for an east-west aligned ditch. The date of this ditch and many of the others on the site must remain in question.

5.6. **Summary**

The early medieval cemetery that the project was initially searching for is clearly not in this location and still needs to be sought elsewhere. The excavation showed that the geophysical survey was accurate in detecting archaeological features including several features interpreted on the original survey as being geological signals. Most of the features that were excavated were drainage gullies or field boundaries of unknown but presumably fairly late (17th century or later) date despite a lack of field boundaries shown in this area on available plans of the period. Large pits were dug for an unknown function probably in the 17th and 18th centuries. These may have been extractive but it is unclear what material they were extracting. Prior to that, probably in the 16th or earlier 17th centuries, there were several small sub-rectangular ditched enclosures. One of these was well-drained and may have been a hay rick or similar feature. Some pit digging and other activity was associated with the enclosures and there may have been some smithing in the area, although not very close to the site.

The most significant finding is the early medieval radiocarbon date from a small feature towards the southern side of the trench. This may be associated with other small pits in the area. Charred cereal grains in this feature demonstrate cultivation of cereals in the area at this time. Towards the middle of the site a deposit of pale clay and surrounding slight features may possibly indicate the location of a structure of the same period. This had a bakestone set into the ground in its centre. However the full significance of these features is not known.

Clearly there is considerable information still to be obtained from this site. The current excavation aimed largely to test the geophysics results and sample the features found. Much more excavation would be required to establish the full character of many of the features and their relationships to each other. As the radiocarbon dates and finds suggest that most of the features are post medieval in date and probably agricultural in function the value of further excavation might be questioned. The group of possibly early medieval features in the middle of the site would justify further investigation. However the remains here are slight and fragmentary and it may be that little more information would be recovered.

6. ACKNOWLEDGEMENTS

Thanks are due to the very many volunteers that worked on the excavation. The experienced volunteers that helped finish the recording of the site were Judit Abou-Samra, John Burman, David Forster, CR (Beaver) Hughes, Jeff Marples, Brian Milner, Avis Reynolds, Margaret Shakespeare and Graham and Irene Thompson. The metal-detector team consisted of CR (Beaver) Hughes, Neil Martins and Ian Harrison Brown with some assistance from Archie Gillespie. The Trust would like to extend to particular thanks to Wyn and Julia Morgan, the owners of the land, for their permission to carry out the work and for their toleration and support throughout the excavations and the Open Day.

David Hopewell and Bethan Jones assisted with supervising the volunteers, and Rhys Mwyn is thanked for taking the school visit and giving Welsh language tours on the Open Day and translating the blog. David Hopewell assisted with English language tours on the Open Day and Bethan Jones, Robert Evans and Nina Steele helped set up and organise the Open Day. Thanks to Ann Huws for translating the information for the Open Day displays. For much of the background research I am greatly indebted to Alison Brigstocke, who carried out research on Ysgubor Ddu for the Morgans and also to Wyn Morgan for allowing me to copy and use her research. This report was edited by David Hopewell.

7. REFERENCES

Brigstocke, A., 2005/6. *Called and known by the name of Ysgubor Ddu*, private research undertaken for the owners of the former Fron Farmyard (Wyn and Julia Morgan) and held in their possession

Cadogan, M, 2008. 'Teddy Tail of the Daily Mail', *Books Monthly* August 2008 (http://www.booksmonthly.co.uk/teddytail.html)

Davidson, A., Hopewell, D., Kenney, J. and Longley, D., 2002. *Early Medieval Burial and Ecclesiastical Sites 2001-2002 (G1680)*, unpublished GAT report 451

Flook, R., 2013. *Findspots and Archaeological Remains Pilot Project, Roman SW Anglesey Landscape Survey Project: Geophysical Surveys & Metal Detection Surveys*, unpublished GAT report 1127

Geology of Britain Viewer, British Geological Survey, http://mapapps.bgs.ac.uk/geologyofbritain/home.html

Gomme, G. L., 1887. *The gentleman's magazine library: being a classified collection of the chief contents of the gentleman's magazine from 1731 to 1868. Romano-British remains, pt 2* (https://babel.hathitrust.org/cgi/pt?id=hvd.hn4xhs;view=1up;seq=117, accessed 25/08/2016)

Kenney, J., 2017. *Hedd yr Ynys Excavation 2016, Lôn Fron, Llangefni, Anglesey: Preliminary Excavation Report*, unpublished GAT report No. 1375

Kenney, J. and Hopewell, D., 2014. *Evaluation of Scheduling Proposals 2013-14: Hen Gastell, Llanwnda*, unpublished GAT report No. 1167

Kenney, J., McGuinness, N., Cooke, R., Rees, C., and Davidson, A., 2011. P*arc Cybi, Holyhead: post excavation assessment of potential report*, unpublished GAT report No. 954, vol I

Kenney, J. and Parry L.W., 2013. 'Excavations at Ysgol yr Hendre, Llanbeblig, Caernarfon: a possible construction camp for Segontium fort and early medieval cemetery', *Archaeologia Cambrensis* 161 (2012), 249-284

Llwyd, A., 2007. A *History of the Island of Mona. The Guide to Anglesey by Angharad Llwyd, her famous prizewinning essay for the Beaumaris Eisteddfod of 1832*, Llyfrau Magma, Llansadwrn, Ynys Môn

8. APPENDIX I: List of finds

Find No	Context No	Material	Description	Period	No of items
1	1001	Iron	Drain grating	Modern	1
2	1001	Iron	Nail	Modern	1
3	1001	Iron	Nail	Modern	1
4	1001	Iron	Horseshoe	Modern	1
5	1001	Iron	Nail	Post medieval	1
6	1001	Iron	Nail	Modern	1
7	1001	Iron	Nut	Modern	1
8	1001	Iron	Strap	Post medieval	1
9	1001	Cu alloy	Handle	Post medieval	1
10	1001	Iron	Nail shank	Modern	2
11	1001	Iron	Bar, slotted	Post medieval	1
12	1001	Iron	Bolt	Modern	1
13	1001	Iron	Nail	Modern	1
14	1001	Iron	Open socket	Modern	1
15	1001	Iron	Wire	Modern	1
16	1001	Iron	Horseshoe	Post medieval	1
17	1001	Iron	Barbed wire	Modern	1
18	1001	Lead alloy	Strip, offcut	Modern?	1
19	1001	Iron	Nail	Modern	1
20	1001	Iron	Nail	Modern	1
21	1001	Iron	Coin	Modern	1
22	1001	Iron	Nail	Modern	1
23	1001	Iron	Nail	Post medieval	1
24	1001	Cu alloy	Badge	Modern	1
25	1001	Lead alloy	Sheet, offcut	Modern	1
26	1001	Ceramic	Post med sherd	Post medieval	1
27	1001	Iron	Nail	Post medieval	1
28	1001	Cu alloy	Buckle tongue fragment	Post medieval	1
29	1001	Iron	Nail	Post medieval	1
30	1001	Iron	Iron objects	Post medieval/modern	3
31	1001	Iron	Iron objects	Post medieval/modern	3
32	1001	Cu alloy	Buckle	Post medieval	1
33	1001	Iron	Nail	Post medieval/modern	1
34	1001	Cu alloy	Coin	Post medieval	1
35	1001	Iron	Formless fragment	Modern?	1
36	1001	Silver	Dime	Post medieval	1
37	1001	Iron	Nail	Post medieval/modern	1
38	1001	Iron	Nail	Post medieval	1
39	1001	Lead alloy	Lead alloy weight	Roman??	1
40	1001	Iron	Nails	Modern?	2

Find No	Context No	Material	Description	Period	No of items
41	1002	Iron	Blade	Modern	1
42	1001	Iron	Nails	Post medieval?	2
43	1001	Lead alloy	Shot	Post medieval	1
44	1002	Iron	Nail fragments	Modern?	2
45	1002	Cu alloy	Handle, window catch	Post medieval	1
46	1002	Iron	Nail	Modern	1
47	1002	Iron	Nails	Modern?	2
48	1002	Iron	Nails	Modern?	3
49	1002	Iron	Nails and screw	Modern	3
50	1002	Ceramic	Roman pot sherd	Roman	1
51	1002	Ceramic	Tile frag	Post medieval	1
52	1002	Iron	Iron blade fragment	Modern?	1
53	1002	Iron	Nail	Modern?	1
54	1002	Cu alloy	Coin	Post medieval	1
55	1002	Ceramic	Roman pot sherd	Roman	1
56	1002	Flint	Flint scraper	Prehistoric	1
60	1001	Iron	Shank/bar	Modern?	1
61	1001	Iron	Ring	Modern?	1
62	1001	Iron	Open socket	Modern	1
63	1001	Lead alloy	Lead alloy seal matrix fragment	Medieval	1
64	1001	Iron	Nail	Modern?	1
65	1001	Iron	Nail	Modern?	1
66	1001	Iron	Hook	Modern?	1
67	1001	Iron	Bolt	Modern	1
68	1001	Cu alloy	Bullet casing	Modern	1
69	1001	Cu alloy	Trumpet brooch	Roman	1
70	1001	Iron	Split pin	Modern?	1
71	1001	Iron	Nail	Modern	1
72	1001	Iron	Key, rotary	Post medieval	1
73	1001	Iron	Nailed binding	Modern?	1
74	1001	Lead alloy	Caulking	Modern?	1
75	1001	Lead alloy	Handle	Post medieval	1
76	1001	Cu alloy	Buckle pin	Post medieval	1
77	1001	Cu alloy	Buckle	Post medieval	1
78	1001	Iron	Coulter tip	Modern	1
79	1001	Iron	Nail	Modern?	1
80	1001	Cu alloy	Button	Post medieval	1
81	1001	Cu alloy	Button	Post medieval	1
82	1001	Lead alloy	Ingate	Post medieval	1
83	1001	Iron	Bar/nail. ?Chisel cut bar with beaten end, see sf93	Modern?	1

Find No	Context No	Material	Description	Period	No of items
84	1001	Cu alloy	Handle	Post medieval	1
85	1001	Iron	Formless iron fragment	Modern?	1
86	1001	Cu alloy?	Mount	Post medieval	1
87	1001	Lead alloy	Pipe offcut, metal working waste repair	Modern	1
88	1001	Lead alloy	Formless lead fragment	Modern?	1
89	1001	Lead alloy	Spoon	Post medieval	1
90	1001	Iron	Cold set and iron object	Modern	2
91	1001	Iron	Nail pulling tool	Modern?	1
92	1001	Cu alloy	Fitting, window/door furniture	Post medieval	1
93	1001	Iron	Bar/nail, ?chisel cut bar	Modern?	1
94	1001	Cu alloy	Coin	Post medieval	1
95	1001	Cu alloy	Sheet metal working waste	Post medieval	1
96	1001	Iron	Scythe blade	Post medieval	1
97	1001	Lead alloy	Lead spillage	Modern	1
98	1001	Iron	Bolt	Modern	1
100	1002	Iron	Rod/bar	Modern?	1
101	1001	Lead alloy	Lead alloy spindlewhorl	Medieval	1
102	1001	Iron	Nail, horseshoe.	Post medieval	1
103	1002	Stone	Slate polishing stone	Unknown	1
104	1005	Cu alloy	Coin (lost)	Medieval?	1
105	1001	Lead alloy	Disc, offcut: sheet metal working waste/washer cutting	Modern?	1
106	1001	Lead alloy	Sheet, offcut; sheet metal working waste/repair	Modern?	1
107	1001	Cu alloy	Ring with thumb rest	Post medieval	1
108	1001	Cu alloy	Sheet, offcut, folded; sheet metal working waste	Post medieval	1
109	1001	Lead alloy	Pipe offcut; metal working waste repair	Modern	1
110	1001	Lead alloy	Stem	Post medieval	1
111	1001	Cu alloy	Buckle	Post medieval	1
112	1001	Cu alloy	Coin	Post medieval	1
113	1001	Cu alloy	Disc	Modern	1
114	1001	Cu alloy	Button	Modern	1
115	1001	Lead alloy	Formless lead fragment	Modern?	1
116	1001	Lead alloy	Disc, offcut; sheet metal working waste/washer cutting	Modern?	1
117	1001	Cu alloy	Button	Modern	1
118	1001	Lead alloy	Sheet, offcut; sheet metal working waste/repair	Modern?	1

Find No	Context No	Material	Description	Period	No of items
119	1001	Cu alloy	Coin	Modern	1
120	1001	Lead alloy	Sheet, offcut; sheet metal working waste/repair	Modern?	1
121	1001	Cu alloy	Coin	Post medieval	1
122	1001	Lead alloy	Vessel fragment	Post medieval?	1
123	1001	Cu alloy	Chain	Post medieval	1
124	1001	Lead alloy	Sheet, offcut; sheet metal working/ repair	Modern?	1
125	1002	Flint	Flint flake	Prehistoric	1
126	1001	Lead alloy	Musket ball	Post medieval	1
127	1007	Stone	Unidentified slate object, pendant/ handle?	Post medieval?	1
128	1001	Lead alloy	Stem; metal working waste?	Modern?	1
129	1001	Lead alloy	Pipe offcut; metal working waste repair	Modern	1
130	1001	Lead alloy	Seating offcut; working waste	Modern?	1
131	1001	Lead alloy	Seating offcut; working waste	Modern?	1
132	1001	Cu alloy	Curtain ring	Post medieval	1
133	1001	Lead alloy	Buckle	Post medieval	1
134	1001	Cu alloy	Sheet fragment	Post medieval	1
135	1001	Cu alloy	Sheet fitting, riveted	Post medieval	1
136	1001	Lead alloy	Washer	Modern	1
137	1001	Iron	Wall anchor	Modern?	1
138	1001	Cu alloy	Button	Modern	1
139	1001	Cu alloy	Buckle	Post medieval	1
140	1001	Iron	Wall cramp	Modern?	1
141	1001	Cu alloy	Lock plate	Post medieval	1
142	1001	Cu alloy	Seating/collar	Modern	1
143	1001	Iron	3 pieces of a handle	Modern?	3
144	1001	Cu alloy	Button	Post medieval	1
145	1001	Iron	Donkey shoe	Post medieval	1
146	1001	Cu alloy	Buckle	Post medieval	1
147	1001	Lead alloy	Washer	Modern	1
148	1001	Lead alloy	Hone?	Modern	1
149	1001	Lead alloy	Handle, spoon	Post medieval	1
150	1001	Cu alloy	Buckle	Post medieval	1
151	1001	Cu alloy	Table fork	Modern	1

Find No	Context No	Material	Description	Period	No of items
152	1001	Cu alloy	Button	Post medieval	1
153	1002	Ceramic	Roman pot sherd	Roman	1
154	1001	Pewter	Finial, scrolled	Post medieval	1
155	1002	Ceramic	Clay spindlewhorl?	Roman	1
156	1040	Iron	Nail shanks	Modern	2
157	1002	Flint	Flint debitage	Natural?	1
158	1047	Flint	Rock crystal and flint flake	Prehistoric	2
160	1001	Lead alloy	Pipe offcut; metal working waste repair	Modern	1
161	1001	Cu alloy	Lid	Modern	1
162	1001	Iron	Pocket knife	Modern	1
163	1001	Cu alloy	Badge	Modern	1
164	1001	Lead alloy	Formless lead fragment	Modern?	1
165	1001	Cu alloy	Buckle	Post medieval	1
166	1001	Cu alloy	Coin	Modern	1
167	1001	Iron	Pocket knife	Modern	1
168	1001	Cu alloy	Button	Post medieval	1
169	1001	Lead alloy	Seating offcut; working waste	Modern?	1
170	1001	Lead alloy	Sheet offcut; sheet metal working waste/washer cutting	Modern?	1
171	1001	Cu alloy	Button and slotted hook	Modern	2
172	1065	Stone	Spindle whorl, unfinished	Iron Age/Roman?	1
173	1084	Stone	Bake stone/working slab previously saddle quern topstone	Iron Age?	1
174	1057	Chert	Shattered chert	Natural	1
175	1002	Cu alloy	Coin	Roman	1
176	1053	Iron	Concreted nails	Post medieval	1
177	1001	Flint	Struck pebble	Natural?	1
178	1000	Ceramic	Roman pot sherd, from spoil heap	Roman	1
179	1001	Cu alloy	Coin	Post medieval	1
180	1002	Flint	Flint pebble	Natural	1
181	1038	Iron	Iron concretion	Natural?	1
182	1038	Slag	Hearth lining	Post-medieval?	1
183	1038	Chert	Piece of chert, possibly worked	Prehistoric?	1
184	1056	Stone	Quern frags	Iron age?	2
185	1050	Stone	Possible hammer stone fragment	Unknown	1
186	1061	Flint	Chert and rock crystal	Natural	5
187	1006	Iron	Horseshoe and nails	Post medieval?	4
188	1006	Ceramic	Post med pot and glass	Post medieval	8
189	1022	Flint	Natural flint fragment	Natural	1
190	1024	Flint	Flint debitage	Prehistoric	1
191	1063	Slag	Vitrified hearth lining	Unknown	2
192	1051	Ceramic	Clay pipe stem	Post medieval	1

Find No	Context No	Material	Description	Period	No of items
193	1031	Flint	Flint pieces including part of a scraper	Prehistoric	3
194	1031	Ceramic	Pot sherd	Post medieval	1
195	1068	Chert	Natural chert and rock crystal	Natural	2
196	1027	Ceramic	Post med pot sherds	Post medieval	3
197	1017	Ceramic	Post med pot sherds	Post medieval	10
198	1017	Flint	Natural flint fragment	Natural	1
199	1017	Stone	Split slate fragment	Post medieval?	1
200	1016	Ceramic	Post med pot sherds	Post medieval	3
201	1016	Flint	Chert flake and quartz	Prehistoric	2
202	1006	Bone	Bone	Post-medieval	1
203	1040	Ceramic	Post med pot sherd	Post medieval	1
204	1005	Ceramic	Post med pot sherd	Post medieval	13
205	1005	Iron	Iron objects	Post medieval?	11
206	1005	Slag	Slag	Post-medieval	1
207	1000	Ceramic	Post med pot sherds	Post medieval	42
208	1000	Metal	Various metal-detector finds from spoil heap	Modern	11
209	1002	Ceramic	Post med pot sherds	Post medieval	12
210	1002	Flint	Flint pebbles and pieces, including a fragment of a scraper	Prehistoric	7
211	1002	Stone	Perforated stone	Unknown	1
212	1012	Ceramic	Pot sherd, initially thought to be possibly medieval	Post-medieval	1
213	1082	Bone	Bone	Post-medieval?	1
214	1038	Slag?	Pebble of iron ore. From soil sample 7	Post-medieval?	1
215	1038	Bone	Tiny frags of burnt bone. From soil sample 7	Post-medieval?	5
216	1038	Slag	Magnetic rock with a few possible hammerscale frags. From soil sample 7	Post-medieval?	1
217	1051	Bone	Tiny frags of burnt bone. From soil sample 1	Post-medieval?	7
218	1051	Slag	Magnetic rock with a few possible hammerscale frags. From soil sample 1	Post-medieval	1
219	1063	Slag	Magnetic rock with a few hammerscale frags. From soil sample 2	Unknown	1
220	1068	Flint	Flint flake with cortex. From soil sample 3	Prehistoric	1
221	1068	Slag	Spheroids/hammerscale. From soil sample 3	Post-medieval?	1
222	1068	Bone	Tiny frags of burnt bone. From soil sample 3	Post-medieval?	2
223	1045	Slag	Magnetic rock with a few possible hammerscale frags. From soil sample 4	Unknown	1

Find No	Context No	Material	Description	Period	No of items
224	1100	Bone	One tiny frag of burnt bone. From soil sample 5	Early medieval?	5
225	1099	Bone	Fragments of burnt bone. From soil sample 6	Early medieval	21
226	1099	Slag	Spheroids/hammerscale. From soil sample 6	Unknown	1
227	1099	Clay	Tiny piece of burnt clay. From soil sample 6	Unknown	1
228	1000	Silver	Button (silver etc). Metal-detector find from Fron Field. Field centre SH455753.	Modern	1
229	1040	Iron	Iron fibre processing spike	Medieval/early post medieval	1
230	1040	Lead alloy	Lead alloy shank	Post medieval?	1
231	1006	Iron	Lasting nail	Post medieval?	1
538	1001	Lead alloy	Disc, offcut; sheet metal working waste/washer cutting	Modern?	1
552	1001	Ceramic	Roman pot sherd, from 2013 metal detecting survey	Roman	1

9. APPENDIX II: Site Records

Context sheet	117 sheets
Context register	5 sheets
Digital photographs	195 files
Site drawings	41 drawings on 10 sheets
Photo record sheets	9 sheets
Drawing sheet register	1 sheet
Drawing register	3 sheets
Finds register	4 sheets
Sample register	1 sheet

10. APPENDIX III: List of bulk soil samples

Sample No.	Context No.	Context description	Total Weight (kg)	Volume (L)	% of deposit sampled	Date Processed	Notes
01	1051	Fill of stone-capped drain (1066)	9	8		15/08/2016	Some charcoal and root material
02	1063	Fill of small pit [1064]	13.7	15	100	15/08/2016	Abundant charcoal flecks and pieces (plus root material)
03	1068	Fill of gully/ ditch [1039]	7.1	7	<5	17/08/2016	Root material, charcoal flecks & pieces
04	1045	Primary fill of feature [1046]	6.3	7	<5	15/08/2016	Hardly any charcoal at all
05	1100	Fill of small pit/hollow [1101]	5.6	7	100	17/08/2016	Abundant charcoal flecks and pieces (plus root material)
06	1099	Charcoal patch cut by ditch [1037]	7.5	8	50	17/08/2016	Root material, some charcoal pieces
07	1038	Fill of ditch/ gully [1039]	9.7	8.5	<5	17/08/2016	Root material, few charcoal pieces.

11. APPENDIX IV: List of contexts

Context number	Type	Description	Interpretation	Dimensions
1001	Layer	Dark brown slightly malleable silt with occasional small stones	Topsoil	Depth: 0.15m
1002	Layer	Mid brown clayey silt with a few stones, 0.05m deep NW end of the site, getting slightly deeper at E end.	Plough soil	Depth: 0.2m max
1003	Layer	Pale yellow silty clay containing small and medium stones, occasional patches of grey and red brown clay.	Natural boulder clay	
1004	Fill	Deposit of large sub-angular and occasional sub-rounded stones (up to 0.3m length) in malleable mid brown silty clay.	Fill of posthole [1009]. Fairly deliberately placed stones laid flat, possibly placed to fill hole after the removal of a post.	
1005	Layer	Dark brown fairly malleable clayey silt with very few stones	Lower part of shallow plough soil over eastern drain.	Depth: c. 0.05m
1006	Layer	Dark brown friable clayey silt, c. 20% small stones and gravel	Lower part of plough soil. Dip from NW corner to NE side of trench caused plough soil to be deeper.	Depth: 0.1m
1007	Fill	Dark brown slightly malleable clayey silt, occasional stones and c.10% gravel.	Fill of rectangular enclosure ditch [1008].	Depth: 0.13m
1008	Cut	Shallow ditch running N to E with vertical inner edge, gradual sloping outer edge a flat base, with a neatly curved corner.	Rectangular enclosure ditch as seen on geophysics.	Length: c. 14.6m Breadth: 0.6m Depth: 0.13 – 0.35m
1009	Pit	Sub-circular, slightly oval shaped pit. Sloping sides at the top, vertical towards the flat base with a slight under cut.	Likely to be a post hole due to neatly dug feature, circular and flat bottomed. Presumed to be packed with stones after post removal.	Length: 0.86m Breadth: 0.64m Depth: 0.88m
1010	Fill	Dark brown compact clayey silt, few stones, 4 flat stones at N end (up to 0.15m in length).	Fill of gully [1011].	Depth: 0.05m
1011	Cut	Gently curving narrow gully, with poorly defined irregular sides and base, broader and rounded at the end containing stones.	Slight and indistinct gully.	Breadth: 0.13m Depth: 0.05m
1012	Fill	Mid brown clayey silt, 10% small and medium stones with patches of red-brown clay within.	Fill of [1013].	Depth: 0.12m
1013	Cut	Irregular linear feature, steep sides in places, undulating base, diffuse edges, confused by natural projecting within this line.	Feature largely caused by root activity, but is on the line of a slight ditch, possibly part of feature [1081].	Breadth: c.0.7m Depth: 0.12m max
1014	Fill	Friable grey-brown silt, c. 20% small – medium stones concentrated towards the centre of the feature. One of the stones in the top is of mill-stone conglomerate.	Fill of [1015]	Length: 0.3m Breadth: 0.15m Depth: 0.29m
1015	Cut	Sub-circular cut with near vertical sides and rounded base	Small post hole.	Length: 0.3m Breadth: 0.15m Depth: 0.29m
1016	Layer	Dark brown slightly clayey silt with occasional small stones.	Deposit at NE trench edge obscuring cut [1090] and covering stones of stone-filled drain [1058].	
1017	Fill	Diffuse loose soft mid brown clayey silt with occasional angular stones and sub rounded pebbles (up to 0.25m). Has occasional charcoal and a few pieces of slipware.	Fill of [1018].	Depth: 0.85m
1018	Cut	Elongated sub-circular with curved edges, sharp vertical side and flat base, though truncated by plough. Step left in midway up SE slope.	Large probably oval pit.	Length: 2.45m Breadth: 1.9m Depth: 0.85m

Context number	Type	Description	Interpretation	Dimensions
1019	Cut	Linear feature rather wandering in plan, with gradual to steep sides, and variable base, U-shaped profile in one section and V-shaped in another. Cut into limestone bedrock (1026).	Enclosure or drainage ditch	Length: >11m Breadth: c. 1.4m Depth: up to 0.35m
1020	Fill	Plastic medium dark grey-brown silty sandy clay with frequent medium gravel and some cobbles (<0.12m). A few pieces of unworked chert recovered from the deposit.	Fill of E facing section from ditch [1019].	Depth: 0.32m
1021	Fill	Plastic medium dark-grey brown sandy silty clay with frequent gravel and cobbles.	Fill of W facing section from [1019], deposit similar to (1021) though no chert,	Depth: 0.35m
1022	Fill	Grey brown rather friable silt with c. 20% small angular and sub-angular stones.	Fill of ditch [1023]	Depth: 0.1m
1023	Cut	Narrow, shallow ditch with fairly steep sides, flat base shallow rounded terminus at E end. Possibly truncated. W end not investigated, but stones <0.3m long within suggest that there may be a posthole here.	Regular ditch or gully. Possible posthole at W end?	Breadth: 0.48m Depth: 0.1m
1024	Fill	Dark grey silty with occasional stones, becoming more clayey to the N with a pink-red hue.	Fill of [1025]	Depth: 0.16m
1025	Cut	Linear feature with steep sides and flat base, running E – W then turning rounded corner orienting N-S.	Ditch with straight sections and curving corner	Breadth: 0.5m Depth: 0.18m
1026	Natural	Broken up surface of limestone bedrock, cracked and eroded appearing almost like pebbles.	Limestone bedrock	
1027	Fill	Brown clayey silt with c.10% up to 0.15m in length.	Fill of pit [1028], with stones 1043 over fill of pit.	Depth: 0.72m
1028	Cut	Very large irregular sub-oval pit, side exposed slopes at c.45˚.	Very large pit	Depth: 0.72m
1029	Fill	Grey-brown clayey silt, groups of stones <0.15m long.	Fill of ditch [1030]	Depth: 0.25m
1030	Cut	Linear feature running c. N-S with steep sides and a flat base with some hollows in it.	Straight ditch.	Length: >6m Breadth: >1.9m Depth: 0.25m max
1031	Fill	Brown clayey silt with occasional small and medium gravel, more clayey and stony at the sides and base.	Fill of pit [1032]	Depth: 0.44m
1032	Cut	Sub-oval pit with variable sides, steep and gradual in places with an irregular rounded base cutting into gravel, clay and limestone (S side).	Pit with hollow in base.	Length: 1.7m Breadth: 1.4m Depth: 0.44m
1033		No 1033 given out, missed in context register.		
1034	Cut	Rectangular cut aligned SE-NW, steep sides, slight step E end, flat base with slight undulation and stones sticking out.	Small grave-shaped pit, no evidence of cist or lining	Length: 1.29 Breadth: 0.51 Depth: 0.21
1035	Fill	Brown clayey silt with occasional small stones, medium ones at the base.	Fill of [1034]	Depth: 0.21
1036	Fill	Dark grey-brown clayey silt with occasional small stones	Fill of [1037]	Depth: 0.18m max
1037	Cut	Gully running straight then curving, petering out at ends with steep sides and irregular base with some projecting stones and agglomerations. NW end vague and irregular. Peters out before reaching [1039].	Long curving gully.	Breadth: 0.38m Depth: 0.18m max
1038	Fill	Dark grey-brown sandy silty clay, numerous small and medium stones lying layered at upper part of fill, some flat.	Stony fill of [1039], where it goes into the baulk.	Depth: 0.2m
1039	Cut	Straight linear feature running c. E-W, curving neatly to run S, vertical sides with a v-shaped base with a “shelf” along N side.	Neatly dug ditch forming the corner of an enclosure.	Breadth: 0.6m Depth: 0.2m

Context number	Type	Description	Interpretation	Dimensions
1040	Layer	Soft red-orange brown, variable from silty clay to clay with a few small stones. Pure clay backfill in places.	Deposit covering slabs of drain (1066), possibly forming a floor surface with 1067 and 1094.	Depth: 0.1m
1041	Fill	Dark grey-brown clayey silt with very few stones and occasional charcoal flecks.	Fill of small pit [1042]	Depth: 0.12m
1042	Cut	Circular pit with gradually sloping sides, curving gradually into flat base.	Small pit	Depth: 0.12m
1043	Fill	Brown clayey silt containing numerous stones up to 0.3m long. Conglomerate of stones seem to form a line along top of ditch [1046].	Line of stones. May be related to land drain [1058]	Depth: c.0.2m
1044	Fill	Brown silty clay with occasional small and medium stones.	Main fill of ditch [1046]	Depth: 0.6m
1045	Fill	Grey-brown silty clay with charcoal flecks, several large stones (<0.2m), gravel and some smaller stones.	Primary fill of ditch [1046]	Depth: 0.17m
1046	Cut	V-profile ditch sloping at c.45° with slight step on S side, Narrow base, possibly an ankle-breaker (0.2m wide and c.0.15m deep).	Profile appears like a defensive ditch but probably an elongated oval pit.	Depth: 0.75m
1047	Fill	Dark grey brown clayey-silt, slightly gritty with occasional small stones.	Fill of ditch [1048].	Depth: 0.08m
1048	Cut	Severely truncated slight ditch/furrow, very shallow with gradually sloping sides and flat base.	Slight ditch/furrow, very difficult to distinguish as cuts into (1098)	Breadth: 0.7m Depth: 0.08m
1049		Renumbered as 1067		
1050	Fill	Brown clayey silt with densely packed c. 50% large sub-angular stones (<0.4m), occasional small stones and coral from limestone.	Fill of land drain [1058]	Depth: c.0.9m
1051	Fill	Soft dark grey clayey silt with no inclusions, clean. Fairly pure silt presumably natural silting of the drain.	Fill of drain [1066]	Depth: 0.03m
1052	Layer	Firm dark red/brown clay without inclusions, very clean natural.	Natural clay underneath 1066	
1053	Fill	Dark grey clayey silt with occasional small stones	Fill of [1039] in middle sondage.	Depth: 0.18m
1054	Fill	Firm mid-dark reddish brown silty clay, occasional stone inclusions <0.01mm and charcoal flecks.	Fill of [1055].	Depth: 0.5m
1055	|Cut	Semi-circular feature with curving slopes, vertical sides and with an uneven base, possible deeper cut towards centre of feature (undug). Probably part of a large sub-circular pit.	Large oval pit.	Depth: c. 1.2m
1056		Small patch of stones at possible junction of features, no more than 0.1m, one a piece of quern stone.	Stones maybe in edge of ditch [1019], seemingly cutting into pit [1055].	Depth : 0.08m
1057	Layer	Red-brown gravel with clay matrix, c.20% small stones with occasional medium stones up to 0.3m long. Some of the larger stones lie fairly flat and are suggestive of a feature, but are actually embedded in the natural.	Glacial gravels overlying boulder clay.	Depth: 0.08 – 0.6m
1058	Cut	Linear feature curving at W end, vertical sides and flat base at lower part, though upper sides seem to gently slope and cut into [1056]. Broader at top than base with rounded W end cutting through gravel (1057).	Land drain	Depth: c.0.9m
1059	Fill	Frim mid-dark yellowish brown silty clay with occasional stone inclusions. Similar texture to (1054) and (1060).	Fill of [1055].	Depth: 0.2m max
1060	Fill	Firm mid-dark reddish brown silty clay with occasional charcoal. Nearly identical to (1054) in colour and texture, similar to (1059) but darker in colour.	Fill of [1055}.	Depth: 0.7m
1061	Fill	Firm drown silty clay, <5% small stones. Chert fragments and small quartz crystal recovered.	Fill of [1062].	Depth: 0.15m

Context number	Type	Description	Interpretation	Dimensions
1062	Cut	Very irregularly shaped feature, somewhat rounded, brown clay at base, undulating clay sides. Orientating E-W.	Shallow hollow – presumably natural but possibly related to erosion caused by activity near [1032].	Depth: 0.15m
1063	Fill	Variable dark brown silty clay with frequent charcoal inclusions.	Charcoal-rich fill of [1064].	Depth: 0.7m
1064	Cut	Small sub-circular very shallow pit with gradually sloping sides and flat base	Charcoal-filled "pit" cut into edge of pale yellow-grey clay.	Diameter: 0.51m Depth: 0.07m
1065	Layer	Small patch of generally angular small stones embedded into natural.	Possible cobbled surface.	Depth: 0.06m
1066	Structure	Stone drain with flat limestone capping stones supported on a ledge of upright side stones. Stones set in a neatly shaped cut terminating abruptly with vertical stones. Drain slopes toward N, near a stream.	Shallow stone-lined drain at the base of asymmetrical V-shaped cut.	Breadth: 0.5m Depth: 0.12m
1067		A series of flat slabs typically 0.3 – 0.4m long laid to form a level surface. Various stone types.	Series of slabs appearing to form a part of a surface perhaps along with 1094 and 1040.	Length: >1.2m Breadth: 0.6m Depth: 0.08m
1068	Fill	Dark grey-brown clayey silt with some small stones.	Fill of ditch [1039]	Depth: 0.2m
1069		Renumbered as 1091, see 1091 for description etc.		
1070	Fill	Grey-brown clayey silt with c. 30% large angular and sub-angular stones up to 0.26m long. Stones sloping on sides not positioned deliberately.	Fill of N part of [1008] containing stones.	Depth:0.35m
1071	Fill	Firm friable orange brown clayey silt with occasional stones up to 10cm long. Fill undistinguishable from that of wider hollow 1073.	Fill of slot [1072]	Depth: 0.15m
1072	Cut	Linear feature with sharp slope breaks, slightly concave sides and base.	Shallow irregular V-profiled slot cut into base of [1074].	Breadth: 0.16m Depth: 0.15
1073	Fill	Firm mid orange brown clayey silt with occasional stones.	Fill of [1074], relationship with 1072 hard to determine	Depth: 0.1m
1074	Cut	Irregular hollow with steep sides and flat base running N-S towards stone slab but appearing to peter out.	An irregular wider linear hollow	Breadth: 0.7m Depth: 0.1m
1075	Fill	Firm mid-orange brown clayey silt with patches of red-brown clay, purplish sand and flecks of yellow mottled sandstone.	Fill of [1076].	Depth: 0.12m
1076	Cut	Irregular linear feature with rounded profile, orientating N-S with a flat base and fairly sloping sides. Slopes to S.	Wide shallow hollow linear	Breadth: 0.6 Depth: 0.12
1077	Fill	Grey clayey silt, patches of pale yellowish grey clay near top with some medium stones up to 0.2m long pressed into cut base.	Fill of [1078].	Depth: 0.3m
1078	Cut	Rather irregular circular pit with steep and sloping sides and stones in base. Not fully exposed as stones left in base for recording.	Irregular shaped pit.	Length: 1.2m Breadth: 1m Depth: 0.3m
1079	Layer	Orange-brown clayey silt with few stones.	Natural orange silt over SW part of site.	
1080	Fill	Brown clayey silt with few stones.	Fill of [1081] – probably cut by 1018, though no firm evidence.	Depth: 0.12m
1081	Cut	Shallow, straight linear feature with very gently sloping sides and a flat base, rather confused by roots in places, possibly truncated.	Possibly a boundary, but rather shallow for a ditch.	Length: 5.5m Breadth: 1.1m Height: 0.12m
1082	Fill	Brown clayey silt with lens of pale silt in S, sparse stone inclusions though increase at base.	Fill of ditch [1083], difficult to see if 1088 cuts this.	Depth: 0.53m

Context number	Type	Description	Interpretation	Dimensions
1083	Cut	V-shaped profile becoming shallower and end in rounded terminus at NW, vertical N end with gradually sloping sides in S and narrow base.	Ditch cut into bedrock.	Breadth: 0.77m Depth: 0.53m
1084	Fill	Grey brown silty clay with charcoal flecks and occasional small stones but largely filled with SF173.	Fill of [1085].	Depth: 0.08m
1085	Cut	Shallow sub-circular hollow in pale clay with sloping sides and rounded base.	Slight hollow, just large enough to hold SF173.	Diameter: c.0.3m Depth: 0.08m
1086	Cut	Wide linear feature running approx. E/W. Not sectioned.	Seems to be straight ditch-like cut.	Breadth: 0.8m
1087	Fill	Brown clay silt with flecks of decayed orange stone, NW end has a quite high portion of small stones.	Fill of [1088]	Depth: c.0.2m max
1088	Cut	Fairly narrow gully with steep sides and flat base curving at NW axis, running into un-excavated area with fairly large stones.	Gully or slot of unknown function.	Breadth: c.0.4m Depth: c.0.2m max
1089	Fill	Dark brown clayey silt with occasional stones, containing 19th century pottery.	Fill of [1090].	Depth: >0.26m
1090	Cut	Large roughly oval hollow, only fully defined on NW and SW sides, NE part under the baulk and SE part confused by overlying deposit (1016). Length defined largely by geophysical signal. Where exposed the sides are fairly gradually sloping; the base was not seen.	Hollow or very large pit.	Length: c7.5m Depth: >0.26m
1091	Fill	Layer of firm red-brown redeposited clay over parts of drain (1066). Similar to natural red clay in this area.	Redeposited clay over parts of drain (1066)	Depth: 0.1m
1092	Cut	Linear feature with rounded corners and gradually sloping sides with a sharp break to a flat base, orientated EW.	Cut for drain (1066)	Breadth: 0.5m Depth: 0.12m
1093	Fill	Hard-friable, mid brown gritty silty clay, 30% small stones 0.02 – 0.06m.	Fill of [1086], not investigated.	Breadth: 0.8m
1094	Structure	Three large green stone slabs (<0.5m) lying on surface of 1093, tilting as though they have subsided into a matrix.	Possibly part of surface with 1067 and features associated with [1066].	Length: 1.1m Breadth: 0.4m
1095	Layer	Firm-friable dark orange-brown gritty silty clay with variable angular stone inclusions (0.08 – 0.15m), up to 80% stones towards the NW side (not investigated further).	Mixed deposit of abundant angular stones, possibly plough-damaged stony surface.	
1096	Fill	Brown clayey silt with very few stones, similar but slightly browner that 1029.	Fill of hollow 1097.	Depth: 0.07m
1097	Cut	One curving side of possibly sub-oval feature with gradually sloping sides and flat base, cut away by ditch [1030].	Sub-oval very shallow hollow, probable natural hollow.	Length: c.2.3m Breadth: >0.77m Depth: 0.07m
1098	Layer	Dark grey-brown silt in SE corner of site containing small stones, appearing rather shallow in places. Depth not fully investigated.	Possible pond deposit, wet area?	Depth: <0.06m
1099	Layer	Small sub-oval patch of charcoal in dark brown clayey silt with small pebbles and patches of burnt reddish clay.	Patch of charcoal cut by ditch 1037.	Depth: 0.06m
1100	Fill	Dark brown clayey silt with frequent charcoal patches and lenses widely distributed.	Charcoal fill of [1101]	Depth: 0.07m
1101	Cut	Small near circular hollow/pit, very shallow with fairly steep sides and flat base.	Slight hollow or pit.	Length: 0.46m Breadth: 0.42m Depth: 0.07m
1102	Fill	Dark grey-brown clayey silt, similar to (1074)	Fill of ditch [1103] – not excavated.	Breadth: 0.75m
1103	Cut	Slight ditch – hard to see in 1098, no terminal visible.	Ditch – not investigated.	Breadth: 0.75m
1104	Fill	Dark grey-brown clayey silt with numerous stones.	Fill of ditch [1105] – not investigated.	Breadth: c.1m
1105	Cut	Straight ditch running across SE corner of site.	Ditch – not investigated.	Breadth: c.1m

Context number	Type	Description	Interpretation	Dimensions
1106	Layer	Brown clayey silt with occasional stones up to 0.2m in length.	Mixed deposit including upper part of 1050 and of 1107 with no difference between them.	Depth: 0.5m
1107	Fill	Grey-brown clayey silt with occasional stones.	Fill of [1108]	
1108	Cut	Fairly straight cut edge gently sloping where exposed but steeper where best preserved. Not fully excavated but chased to expose edge.	Cut edge, possibly part of [1028] or ditch [1019].	
1109	Fill	Brown clay silt with several stones >0.2m long with gravel near sides and base. No clear patterning or arrangement to the stones.	Fill of [1110]	Diameter: c.0.6m
1110	Cut	Sub-circular cut with fairly steep sides and rounded base with 2 deeper hollows within.	Small pit or posthole. Pit [1028] cuts close to [1110] but not possible to establish relationship.	Diameter: c.0.6m Depth: c.0.4m
1111	Fill	Brown clayey silt with small stones, 2 medium sized stones >0.2m long. One set on edge and largest is a conglomerate of the sort used to make quern stones.	Stones and fill of [1112], stones may have been deliberately placed.	Depth: 0.05m
1112	Cut	Very shallow cut, probably originally circular with steep sided and flat base, partially dug as rest under baulk.	Slight hollow, possibly specifically to support the stones in it.	Diameter: c.0.4m Depth: 0.05m
1113	Fill	Brown clayey silt with few stones.	Fill of [1114].	Depth: 0.06m
1114	Cut	Elongated shallow gully with rounded ends petering out before reaching [1039], running at NW-SE axis.	Gully or possibly a burrow.	Length: 2m Breadth: 0.44m Depth: 0.06m
1115	Fill	Brown clayey silt with few stones and gravel, group of stones in E side.	Fill of ditch [1116] – not investigated.	
1116	Cut	Straight broad ditch.	Possibly a field boundary ditch – not investigated.	Length: >24m Breadth: c.2.4m
1117	Layer	Very pale grey/white silty clay with few stones. Firm when dry and plastic when wet. Left rather upstanding due to machining.	Area of particularly pale clay.	Length: c.4m Breadth: c.3m
1118	Fill	Brown clayey silt with few stones.	Fill of [1119].	
1119	Cut	Amorphous, roughly L-shaped, very shallow feature.	Possibly traces of ploughing	Length: c.3m Breadth: c.0.5m Depth: 0.1m max
1120	Fill?	A linear patch of brown clayey silt with some small stones and patches of charcoal.	Not investigated, so unsure if this is the fill of a feature	Length: c.4.5m Breadth: up to c.1.0m
1121	Fill?	A linear spread of dark grey clayey silt with numerous small stones.	Almost certainly a ditch, but not investigated.	
1122	Fill?	A linear spread of dark grey clayey silt with occasional small stones.	Almost certainly a ditch, but not investigated.	
1123	Fill?	A linear spread of dark grey clayey silt with few stones and some lumps of reddish clay.	Almost certainly a ditch, but not investigated.	
1124	Fill?	Small sub-circular patch of charcoal-rich clayey silt.	Possible charcoal-filled pit or hollow, not investigated	Diameter: c.0.5m

12. APPENDIX V: Report on Roman Pottery

Gill Dunn, freelance Roman pottery specialist

There are five fragments of Roman pottery and one possible ceramic spindlewhorl of ?Roman date, which are listed below:

Find number 50 (1002)
One body sherd in a coarse orange Cheshire Plain type fabric weighing 2g.

Find number 55 (1002)
One base sherd of a vessel in a coarse orange Cheshire Plain type fabric weighing 4g. Very weathered.

Find number 153 (1002)
One body sherd in a coarse orange Cheshire Plain type fabric weighing 2g. This is probably pottery as opposed to a fragment of tile though the surfaces are very weathered.

Find number 155 (1002)
Roughly spherical piece of fired clay, possibly a spindlewhorl, in a pale grey/buff fabric weighing 5g. Maximum diameter 21.6 mm, maximum height 16.9 mm.

Find number 178 (unstratified) (from spoil heap)
One sherd in a soft brown/orange fine Cheshire Plain type fabric weighing 17g with rouletted decoration. Very weathered.

Find number 552 (1001) (from fieldwalking)
Rim sherd weighing 21g. Very fine grey fabric and smooth grey surfaces. Plain 'collared' rim of a ?bowl, weathered on the top and stepping in 38 mm from the rim edge. Patches of vertical scoring marks on the interior surface and possible sooting marks.

Summary
All the fragments except for the grey ware sherd are very weathered, as is to be expected when recovered from plough soil and topsoil. Although the material appears to date to the first and second centuries, the small quantity, its fragmentary nature and the circumstances of retrieval (from plough soil, unstratified or field walking) means that little can be concluded regarding the dating or function of the settlement.

13. APPENDIX VI: Report on Post-medieval Pottery

Jonathan Goodwin, Stoke-on-Trent Archaeology Service (Report No. 414)

Introduction
Gwynedd Archaeological Trust carried out a community excavation on the potential site of an early medieval cemetery on the southern outskirts of Llangefni, Anglesey (GAT Project No. G2455). The excavation was undertaken in July 2016 and targeted anomalies identified during a previous geophysical survey. The project also included a metal detecting survey of the excavation area and the field within which it was located (Kenney 2017).

Stoke-on-Trent Archaeology Service was appointed to undertake an assessment of potential for further analysis of the small assemblage of post-medieval pottery recovered from the site.

Assessment methodology
The ceramic finds from Hedd yr Ynys were catalogued by context and further organised by ware/ fabric type, decoration and vessel form during post-excavation assessment. Primary quantification was by sherd count and weight, and a minimum vessel count was also conducted. This latter quantification was based principally on the presence of rims, but also components such as bases and handles where no other vessel part was represented within the assemblage. Similarly, body sherds were used conservatively within the vessel count and considered only where the particular form, fabric or decorative technique could not be identified elsewhere. Sherds were examined macroscopically or with a hand lens. A full catalogue of the sherds is provided in table VI.2.

The assemblage comprises 95 pottery sherds (655g in weight), representing a minimum of 57 vessels, recovered from ten contexts and an unstratified group (recorded as (1000)/ finds no. 207). Thirty-two percent of the fragments (by sherd count) weigh no more than 1g; 7% weigh between 1g and 5g. Fourteen percent of sherds show marked surface abrasion.

Three fragments of abraded, orange/ red-bodied ceramic building material were found within the pottery assemblage, but were not included within the main quantification or assessment. They were, however, recorded and are presented in table VI.3. A small group of clay pipes and a single fragment of glass were treated in the same manner (see tables VI.4 and 5).

Context summaries
Descriptions of the ceramics by context are provided below. The overall date range for pottery finds from each context is given in table VI.1. A full catalogue of the ceramics is presented in table VI.2.

1000/ finds no. 207 *(42 sherds; 336g)*
This group comprises unstratified finds, most of which were recovered from the spoil heap. It is the largest collection of pottery from the site and has a wide date range, spanning the late 17th to late 19th centuries. Blackwares, with hard orange or red fabrics, infrequently streaked with white clay, and dark-brown or black lead glazes, number amongst the late 17th-/ early 18th-century finds, with forms such as bowls or porringers. Two slipware fragments stem from two different hollow-ware forms, one with white slip trailed over a dark slip ground on the interior base (which is also glazed), and the other with white slip trailed over the exterior body and a lead glaze applied to the inside and outside of the vessel. A single mottled-ware hollow ware sherd also belongs to the late-17th/ early 18th century.

Several coarse earthenware sherds exhibit a fabric and glaze comparable with that of the blackwares, but represent coarser forms, such as large straight-sided storage jars. Examples of this ware from the 17th to 19th centuries typically demonstrate few chrono-typological traits and, consequently, are difficult to date precisely. It is possible, however, that at least some of the coarse earthenware sherds from (1000) are of at least 18th-century date.

A sherd of an under-glaze painted Oriental porcelain saucer dates to the late 18th century; a single brown stoneware fragment is also likely to be of 18th-century date. The late 18th/ early 19th century is represented by a pearlware tea bowl sherd, painted under-glaze in blue with an Oriental landscape scene, and a possible creamware fragment of undiagnostic form.

The mid-late 19th-century material is dominated by whitewares, most of which feature under-glaze printed decoration in blue, black or purple, with common patterns such as ‘Asiatic Pheasants’ and ‘Willow’ (both in blue).

Three sherds have a blue marbled design which also appears on a piece from (1006). All but three of the printed sherds represent plates. Under-glaze slip decoration is present on one whiteware bowl fragment; the exterior of a refined yellow ware sherd, again a bowl, has a white slip ground with blue 'mocha' design. One whiteware handle sherd has under-glaze sponged decoration in blue. A whiteware saucer fragment does not feature applied decoration, but has moulded flutes on the rim. An undecorated bone china saucer sherd is also present.

1001/ finds no. 26 *(1 sherd; 6g)*
A single sherd of a red-bodied earthenware dish with trailed white slip applied in concentric circles on the vessel interior. A clear lead glaze is also present on the vessel interior. A late 17th- or 18th-century date is likely.

1002/ finds no. 209 *(12 sherds; 102g)*
A collection of twelve sherds, including a slip-trailed dish rim sherd of lead-glazed pale orange fabric and six blackware hollow ware fragments with fine orange/ red bodies and dark brown to black glazes, all of probable late 17th/ early 18th-century date. A coarse earthenware pancheon sherd has a similar fabric and glaze to the blackwares, but is distinguishable by its coarser form. The sherd is, however, somewhat later in date, belonging to the 18th or even 19th century. A whiteware plate sherd, two whiteware fragments of undiagnostic form and a red-bodied earthenware hollow ware with white-slipped interior of 19th-century date complete the group.

1005/ finds no. 204 *(13 sherds; 46g)*
The context produced eleven slipware fragments of lead-glazed, cream/ buff or orange fabric, representing a thrown dish with everted rim, a porringer with everted rim and a hollow ware, the precise form of which is unclear. The dish has a wavy line of white slip trailed on the upper surface of the rim; the hollow ware fragments are somewhat abraded, but also have traces of trailed white slip on the vessel exterior. The porringer has dabs of brown slip on the upper rim. A single small fragment of a blackware hollow ware is present, along with a sherd of Westerwald stoneware in the form of a globular(?) hollow ware with mould-applied and under-glaze cobalt-blue-painted decoration. All of the material is of late 17th- or early 18th-century date.

1006/ finds no. 188 *(8 sherds; 14g)*
All but one of the ceramic finds from (1006) can be dated to the late 17th or early 18th century, with examples of blackware, mottled ware and slipware. A single earthenware sherd of lead-glazed off-white/ buff fabric could stem from a yellow ware or slipware vessel. The one later sherd is a mid-late 19th-century whiteware, decorated under glaze with a marbled printed pattern that also occurs on fragments from (1000).

1012/ finds no. 212 *(1 sherd; 8g)*
One abraded sherd of a late 17th-/ early 18th-century thrown slipware dish with soft orange fabric. The upper surface of the everted rim is trailed with white slip and is lead glazed.

1016/ finds no. 200 *(3 sherds; 7g)*
Two sherds of a late-17th-/ early 18th-century blackware cup or mug feature alongside a small fragment of a probable coarse earthenware pan or jar, with hard orange fabric and dark brown glaze on the interior base, perhaps of similar date.

1017/ finds no. 197 *(10 sherds; 79g)*
An over-fired hollow ware sherd from (1017) is possibly a Cistercian-type ware of the late 16th or early 17th century. The very hard, fine fabric has a reduced dark grey core and purple, vitrified, lead glazed interior and exterior surfaces. The context also produced a single abraded fragment of a North Devon gravel-free hollow ware of probable 17th century date. Four blackware fragments, representing at least one mug and a chamber pot or jug, and four dish and hollow ware sherds with hard to soft orange/ red fabrics, decorated with trailed white slip, are of late 17th- or early 18th-century date.

1027/ finds no. 196 *(3 sherds; 55g)*
The context generated a body sherd of a Midlands Purple-type large hollow ware (jar or cistern). The fabric is very hard and purple/ grey in colour. A black, lead glaze has been applied fairly evenly to the vessel interior, but is patchy and thin on the exterior. A late 16th-/ early 17th-century date is likely. A hollow ware fragment of a highly fired 17th-century yellow ware also occurs, and has a very hard orange/ red fabric with a reduced grey core (J. Edwards pers. comm. 2017). A white slip has been applied to the vessel interior, over which a lead glaze has been applied. This has reduced to a pale, olive green colour; traces of glaze are also present on the vessel exterior. A slipware hollow ware sherd, with trailed white slip and turned horizontal lines on the vessel exterior completes the

group and belongs to the late 17th or early 18th century.

1031/ finds no. 194 *(1 sherd; 1g)*
An abraded fragment of hard pale orange fabric, with traces of lead glaze on what is probably the vessel interior. Although no traces of decoration survive, it is possible that the sherd represents a thrown slipware dish of late-17th-/ early 18th- century date.

1040/ finds no. 203 *(1 sherd; 1g)*
A single thrown slipware dish sherd. The hard orange fabric is trailed with white slip and lead glazed on the vessel interior. Late-17th-/ early 18th-century date.

Table VI.1: Date ranges for ceramic vessel sherds from Hedd yr Ynys

Context	Context Description	Date Range	No. Sherds
1000	Unstratified material	lC17-lC19	42
1001	Topsoil layer	lC17 – eC18	1
1002	Plough-soil layer	lC17 – lC19	12
1005	Lower plough-soil layer over eastern drain	lC17- C18	13
1006	Lower plough-soil layer/ upper ditch fill	lC17 – lC19	8
1012	Fill of [1013]	lC17-eC18	1
1016	Lower plough-soil layer at NE trench edge. Above cut [1090] and drain (1058)	lC17-eC18?	3
1017	Fill of cut [1018]	lC16/ eC17-eC18	10
1027	Fill of cut [1028]	lC16/ eC17-eC18	3
1031	Fill of cut [1032]	lC17-eC18	1
1040	Layer above drain (1066)	lC17-eC18	1
		Total	**95**

Discussion
The post-medieval ceramic assemblage from Hedd yr Ynys includes material from the late 16th to the late 19th centuries. Approximately 60% of the sherds, however, pre-date the early 18th century, with the majority likely to date to the late 1600s. Contexts (1001), (1005), (1012), (1017), (1027), (1031) and (1040) are populated exclusively with material that dates no later than the early 18th century. The ceramics from (1005) and (1016) are predominantly late-17th-/ early 18th-century, supplemented by one or two later fragments. Context (1027) produced the earliest diagnostic sherd in the assemblage, a Midlands Purple-type ware, probably of the late 16th or early 17th century, but also features a late-17th-/ early 18th-century slipware fragment. A possible Cistercian ware sherd appears in (1017), which could be of at least late 16th-/ early 17th-century date, but this small piece is over-fired, reduced and vitrified, making precise identification difficult. The majority of later finds, notably a group of mid- to late 19th-century wares, appear in the unstratified group recorded as (1000).

The assemblage comprises a range of wares typical of the periods represented. Blackwares and slipwares dominate the earlier groups, supplemented by yellow wares, mottled wares and at least one example of a Midlands Purple-type ware. The late 18th- and 19th-century material is characterised by refined, decorated pearlwares and whitewares, in tea and tableware forms.

The source of most of the early wares is unclear, although some observations can be made. The slipware fragment from (1001) is stylistically comparable to an example from Buckley held in the collections of Aberystwyth University (Aberystwyth University Ceramic Collection & Archive). The crisp slip trailing evident on the rims of thrown red/orange-bodied dishes from (1002) and (1005) is reminiscent of that recorded on large bowls found at Pinfold Lane, Buckley although the examples from Hedd yr Ynys are of a somewhat finer fabric and form (Davey 1987, 112-113). This may instead suggest that they, along with other trailed fragments from (1012) and (1017), are north Staffordshire products in the vein of thrown slip-decorated dishes recovered from the site of the former Hilltop Pottery, Burslem (Kelly 1969). Other slipwares from the assemblage are almost certainly Stoke-on-Trent products: a buff-bodied porringer with slip-decorated rim from (1005) is very similar to an example found at Newcastle Street, Burslem (Kelly 1975, 15, 18; fig. 9).

Six sherds from (1000) (three coarse earthenware fragments, one blackware and one slipware) and (1017) (one slipware) have orange/ red, iron-rich fabrics with white clay laminae. This characteristic has been noted on coarsewares produced at Buckley in Flintshire and black-glazed fabrics from Prescot, south Lancashire (Davey 1987, 98), but is not sufficiently pronounced on the Hedd yr Ynys sherds to aid conclusive attribution.

The provenance of a small number of sherds is easier to establish. A small, abraded coarse hollow ware (jar?) sherd from (1017) is a North Devon gravel-free ware (J. Edwards pers. comm. 2017; Jefferson Patterson Park & Museum). A fragment of Rhenish, Westerwald stoneware occurs in (1005) and a sherd of Oriental porcelain in (1000). The 19th-century refined earthenwares, most of which appear in (1000), may well be Stoke-on-Trent products, although as north Staffordshire effectively provided the industry standard at this time, it is possible that they were manufactured elsewhere. The mocha-decorated refined yellow ware from (1000) could have been produced in south Derbyshire, where a 'Derbyshire Ironstone' or yellow ware industry flourished throughout the 19th century (Godden 1972, xxviii). Mocha production, however, was widespread and the ware is known to have been manufactured in Wales by the Cambrian Pottery, Swansea, and at Llanelli and Ynysmeudwy (Rickard 2006, 140-162).

Conclusions

Further analysis of the Hedd yr Ynys post-medieval material is not recommended. The assemblage is relatively small in size and comprises a fairly standard range of wares produced during the late 16th-late 19th centuries. None of the context groups are individually substantial enough to provide little more than dating evidence (the largest single collection of material – from (1000) - is unstratified, beyond which only three contexts – (1002), (1005) and (1017) – contain ten or more sherds) and, collectively, present only a general picture of ceramic consumption on and around the site. In addition, the sherds are generally small in size and/ or demonstrate some degree of abrasion. In some instances, these factors hindered conclusive identification and made precise determination of vessel form difficult.

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References

Aberystwyth University Ceramic Collection & Archive: <http://www.ceramics-aberystwyth.com/a-z/pot/c572>

Davey, P. J. 1987. 'Further observations on a post-medieval kiln group from Pinfold Lane, Buckley', in Vyner, B. & Wrathmell, S. (ed.) *Studies in Medieval and Later Pottery in Wales.* University College, Cardiff, 93-120

Godden, G. A. 1972. *Jewitt's Ceramic Art of Great Britain 1800-1900.* London: Barrie & Jenkins

Jefferson Patterson Park & Museum. *Diagnostic Artifacts in Maryland: Colonial Ceramics – North Devon:* <https://www.jefpat.org/diagnostic/ColonialCeramics/Colonial%20Ware%20Descriptions/NorthDevon.html>

Kelly, J. H. 1969. 'The Hill Top Site, Burslem', *City of Stoke-on-Trent Museum Archaeological Society Report No. 3*.

Kelly, J. H. 1975. 'Post Medieval Pottery from Newcastle Street, Burslem, Stoke-on-Trent', *City of Stoke-on-Trent Museum Archaeological Society Report No. 8*, 11-20.

Kenney. J. 2017. *Hedd yr Ynys Excavation 2016 - Lôn Fron, Llangefni, Anglesey: Preliminary Excavation Report*. Gwynedd Archaeological Report No. 1375.

Rickard, J. 2006. *Mocha and Related Dipped Wares, 1770-1939*. University Press of New England.

Table VI.2: Catalogue of post-medieval ceramic vessel sherds from Hedd yr Ynys

context	finds no	ware/ fabric description	applied surface decoration	decoration in/ on body	glazed?	vessel form/ description	Component parts						no. sherds	wt. (g)	MNV	date	notes
							no. base	no. body	no. rim/edge	no. spout	no. handle	no. profile					
1000	207	mottled ware		turned horizon-tal lines	y	hollow ware		1					**1**	**1**	**1**	lC17-eC18	
1000	207	slipware	trailed slip		y	hollow ware		1					**1**	**10**	**1**	lC17-eC18	Lead-glazed pale orange fabric with trailed white slip on exterior.
1000	207	slipware	trailed slip		y	hollow ware	1						**1**	**2**	**1**	lC17-eC18	Hard orange fabric with infrequent white streaks. Dark slip ground over interior, with white slip trailed over. Lead glazed on vessel interior.
1000	207	blackware			y	chamber pot/ jug?	1						**1**	**20**	**1**	lC17-eC18	Hard red/ orange fabric, with infrequent, quartz inclusions and white clay pellets and lamination. Dark glaze, somewhat brown and streaky on vessel interior.
1000	207	blackware			y	bowl/ porringer?	1						**1**	**8**	**1**	lC17-eC18	Hard red/ orange fabric, with black glaze (slightly reduced) on exterior and exterior of vessel.

context	finds no	ware/ fabric description	applied surface decoration	decoration in/ on body	glazed?	vessel form/ description	Component parts						no. sherds	wt. (g)	MNV	date	notes
							no. base	no. body	no. rim/edge	no. spout	no. handle	no. profile					
1000	207	blackware			y	bowl?	2						**2**	**16**	**1**	lC17-eC18	Hard red/ orange fabric with rich black glaze on vessel interior.
1000	207	blackware?			y	bowl/ porringer?			1				**1**	**1**	**1**	lC17-eC18	Hard pale orange fabric with brown glaze on interior and exterior. Possible iron-rich slip coat between body and glaze.
1000	207	blackware?			y	hollow ware		3					**3**	**14**		lC17-eC18	Hard red/ orange fabric with fine black glaze on exterior and interior.
1000	207	coarse e'ware/ blackware?			y	straight-sided jar?	1						**1**	**24**		C18?	Hard orange fabric with slightly reduced black glaze on interior. Flange around base.
1000	207	coarse e'ware			y	large straight-sided jar?	2	1					**3**	**114**	**1**	C18/ eC19?	Hard red/ orange fabric with patchy black/ purple glaze on interior and exterior.

context	finds no	ware/ fabric description	applied surface decoration	decoration in/ on body	glazed?	vessel form/ description	Component parts						no. sherds	wt. (g)	MNV	date	notes
							no. base	no. body	no. rim/edge	no. spout	no. handle	no. profile					
1000	207	coarse e'ware?		turned horizontal lines on one sherd	y	hollow ware		3					**3**	**16**	**1**	C18?	Hard orange fabric with infrequent quartz, sandstone(?) and iron-ore fragments, frequent white clay pellets and laminae. Black glaze on interior and exterior surfaces.
1000	207	coarse e'ware?				undiagnostic		3					**3**	**10**		?	Soft, abraded, unglazed sherds of orange fabric. Possible CEW.
1000	207	Oriental porcelain	under-glaze painted (blue)		y	saucer			1				**1**	**1**	**1**	lC18	
1000	207	brown stone-ware		turned horizontal lines	y	mug?		1					**1**	**1**	**1**	lC18/ eC19?	
1000	207	pearlware	under-glaze painted (blue)		y	tea bowl?		1					**1**	**1**	**1**	lC18/ eC19	Probable Oriental landscape scene.
1000	207	creamware?			y	undiagnostic	1						**1**	**1**	**1**	lC18/ eC19?	
1000	207	whiteware			y	dish			1				**1**	**4**	**1**	m-lC19	
1000	207	whiteware		moulded flutes	y	saucer		1					**1**	**1**	**1**	m-lC19	

context	finds no	ware/ fabric description	applied surface decoration	decoration in/ on body	glazed?	vessel form/ description	Component parts						no. sherds	wt. (g)	MNV	date	notes
							no. base	no. body	no. rim/edge	no. spout	no. handle	no. profile					
1000	207	whiteware			y	undiagnostic		2					**2**	**1**		m-lC19	
1000	207	whiteware	under-glaze transfer printed (blue)		y	plate			1				**1**	**16**	**1**	m-lC19	Willow pattern.
1000	207	whiteware	under-glaze transfer printed (blue)		y	plate	1		1				**2**	**14**	**1**	m-lC19	Asiatic Pheasants pattern.
1000	207	whiteware	under-glaze transfer printed (purple)		y	dish		1					**1**	**14**	**1**	m-lC19	Floral pattern.
1000	207	whiteware	under-glaze transfer printed (black)		y	plate	1		1				**2**	**16**	**1**	m-lC19	Floral pattern.
1000	207	whiteware	under-glaze transfer printed (blue)		y	hollow ware	2		1				**3**	**10**	**1**	m-lC19	Marbled print.

context	finds no	ware/ fabric description	applied surface decoration	decoration in/ on body	glazed?	vessel form/ description	Component parts						no. sherds	wt. (g)	MNV	date	notes
							no. base	no. body	no. rim/edge	no. spout	no. handle	no. profile					
1000	207	whiteware	under-glaze sponge decorated (blue)		y	hollow ware					1		**1**	**6**	**1**	m-lC19	
1000	207	whiteware	under-glaze slip decorated		y	bowl			1				**1**	**2**	**1**	m-lC19	Slip bands below rim on exterior; yellow slip ground.
1000	207	refined yellow ware	under-glaze slip decorated		y	bowl		1					**1**	**6**	**1**	m-lC19	White slip ground on exterior with blue dendritic 'mocha' design.
1000	207	bone china			y	saucer	1						**1**	**6**	**1**	m-lC19	
1001	26	slipware	traces of trailed white slip		y	dish	1						**1**	**6**	**1**	lC17-eC18	Dense, fine orange fabric with traces of trailed white slip on interior. Lead glaze on interior only.
1002	209	slipware	trailed slip		y	dish			1				**1**	**8**	**1**	lC17-eC18	Hard, pale orange fabric with trailed white slip on upper surface of everted rim. Lead glazed on interior surface.

context	finds no	ware/ fabric description	applied surface decoration	decoration in/ on body	glazed?	vessel form/ description	Component parts						no. sherds	wt. (g)	MNV	date	notes
							no. base	no. body	no. rim/edge	no. spout	no. handle	no. profile					
1002	209	blackware			y	hollow ware	2	4					**6**	**33**	**1**	lC17-eC18	Fine orange-red fabric with dark-brown to black glaze on one or more surfaces
1002	209	coarse e'ware			y	pancheon	1						**1**	**58**	**1**	C18/ C19	Fine red fabric with black glaze on vessel interior.
1002	209	whiteware			y	undiagnostic			2				**2**	**1**		m-lC19	
1002	209	whiteware			y	plate	1						**1**	**1**	**1**	m-lC19	
1002	209	red-bodied e'ware	white slip on interior		y	hollow ware		1					**1**	**1**	**1**	m-lC19	White slip on interior surface; lead glazed.
1005	204	blackware			y	hollow ware		1					**1**	**1**	**1**	lC17-eC18	Hard, fine red/ purple fabric with fine black glaze on interior and exterior surfaces.

context	finds no	ware/ fabric description	applied surface decoration	decoration in/ on body	glazed?	vessel form/ description	Component parts						no. sherds	wt. (g)	MNV	date	notes
							no. base	no. body	no. rim/edge	no. spout	no. handle	no. profile					
1005	204	slipware	applied slip		y	porringer		3	2				**5**	**12**	**1**	lC17-eC18	Three conjoining sherds of a small bowl/ porringer with everted rim. Dabs of brown slip applied to upper surface of rim. Buff fabric with lead glaze.
1005	204	slipware	trailed slip		y	hollow ware		5					**5**	**22**	**1**	lC17-eC18	Fine orange fabric with trailed white slip on exterior surfaces. Where not abraded, lead glazed on interior and exterior of sherds.
1005	204	slipware	trailed slip		y	dish			1				**1**	**10**	**1**	lC17-eC18	Hard, fine pink/ orange fabric with trailed white slip on upper surface of everted rim. Lead glazed on interior surface.
1005	204	Westerwald stoneware	UGP	applied decora-tion	y	hollow ware		1					**1**	**1**	**1**	lC17-eC18	Cobalt-blue under-glaze decoration; applied vertical bands with chevrons.

context	finds no	ware/ fabric description	applied surface decoration	decoration in/ on body	glazed?	vessel form/ description	Component parts						no. sherds	wt. (g)	MNV	date	notes
							no. base	no. body	no. rim/edge	no. spout	no. handle	no. profile					
1006	188	blackware			y	hollow ware		1					**1**	**1**	**1**	lC17-eC18	Very hard, fine purple/ brown fabric with black glaze on interior and exterior surfaces.
1006	188	mottled ware			y	hollow ware		1					**1**	**1**	**1**	lC17-eC18	Hard, fine buff fabric with brown streaked lead glaze on interior and exterior surfaces.
1006	188	yellow ware/ slipware			y	hollow ware		1					**1**	**6**	**1**	lC17-eC18	Hard, fine off-white/ buff fabric with lead glaze. The sherd could represent an undecorated part of a slipware vessel or a plain yellow ware.
1006	188	slipware	applied slip		y	dish			1				**1**	**1**	**1**	lC17-eC18	Hard, fine pale orange fabric; abraded but with traces of white slip and lead glaze on upper rim.

context	finds no	ware/ fabric description	applied surface decoration	decoration in/ on body	glazed?	vessel form/ description	Component parts						no. sherds	wt. (g)	MNV	date	notes
							no. base	no. body	no. rim/edge	no. spout	no. handle	no. profile					
1006	188	slipware?				dish			1				**1**	**1**	**1**	lC17-eC18	Hard, fine pale orange fabric, abraded. Unglazed and undecorated, but identical fabric and form to other slipware sherd from context.
1006	188	slipware/ blackware			y	undiagnostic	1						**1**	**1**		lC17-eC18	Soft, fine orange fabric, abraded. Mid-brown lead glaze on interior(?) surface. Fabric and glaze colour similar to examples of slipware and blackware from the site.
1006	188	whiteware	UGTP		y	hollow ware		1					**1**	**2**	**1**	m-lC19	Same marbled pattern as recorded in u/s 207.
1006	188	pearlware/ whiteware			y	undiagnostic	1						**1**	**1**		m-lC19	
1012	212	slipware	trailed slip		y	dish			1				**1**	**8**	**1**	lC17-eC18	Abraded, soft orange fabric with trailed white slip and lead glaze on upper surface of everted rim.

context	finds no	ware/ fabric description	applied surface decoration	decoration in/ on body	glazed?	vessel form/ description	Component parts						no. sherds	wt. (g)	MNV	date	notes
							no. base	no. body	no. rim/edge	no. spout	no. handle	no. profile					
1016	200	blackware			y	cup/ mug	1	1					**2**	**6**	**1**	lC17-eC18	Hard, fine red/ orange fabric with fine black glaze on interior and exterior surfaces.
1016	200	coarse e'ware?			y	dish/ pan/ jar?	1						**1**	**1**	**1**	C18?	Small sherd of hard, fine orange fabric with trace of dark brown glaze on interior base.
1017	197	Cistercian-type ware?			y	hollow ware		1					**1**	**1**	**1**	lC16/ eC17?	Very hard fabric, with vitrified purple surfaces and grey core. Glazed on interior and exterior surfaces. Possibly an over-fired Cistercian-ware type.
1017	197	North Devon gravel-free ware			y	hollow ware		1					**1**	**4**	**1**	C17	Abraded fragment
1017	197	blackware			y	mug	1						**1**	**22**	**1**	lC17-eC18	Fine, hard orange/ red fabric with even black glaze on interior and exterior surfaces.

context	finds no	ware/ fabric description	applied surface decoration	decoration in/ on body	glazed?	vessel form/ description	Component parts						no. sherds	wt. (g)	MNV	date	notes
							no. base	no. body	no. rim/edge	no. spout	no. handle	no. profile					
1017	197	blackware			y	chamber pot/ jug?					1		**1**	**16**	**1**	lC17-eC18	Fine, hard red/ purple fabric with even black glaze on interior and exterior surfaces.
1017	197	blackware			y	hollow ware		1					**1**	**1**		lC17-C18	Fine, hard orange/ red fabric with even black glaze on interior and exterior surfaces.
1017	197	blackware?			y	hollow ware		1					**1**	**1**		lC17-C18	Fine, hard orange fabric with patchy mid-brown glaze on interior and exterior surfaces.
1017	197	slipware	trailed slip		y	dish			1				**1**	**30**	**1**	lC17-C18	Dish with everted rim in hard, fine pale orange fabric. Trailed white slip on vessel interior; lead glazed on interior only. Slightly reduced.
1017	197	slipware	trailed slip		y	dish	1						**1**	**1**	**1**	lC17-C18	Hard, fine pale orange fabric with infrequent white streaks. Trailed white slip under lead glaze on interior.

context	finds no	ware/ fabric description	applied surface decoration	decoration in/ on body	glazed?	vessel form/ description	Component parts						no. sherds	wt. (g)	MNV	date	notes
							no. base	no. body	no. rim/edge	no. spout	no. handle	no. profile					
1017	197	slipware	trailed slip		y	hollow ware?		1					**1**	**1**	**1**	lC17-eC18	Soft, fine orange fabric. Trailed white slip on exterior; lead glaze on interior and exterior surfaces.
1017	197	slipware	trailed slip		y	hollow ware		1					**1**	**2**	**1**	lC17-eC18	Hard, fine orange/ red fabric. Trailed white slip on exterior; lead glaze on interior and exterior surfaces.
1027	196	Midlands Purple-type ware			y	large hollow ware - jar/ cistern?		1					**1**	50	**1**	lC16-eC17	Very hard, purple/ grey fabric with fairly even black glaze on interior, but patchy and thin on exterior surface.
1027	196	yellow ware			y	hollow ware		1					**1**	**4**	**1**	C17	Very hard, fine fabric, brown/ orange oxidised exterior surface, reduced light grey core. White slip on vessel interior, over which has been applied a lead glaze that has reduced to a pale olive green. Traces of green glaze also on exterior.

context	finds no	ware/ fabric description	applied surface decoration	decoration in/ on body	glazed?	vessel form/ description	Component parts						no. sherds	wt. (g)	MNV	date	notes
							no. base	no. body	no. rim/edge	no. spout	no. handle	no. profile					
1027	196	slipware	trailed slip	turned horizon-tal lines	y	hollow ware		1					**1**	**1**	**1**	lC17-eC18	Hard, fine red/ orange fabric with trailed slip on vessel exterior. Lead glaze on interior and exterior surfaces.
1031	194	slipware?			y	dish?		1					**1**	**1**	**1**	lC17-C18?	Hard, fine, pale orange fabric with lead glaze on interior(?) surface. Although no trace of slip is evident, this probably represents a thrown slipware dish.
1040	203	slipware	trailed slip		y	dish	1						**1**	**1**	**1**	lC17-eC18	Hard, fine orange fabric with trailed white slip on interior. Lead glaze on interior only.
													95	**655**	**57**		

Table VI.3: Ceramic building material from Hedd yr Ynys

context	finds no.	fabric description	form	total no. fragments	wt. (g)	date
1000	207	hard orange fabric with infrequent, ill-sorted medium quartz inclusions	brick/ tile?	2	26	?
1002	51	soft red/ orange fabric	tile?	1	22	?
			Total	**3**	**48**	

Table VI.4: Clay pipes from Hedd yr Ynys

context	finds no.	fabric description	decoration	stem	bowl	pro-file	total no. fragments	wt. (g)	date	notes
1000	207	white pipe clay	Foliate moulding on bowl seam	*	*		2	6	m-lC19	Spurred
1005	204	white pipe clay		*			4	4	m-lC17?	Stem bores are c.3mm in diameter
1051	192	white pipe clay		*			1	1	C17?	Stem bore diameter of c.3.5mm
				Total			**7**	**11**		

Table VI.5: Glass finds from Hedd yr Ynys.

context	finds no	colour	decoration/ lettering	form/ description	base	body	edge	rim/ neck	profile	total no. frags	wt. (g)	date
1000	207	green		bottle		*				1	26	C18-eC19?
					Total					**1**	**26**	

14. APPENDIX VII: Report on Archaeometallurgical Residues

Dr T.P. Young, GeoArch

Abstract
The assemblage contained a very small collection of residues (both macro- and micro-), probably from blacksmithing and compatible with the proposed Roman age, although not themselves diagnostic. A single piece of clinker from an overlying plough-soil might be from a post-medieval steam-powered implement.

Two concretions have cores containing metallic iron, and these should by X-rayed to ascertain whether the cores are significant iron artefacts.

Methods
All materials were examined visually with a low-powered binocular microscope where required. As an assessment, the materials were not subjected to any high-magnification optical inspection, not to any form of instrumental analysis. The identifications of materials in this report are therefore necessarily limited and must be regarded as provisional.

The examined materials are listed in Table VII.1.

Results
Description of materials
The submitted assemblage comprised 298g of macroscopic material, five small assemblages of magnetic separates (total 20g) from sieving and one sieved fragment of fired clay (0.2g). The macroscopic material included several pieces of hearth/furnace lining, a very small quantity of slag, some concretions that may contain iron artefacts and various natural iron-rich materials. The sieved samples contained very small quantities of slag, a single piece of coal and one contained some hammerscale, as well as natural materials

The single piece of **clinker** (the partially melted inorganic residue from the burning of impure coal) (11g), was of typical variegated colours and contained a large grey coal-shale clast.

The **hearth/furnace lining fragments** (probably hearth lining rather than furnace lining since the other residues suggest blacksmithing) are not themselves diagnostic of purpose, but are typical of early materials. They comprised four pieces with a total weight of 73g.

True **slags** are limited to minute fragments in some sieved samples and to two slightly larger fragments (total weight 4g), both showing a strong influence from the hearth lining.

Two **concretions**, one rounded, the other flat and rectangular, are both cored on material containing metallic iron (though that material could be slag containing metallic iron). They have a combined weight of 194g.

One sieved sample contained a small assemblage of **flake hammerscale** (the oxidised surface layer that forms on hot iron and spalls off when the iron is cooled or struck).

Several samples contained highly polished very dark grains with a slightly red surface. These pieces are likely to be rolled natural fragments of **iron ore**. It is not possible to determine whether these are Lower Palaeozoic ores from North Wales, or derived pieces of later ores from Cumbria.

The majority of the particles in the sieved samples were natural grains. The single piece of fired clay broadly resembled the material if the vitrified examples, but was, strictly indeterminate.

Distribution of the residues
The fragment of clinker derived from a ploughsoil (1005). The remainder of the materials came from the fills of various cut features.

Interpretation
This is an extremely small and sparsely-distributed assemblage. It is unlikely that any significant amount of metallurgical activity took place within the excavated area.

The single piece of clinker from ploughsoil may well represent a residue from steam-powered agricultural equipment, although other origins are certainly possible,

The assemblage of hearth lining, sparse slag and a tiny quantity of hammerscale present in the cut features, suggests that the area was close to a location at which charcoal-fuelled blacksmithing was undertaken. Almost every Roman farmstead shows at least some signs of blacksmithing, for the demands of rural life mean that tools and equipment are frequently in need of repair or replacement.

The materials are not, in themselves, dateable (beyond belonging to some pre-industrial period) or interpretable in terms of detailed process.

Further work
No additional work is recommended on the archaeometallurgical assemblage. Retention of the assemblage with the site archive could be considered a relatively low priority.

It is recommended however, that the concretions are submitted to X-radiography, to determine whether they contain iron artefacts.

Table VII.1: Sampled material

Context	Find No.	Sample No.	Sample weight	Individual weight	Num-ber of items	Notes
1005	206		11	11	1	fragment (now with small break) of highly porous clinker; typically variegated in colour; contains large shale clasts
1038	181		155	155	1	rounded concretion core includes metallic iron; very dense; some possible slag showing through surface of sandy/ashy concretion; contains small charcoal fragments; unclear if an iron core or an iron-bearing slag core; some minor expansion cracking just starting, indicating corrosion of iron inclusion
1038	182		61	61	1	slightly convex lump of hearth lining; outer vitrified layer has weathered pale; overlie an approximately 10mm thick dark, reduced fired and strongly vitrified layer, which in turn overlies 20mm of oxidised fired ceramic; the ceramic is rich in gravel fragments and has a silty matrix
1038	214	7	18.9	18.9	1	33x23x8mm, small pebble of iron ore; dense, almost black in colour, but with slight maroon surface sheen; highly polished surface, but where rougher appears to show a granular oxide texture; unclear if this is a de-rived, perhaps Cumbrian ore, or a more local sedimentary iron ore.
1053	176		38.7	38.7	1	concretion with irregular margins but central rectangular piece, 43mm x 30mm x 7mm; the central area con-tains a small amount of metallic iron.
1063	191		12.9	0.9	1	slag fragment, probably a lining slag
				12	3	vitrified oxidised fired hearth lining
hammerscale subsamples (magnetic separation)						
1038	216	7	2.1g		assm	1 particle (<0.01g) of probable slag
1045	223	4	0.60g		assm	includes three possible grains of slag and one small fragment of coal
1051	218	1	0.72g		assm	includes two flakes of rust and a broken elongate concretion, which is probably iron pan formed on a plant root or burrow, but might just possibly be mineralised iron wire
1063	219	2	4.43g		assm	largest grain (3.19g) is a dense slag fragment of dimpled grey slag, with slightly greenish glazed rounded lobe, probably of more lining-influenced material; small material includes 1 grain with dark highly polished surface, possibly slag, but probably another polished ore grain; there are three pieces of probable slag and five fragments of flake hammerscale.
1099	226	6	0.08g		assm	assemblage of just 4 grains; the largest, 0.06g, is black and highly polished - probably an iron ore grain similar to SF214
clay subsample						
1099	227	6	0.19g		1	single piece of oxidised fired, sandy ceramic with some coarser grit

15. APPENDIX VIII: Metal Objects

Appendix VIII.1: Conservation and x-rays

Phil Parkes, Cardiff Conservation Services

All iron objects were x-rayed (see figures VIII.1.1-8). Selected items were conserved to stabilise their condition and clean them to clarify features.

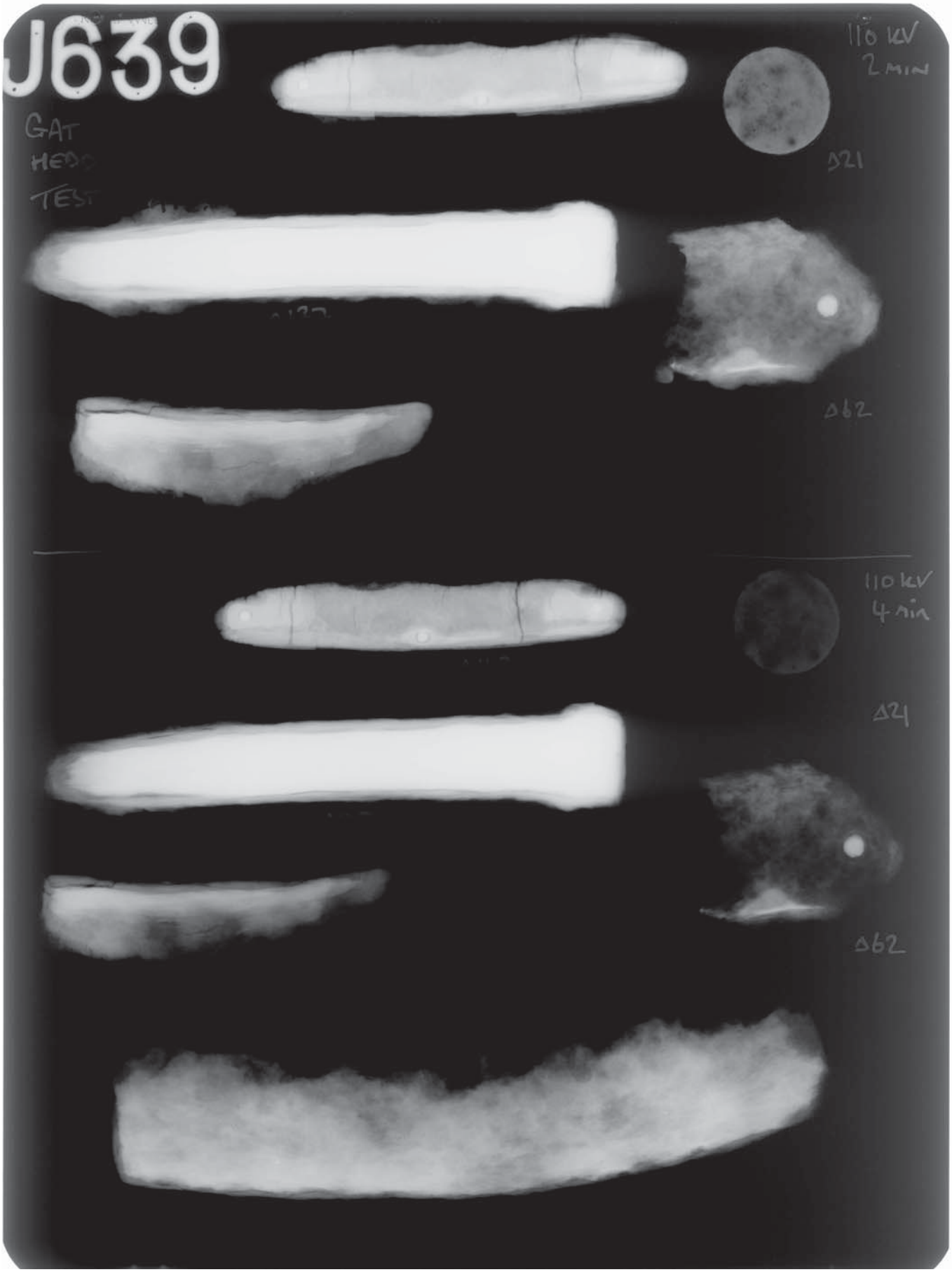
The Roman brooch (SF69) and buckle pin (SF76) were treated in the following way (Lab. No. 6365):-

Both objects appeared to be relatively clean when received, with only small amounts of dirt adhering to the surface and in some undercut areas. Both objects were cleaned mechanically using cotton wool swabs with industrial methylated spirits (95% ethanol / 5% methanol) rolled over the surface to remove dirt. A porcupine quill was used to remove softened dirt from areas where the swab could not reach.

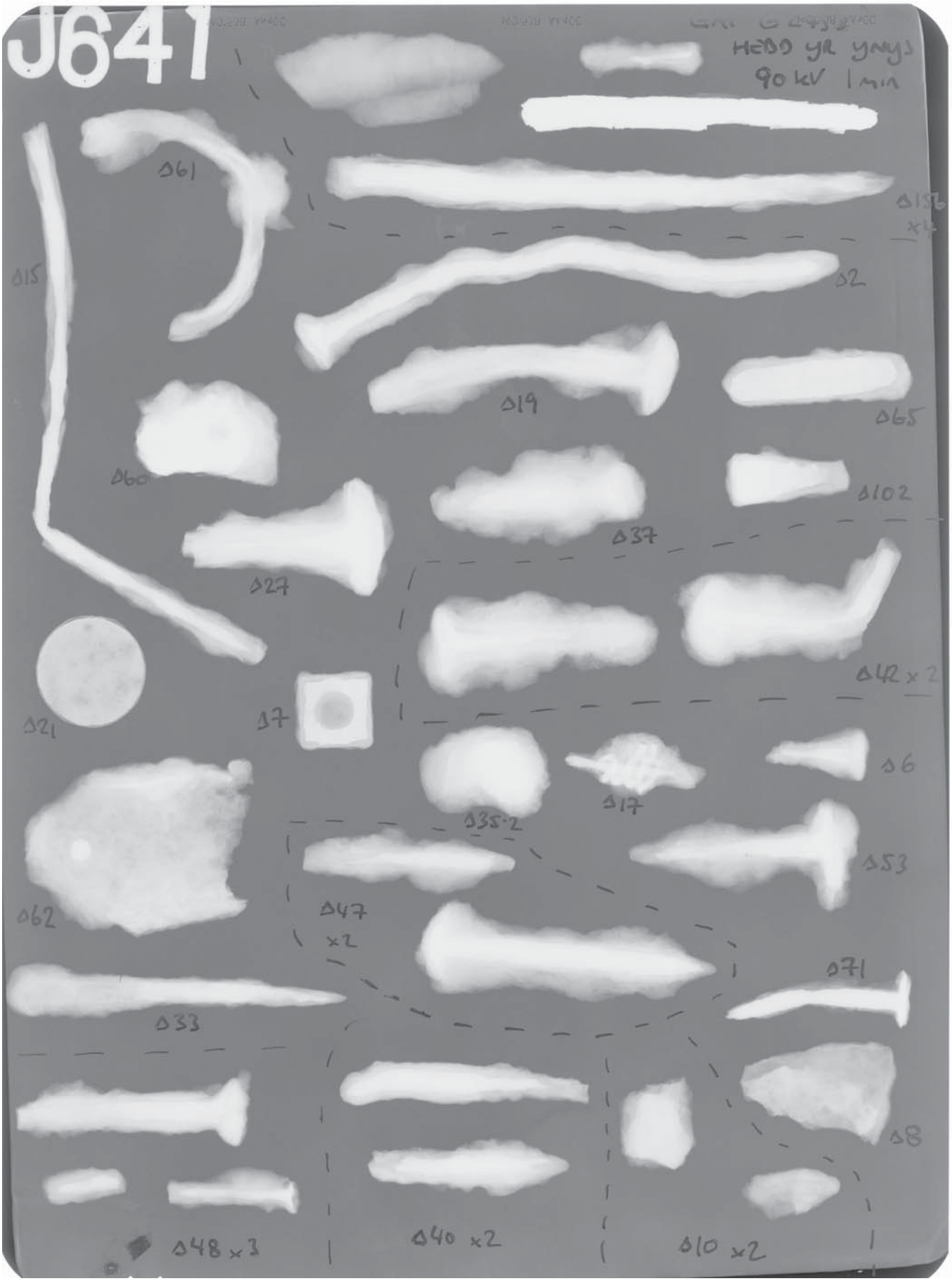
After cleaning both pieces were lacquered with 3 coats of ~10% incralac (Paraloid B44: methyl methacrylate / ethyl acrylate / butyl methacrylate copolymer, plus a small amount of Benzatrazole) in toluene applied by brush and allowed to dry.

A lasting nail (SF231) was also conserved after x-raying. The iron oxide compounds were removed using an airabrasive with aluminium oxide powder to reveal a black magnetite surface which most closely represents the original surface. Some cleaning of a groove round one end was carried out but it was difficult to distinguish between the corrosion compounds filling the groove in order to determine where the original surface began. The groove was left more pronounced but was not fully cleaned. The head of the object has a square cross-section while the shaft appears to be round. The object was not fully cleaned, the blister of corrosion was left on the shaft as removing it may leave pitting/fresh metal. The x-rays of the object from two angles show that the groove is on all sides of the object.

The finds were repackaged in a Stewart Box with silica gel.


J639
GAT
HEAD
TEST
110 kV
2 min
Δ21
Δ62
110 kV
4 min
Δ21
Δ62


J640
110 kV
2 min
GAT
HEDD
Δ147
Δ40
Δ93
Δ73
Δ38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Head yr ymyl
90 kV 1 min
Δ61
Δ15
Δ2
Δ19
Δ65
Δ60
Δ102
Δ37
Δ27
Δ42 x 2
Δ21
Δ7
Δ6
Δ17
Δ35·2
Δ53
Δ62
Δ47
x2
Δ71
Δ33
Δ8
Δ48 x 3
Δ40 x2
Δ10 x2


J642
110 kV
4 min
GAT
Δ143
Δ96


J644
GAT G2455 HEDD YR YNYS
110 kV
2 mins
Δ79
Δ5
Δ29
Δ162
Δ67
Δ44 x2


J645
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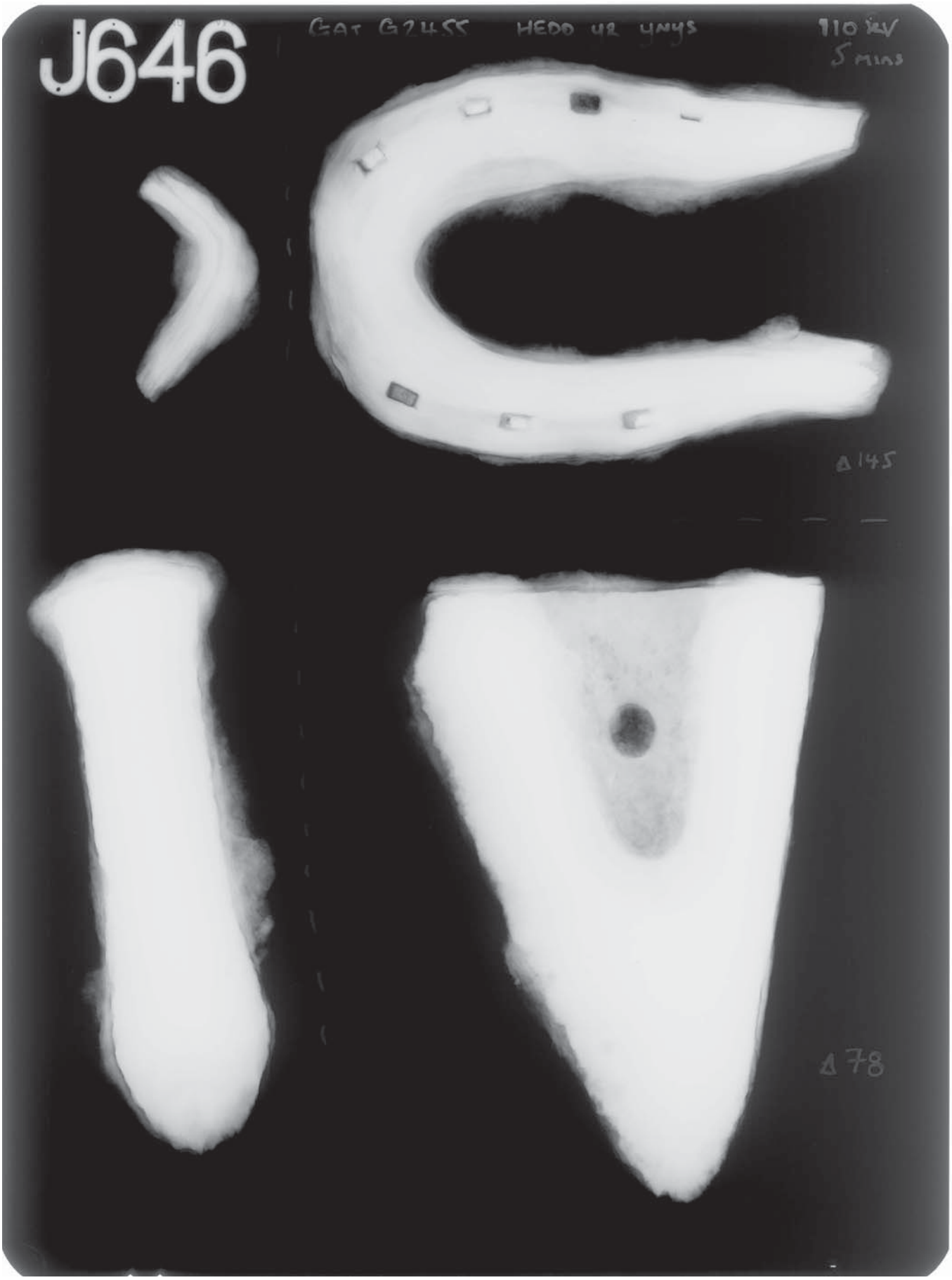
110 KV
4 MIN
Δ30 x3
Δ190


J646
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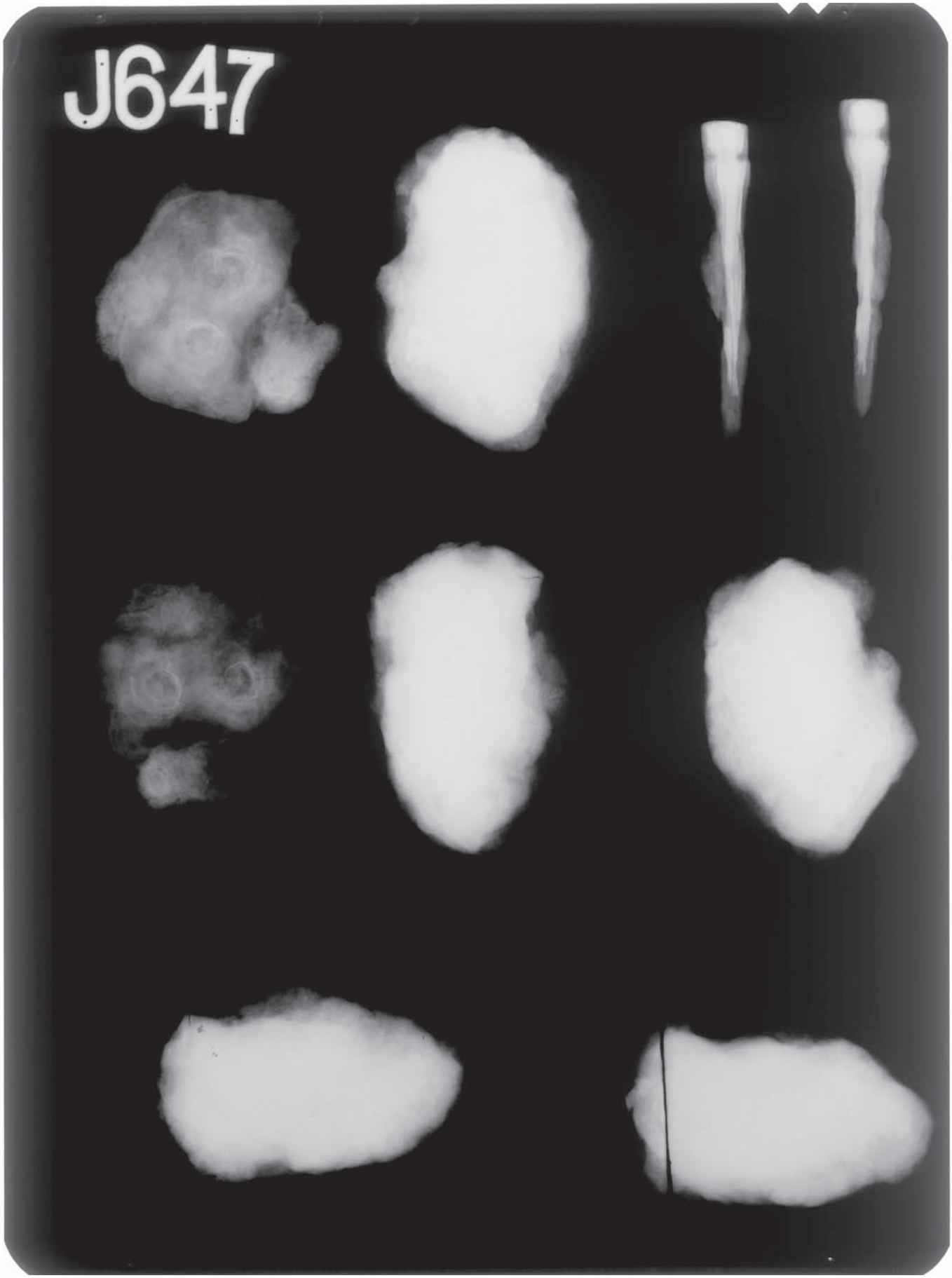
5 MINS
Δ145
Δ78


J647

Appendix VIII.2: Assessment of Metal Objects

Quita Mould, freelance specialist

Methodology
This assessment is based on examination of the material and the accompanying X-radiographs. A basic record of the material examined has been made and is included as appendix VIII.4. The information gathered has been correlated with the current contextual information available (Kenney 2017) and the finds considered in the light of the specific aims of the project that have been supplied.

In the basic record all dimensions are taken from the object, and include corrosion products, unless stated otherwise. The length of nails, bolts etc is the total length, including head and shank. In the basic record any object dating after c. 1485 is described as post-medieval, with a century or more specific date only given if known. In this document the term early post medieval is used to cover roughly the Tudor and Stuart periods, with the term early modern period (pre-Victorian 18th–early 19th century), modern/recent referring to 20th century.

Condition
The iron finds have been X-radiographed. Two items of copper alloy have been conserved and are stored together in a small air-tight plastic container. The rest of the material is currently packed in self sealed polythene bags within air-tight storage boxes containing silica gel. The condition of the metal finds is recorded in the basic record. If a more detailed assessment of condition is required this should be commissioned from an archaeological conservator.

Basic quantification and provenance
Quantification: 204 objects from the site were examined and a basic record provided (appendix VIII.4); they are quantified by material below.

Material	Count
Iron	98
Copper alloy	63
Lead alloy	41
Silver	1
Glass	1
	204

Provenance: Most of the metal finds were recovered by metal detecting survey. The clear majority (73%) of the objects were recovered from the topsoil [1001]. A smaller amount came from plough soil [1002], deposits of lower plough soil located over specific features [1005, 1006] or the spoil heap [1001]. One deposit [1040], covering slabs of drain [1066] may represent a floor surface [1040/1067/1094].

Context	1000	1001	1002	1005	1006	1040	Fron Field
Quantity	12	149	21	12	5	4	1

21 items came from deposits that may be of potential relevance to the interpretation of the site. The deposits are:

- 1005 the lower part of shallow plough soil over the eastern drain
- 1006 the lower part of plough soil/upper ditch fill
- 1040 deposit covering slabs of drain [1066] possibly forming a floor surface with 1067 and 1094

The items are discussed below:
Context 1005 A medieval coin was found, but no other information is available (the find was lost on site and despite searching with metal-detectors was not retrieved). A group of 11 items were recovered chiefly small iron nails and other broken iron items that are not independently datable along with an iron figure of eight chain link (SF205.1) and an iron wire hook (SF205.11) from a hook and eye clothing fastening commonly used on 17th century buff leather coats and used from the early post medieval period onward.

Context 1006 Five iron items were found including the heel from a horse or donkey shoe (SF187.1) and horseshoe

nails all likely to date to the early modern period or possibly later. One item (SF231), with a distinctly well-formed head may, potentially, be an item of interest and would benefit from additional radiography and cleaning, see section 5.2 below.

Context 1040 Four items of metal were found in context 1040: two iron nail shank fragments (SF156.3, 156.4) and a shank of lead alloy (SF230) that cannot be independently dated and an iron fibre processing spike (SF229). The iron spike (SF229) may come from a flax heckle or wool comb; they are difficult to tell apart (Walton Rogers 1997: 1727). They are relatively common finds in Anglo-Saxon, Anglo-Scandinavian and medieval contexts. Found here, in these circumstances, however, such an identification must be tentative as the possibility of it being bar iron must also be considered in the light of the other likely pieces of bar iron recovered.

Range and date of the material

Range of items found: Much of the material recovered was clearly 19th or 20th century date and appears to be the result of domestic rubbish disposal, the coinage, small personal items and items of dress occurring being the result of casual loss. A small amount of metalworking debris recovered, namely copper alloy sheet offcuts and lead alloy sheet and pipe offcuts, may represent only a very small proportion of a once bigger activity, as one would imagine the bulk of such waste would have been carefully collected for recycling. Metalworking tools and a small amount of possible bar iron point to some small-scale ironworking, probably blacksmithing, in the vicinity, while a small number of items represent agricultural activity (coulter tip from a plough, broken scythe blade, horseshoes, donkey shoe). It should be noted that several categories of item, particularly iron craft tools and structural ironwork, cannot be independently dated. These objects, having been recovered from topsoil and plough soil, must be considered of early modern and modern derivation, particularly as their corrosion is comparable with other items from those contexts of known recent date, however, several of these items could happily be considered of earlier date if they had been found in sealed contexts lower down the stratigraphic sequence.

Date range of items found: A small number of metal detected items from the topsoil (1001) and plough soil (1002) were datable to the Roman, medieval and early post medieval periods and are itemised below. Objects of these dates from the contexts of interest are also included.

Roman material

Brooches: Part of a bow brooch (SF69) and a separate, cast brooch pin (SF76) came from 1001. They both are in poor condition and have the same light green corrosion products suggesting that they shared the same burial environment. On the face of it, it is conceivable that they come from the same brooch, however, the cast pin (SF76) has a cylindrical head and a straight stem, and lacks the tension lug required for a hinged pin for a Roman bow brooch or plate brooch, suggesting it comes from a penannular brooch, potentially of early Post-Roman date. The poor condition of the bow brooch (SF 69) obscures much diagnostic detail making it difficult to classify but it may come from a trumpet brooch. The solid lug protruding from the trumpet-shaped head suggests this brooch may be a miscasting. These items should be seen by a brooch specialist see below.

Weight: A lead suspension (pendant) weight of conical shape (SF39) found in 1001 weighs approximately a sixth of a Roman pound (libra), known as a *dextans,* and so may be of Roman date, however it has the appearance of a more modern weight and this may be a coincidence. Suspension weights of Roman date are not usually of this form. It is unlikely that such an item can be independently dated with confidence. A brief amount of research is required to see if a dated Roman parallel can be found.

Coin: A coin (SF175) identified by Gwynedd Archaeological Trust as a Radiate ?Carausius (AD287-93) was recovered from plough soil [1002]. This should be identified by a coin specialist.

Medieval material

Coin: A medieval coin (SF104) was recovered from 1005 but was later lost, no further details are known.

Seal matrix: Part of a lead alloy seal (SF63) is of a type that may be dated to the 13th century. Seals of this type were commonly deliberately broken and discarded on the death of the owner. The inscription, part of which survives, appears to be part of a name followed by 'F' denoting the son or daughter of. While not an object belonging to a particularly wealthy or prestigious individual, the owner clearly possessed documents or packages considered sufficiently important that they were not to be tampered with by others.

Spindlewhorl: A small lead alloy biconical spindlewhorl (SF101) found in topsoil (1001) is likely to be of medieval

date, due to its form and the large size of the central hole. The shape is typical of examples found in medieval northern and eastern Britain (Walton Rogers 1997: 1737)

Fibre processing spike: a single fibre processing spike (SF229) was recognised amongst the small group of iron recovered from the deposit [1040] covering slabs of drain (1066) possibly forming a floor surface with 1067 and 1094.

Timber nails: amongst the obviously 20th century wire nails was a small quantity of nails of types found on sites of medieval and early post medieval date. These included flat headed nails with angular sectioned shanks, nails with rectangular sectioned, faceted heads (Goodall, 'headless' nails (Goodall type 8) could be medieval or early post medieval. Flat headed nail types have been in use from the Roman period onward and cannot be independently dated.

Early post medieval material
A small number of objects may date to the early post medieval period (16th-17th centuries). These include an iron wire hook (SF205.11), from lower plough soil [1005], from a hook and eye clothing fastening commonly used on 17th century buff leather coats and used from the early post medieval period onward; A lead musket shot (SF126) and an iron rotary key (SF72) recovered from top soil [1001]. The broken rotary key (SF72) may be of early post medieval date but the solid, straight ended stem projecting beyond the bit and the decorative transverse mouldings located just above the bit all suggest the key may be significantly later date. Similarly, the copper alloy socket from a candlestick (SF208.3) recovered from the spoil heap [1000], is of simple 'bunsen' burner type (SF208.3) which appears to be of early post medieval date, however, the socket is of sheet metal, not cast, which may suggest a mass-produced product of later date.

Early modern/modern material
A small number of items, such as a pewter spoon handle (SF149) and copper alloy and pewter shoe buckles (SF28, SF133), can be dated to 18th century but most can be attributed to the 19th and 20th centuries, see section 4.1 above. Twelve coins, including an American dime, appear to be of Victorian or later date. Those items that cannot be dated with more precision have been called 'early modern' (pre-19th century) or 'modern' in the accompanying basic record.

Potential for analysis and suggested further work
A basic record of all the material accompanies this assessment and the majority will require no further work.

X-radiography and investigative conservation: One iron item would benefit from investigative conservation. The iron object SF231 from 1006, lower plough soil/upper ditch fill, is currently unidentified. The well-formed head suggests it may not a horseshoe nail but possibly a tuning peg from a musical instrument, though these are more frequently made in organic materials. Additional radiography to show 2 views of the nail/pin/peg (SF231) to confirm the possibility of a central hole beneath the head, and cleaning to reveal the section of the shank is required to help identification. Conservation would also allow it to be more easily illustrated if required.

Roman brooch and coin identification consultations:
The Roman bow brooch (SF69) and the pin (SF76) have previously undergone conservation (by Phil Parkes Cardiff Conservation Services, Cardiff University, Lab No 6365). The Roman brooch and the brooch pin should be seen by a Roman brooch specialist. Similarly, a 'second opinion' would be welcomed to confirm the suggested 'non-Roman' dating of the lead alloy suspension weight and the lead alloy spindlewhorl.

The identification of the Roman coin SF175 should be verified by a coin specialist.

The report: It is suggested that the material of potential Roman and medieval date be summarised to inform those writing the site narrative and for inclusion in any published site report as necessary. At present, it is not certain what form of metal report is required but perhaps a summary of the range of later material recovered from the topsoil and plough soil should be included.

Illustration: It is suggested that the principal objects of Roman and medieval date be illustrated either by line drawing or good quality photography.

- Roman copper alloy bow brooch (SF69) [1001]
- Copper alloy buckle pin (SF76) [1001]

- Roman copper alloy coin (SF175) [1002] Photo obverse and reverse if required
- Lead alloy suspension weight SF39 [1001]
- Lead alloy seal matrix SF63 [1001]
- Lead alloy spindlewhorl SF101 [1001]
- Iron fibre processing spike (SF229) [1040]
- Iron lasting nail (SF231) [1006]
- Iron blade fragment (SF52) [1002]

X-rays to be used to inform drawings of iron objects.

References

Kenney J. 2017 *Hedd yr Ynys Excavation 2016 Lôn Fron, Llangefni, Anglesey Preliminary Excavation Report*. Gwynedd Archaeological Trust (March 2017)

Walton Rogers, P 1997 Textile Production at 16-22 Coppergate. The Archaeology of York The Small Finds 17/11, York: CBA

Appendix VIII.3: Final Report on the Metal Objects

Quita Mould, freelance specialist

Introduction

205 metal objects and a glass bead were examined from the site. Most of the metal finds were recovered by a metal detecting survey conducted during the excavations. They are quantified by material in table VIII.3.1, below, and a basic record of each is provided in appendix VIII.4. It should be noted that the very recent objects were discarded on site during the excavation process and have not been seen by this author. The provenance of the material examined is given in table VIII.3.2. The clear majority (72%) of the objects were recovered from the topsoil [1001]. A smaller amount came from plough soil [1002], deposits of lower plough soil located over specific features [1005, 1006], the spoil heap [1000], a possible floor surface [1040], and two fills [1038, 1053] of a ditch [1039] in the southern part of the site.

Material	Count
Iron	100
Copper alloy	63
Lead alloy	41
Silver	1
Glass	1
	206

Table VIII.3.1: G2455 metal finds quantified by material

Context	1000	1001	1002	1005	1006	1038	1040	1053	Fron Field
Quantity	12	149	21	12	5	1	4	1	1

Table VIII.3.2: G2455 metal finds quantified by context

The range and date of the objects found

Much of the material recovered was clearly of 19th or 20th century date and appears to be the result of domestic rubbish disposal, no doubt deriving from the modern urban development close by. The coinage, small personal items and items of dress being the result of casual loss. The structural ironwork (timber nails and other small fittings) deriving from domestic buildings. A small amount of non-ferrous metalworking debris recovered, namely copper alloy sheet offcuts and lead alloy sheet, pipe offcuts and casting ingates, may represent only a very small proportion of a once bigger activity occurring locally, as one would imagine the bulk of such waste would have been carefully collected for recycling. Copper alloy sheet fragments were also found during a previous metal detecting survey. A cold set (SF 90.1), a heavy chisel-like metalworking tool, and a small amount of possible bar iron point to some small-scale ironworking, probably blacksmithing, in the vicinity, while the nail puller (SF91) would be a useful addition to any tool box. A small number of items found, including a coulter tip from a plough, a broken scythe blade, horseshoes, and a donkey shoe, represent agricultural activity. It should be noted that several categories of item, particularly iron craft tools and much structural ironwork, cannot be independently dated. These objects, having been recovered from topsoil and plough soil, must be considered of early modern and modern derivation, particularly as their corrosion is comparable with other items from those contexts of known recent date, however, several of these items could happily be considered of earlier date if they had been found in sealed contexts lower down the stratigraphic sequence.

A small number of metal detected items from the topsoil (1001) and plough soil (1002) were datable to the Roman, medieval and early post medieval periods and are discussed in more detail, along with other items of intrinsic interest, below.

Roman

A Roman coin (SF175) was recovered from plough soil [1002]. The coin is a radiate of Carausius (AD286-93). This coin was inspected by Peter Guest who confirmed the identification. Roman coins, both stray finds and hoards, are not uncommon on Anglesey with sixty individual records being recorded on the dataset of Iron Age and Roman coins from Wales (Guest and Wells, 2007). Carausian radiates are less common with the largest number being found at Llanddona (a group of coins mostly found down a rabbit hole) in the east of the island. Two small hoards of coins containing radiates of Carausius have been found in the vicinity of Dwyran, Rhosyr in the

south-western corner of Anglesey. One, in the collection of L. Col. T. W. L. Hughes of Criccieth, the other, found by workmen in 1856, so that it is quite possible that they derive from a single hoard.
Part of a bow brooch (SF69) and what was initially thought to be a separate, cast brooch pin (SF76) came from topsoil [1001]. These items were examined by Dr. H. E. M. Cool who kindly provided the following report:

"SF69 is an extremely eroded fragment of a Roman trumpet brooch. This family of brooches was in use during the last third of the first century and into the late second century. The condition of sf 69 makes it very difficult to refine its dating. It would appear to be a brooch with a cast headloop and most probably originally had the spring held by two lugs but the damage at the sides of the head has removed them. Certainly the hollow at the back of the head precludes it ever having a central lug to hold the spring. The form of the central button on trumpet brooches is often diagnostic but here too the erosion of the surface has obscured most of the useful details. Those that remain do not suggest that originally it had the classic acanthus mouldings. The recognisable features would place it within Mackreth's Trumpet Group 2 (Mackreth 2011, 123-4) but it is not possible to identify the type more closely. The general dating of the Group 2 trumpet brooches lies within the second century.

"It has been suggested that SF76 was a brooch pin. If that was correct it would have been the pin of a penannular brooch dating to the post-Roman period as most Roman penannular brooches have pins that taper only very slightly from the head to the point and are generally wrapped around the hoop of the brooch. On post-Roman brooches of the fifth to seventh centuries there was a greater elaboration of the pins which were cast with slightly expanded and frequently ridged heads. Fowler described these as 'barrel-headed' and notes that they were clenched over the hoop (Fowler 1963, 101). In some cases such pin heads were further closed with solder as in the case of one from Caernarfon (Allason-Jones 1993, 166 no. 16, fig. 10.2). Sf 76 by contrast appears to have a head that is a wide solid cast cylinder which tapers to a broken pin. Were it to have come from a penannular brooch, the diameter of the hoop would have been in the vicinity of 50 mm to allow for the width of the head. The perforation diameter would have allowed the hoop of the brooch to have been 1.5 mm at the most. As the pins of penannular brooches needed to be moved easily around the hoop to enable them to be fastened, the likely diameter of the hoop would have been in the range of 1-1.25 mm. This is too narrow for a penannular brooch with a diameter of 50 mm. For all these reasons it is highly unlikely that SF76 was a brooch pin and another function must be sought."

In the light of the analysis of the object SF76, given above, this author was forced to reconsider the item. A plausible identification for the pin SF76 is that of a pin from a Georgian boot (or garter) buckle. During the 18th and the beginning of the 19th centuries tall boots were fashionable wear for men, both for riding and everyday wear (Swann 1984). Riding boots and some top boots used for riding had narrow straps that passed through a loop at the back of the boot and buckled above the top of the knee, holding the closely-fitting, soft boot leg in place. Small, metal, two-piece buckles, usually of tinned copper alloy, were used on these narrow boot straps, also on garters, with some highly decorated ones being used on cravats. These two-piece buckles comprised a frame with a central pin bar and a separate single, double or triple, fixed pin (buckle tongue) on a cast tube that articulated with the central pin bar. SF76 is a single pin example (Whitehead 1996, 114 XVII and buckle no. 735).

Similarly, a small number of other items found, while potentially of Roman date, are thought to be of later origin. A lead suspension weight (SF39), also known as a pendant or hanging weight, of conical shape, found in topsoil [1001], weighs approximately a sixth of a Roman pound (libra), known as a *dextans,* and so may be of Roman date. It has the appearance of a more modern weight, however, and the closeness to a Roman measurement of weight may be a coincidence. The difficulties of establishing the intended value of excavated weights have been admirably described and illustrated by Biddle (1990, 910-917) when discussing the weights found at Winchester. Suspension weights of Roman date are not usually of this form and, as it cannot be independently dated with confidence, the suspension weight (SF39) is most likely to be of later date.

Medieval and early modern

Medieval

Two objects of lead alloy (SF63 and SF101), found in the topsoil [1001], can be safely dated to the medieval period. Part of a lead alloy seal matrix (SF63) is of a type that may be dated to the 13th century. Seals of this type were commonly deliberately broken and discarded on the death of the owner. This example (SF63) is broken and the lug has been cut. The inscription, part of which survives, appears to be part of a name followed by 'F' denoting 'the son or daughter of'. While not an object belonging to a particularly wealthy or prestigious individual, the owner clearly possessed documents or packages considered sufficiently important that they were not to be tampered with by others, and so required a personal seal. A small lead alloy biconical spindlewhorl (SF101) is likely to be of medieval date, due to its form and the large size of the central hole. The shape is typical of examples found in

medieval northern and eastern Britain, more usually of stone (Walton Rogers 1997, 1737).

A small copper alloy coin (SF104) was found in the lower part of shallow plough soil [1005] above the stone slabs [1067] of the eastern drain, along with a small group of ironwork. On initial inspection by the excavators the coin (SF104) was thought to be of medieval date. Unfortunately, the coin was dropped on site shortly after its recovery and could not be retrieved. The eleven iron objects (SF205) from the same context [1005] comprised small iron nails, a figure of eight chain link (SF205.1) and other broken items that were not independently datable, along with a wire hook (SF205.11) from a hook and eye clothing fastening of a type commonly used on 17th century buff leather coats and in use from the early post-medieval period onward.

Four items of metal were found in a deposit [1040] covering the slabs of drain [1066] that may have formed a floor surface [with 1067/1094]: two iron nail shank fragments (SF156.3, 156.4), a shank of lead alloy (SF230) that cannot be independently dated, and an iron fibre processing spike (SF229). The iron spike (SF229) may come from a flax heckle or wool comb; they are difficult to tell apart (Walton Rogers 1997: 1727) and are known collectively as fibre processing spikes. These spikes are relatively common finds in Anglo-Saxon, Anglo-Scandinavian and medieval contexts. Found here, in these circumstances, however, such an identification must be tentative, as the possibility of it being bar iron must also be considered in the light of the small quantity of other likely pieces of bar iron recovered from the topsoil (SF60, 83, 93) and plough soil (SF100).

Early modern

A small number of objects may date to the early modern period. These include an iron wire hook fastening from clothing (SF205.11), from lower plough soil over the eastern drain [1005], mentioned previously, a lead musket shot (SF126), 17mm in diameter and weighing 30g, and an iron rotary key (SF72) recovered from top soil [1001]. The broken rotary key (SF72) may be of early post medieval date but the solid, straight-ended stem projecting beyond the bit and the decorative transverse mouldings located just above the bit all suggest the key may be significantly later in date. Similarly, a copper alloy socket from a candlestick (SF208.3) recovered from the spoil heap [1000], is of simple 'bunsen' burner type (SF208.3) which appears to be of early post medieval date, however, the socket is of sheet metal, not cast, which may suggest it to be a mass-produced item of later date. While other objects, such as a pewter spoon handle (SF149) and copper alloy and pewter shoe buckles (SF28, SF133 and SF76 discussed previously), can be dated to 18th century, most of the small metal items recovered and twelve coins, including an American dime, can be attributed to the 19th and 20th centuries.

The nails

Nearly half (47%) of the ironwork recovered were timber nails. Amongst the obviously 20th century wire nails, was a small quantity of nails of types found on sites of medieval and early post medieval date. These included nails with rectangular-sectioned, faceted heads (Goodall type 4) and 'headless' nails (Goodall types 6 and 8, Goodall 2011, 164, figure 9.1). Flat-headed nails with angular-sectioned shanks, the most commonly found nails on excavations, have been in use from the Roman period onward and cannot be independently dated. Nails of these types continued in use to recent times.

Of interest is an unusual iron nail (SF231) found, along with the heel from a horse or donkey shoe (SF187.1), a horseshoe nail and two other nails, in a layer of the lower part of the plough soil/upper ditch fill [1006]. The small nail (SF231) has a particularly well-formed head that sets it apart from the other horseshoe and timber nails recovered here or know from excavations elsewhere. The square head is separated from the tapering, round-sectioned, pointed shank by a distinct neck formed by a transverse groove. One possible explanation it that it is a lasting nail, also known as a lasting tack, a nail used to temporarily fasten a leather shoe upper in place whist it was stretched over the wooden last during shoe manufacture. The large head provided good grip for the pinchers by which it was removed from the last, and its robust nature allowed it to be used again and again (Salaman 1986, 145-6 and figure 2:129). At 60mm in length it is slightly larger than what appears to have been the standard size of 35-50mm of these lasting nails used in recent times (Salaman 1986, 145), and it now lacks the extremely sharp point. This tentative identification may be supported by the recovery of a broken blade with a curving and sharply pointed tip (SF52), found in plough soil [1002], which has the distinctive shape characteristic of a knife used to cut leather (see for example Salaman 1986, 134 and figure 2:118b and 141 figure 2:124).

Catalogue of items discussed in detail in the text

Copper alloy Coin. Radiate of Carausius (286-93) with the reverse PAX AVG and the mint mark S/P//[.....] (could be London or C mint). RIC: 475-83. G2455, SF175, [1002], unstratified find probably from ploughsoil

Copper alloy Trumpet brooch. Head and upper bow fragment; all surfaces much eroded. Trumpet head with stump of cast headloop, remnants of what may have been a curved beaded ridge between trumpet head and headloop; head hollowed at rear, all edges of head broken. D-sectioned upper bow and central button moulding; faint traces of rib / moulding above and below button; remnants of a wavy horizontal channel centrally on front of button. Present length 39mm; present head width 13mm. G2455, SF69, [1001] topsoil

Copper alloy separate pin from a two-piece buckle. Cast, cylindrical, tube-like head with a short, straight, tapering pin projecting at a right angle, the round-sectioned pin is now broken before the tip. Almost complete. Pin length 26+mm, head length 11mm, head diameter 4mm. G2455, SF76 [1001] topsoil

Lead alloy weight. Conical weight with flat base with a small roughly central depression, tapering sides and flat top with a small copper alloy suspension loop embedded. Complete. Height 40mm, base width35mm, weight 271g. G2455, SF39 [1001] topsoil

Lead alloy seal matrix fragment. Part of a discoidal seal matrix with a legend in Lombardic script H ?L D I : F : around the perimeter and a central cross moline within a double grooved border. The plain back has an integral cast lug, now partially cut away obliquely. Incomplete. Surviving diameter 28+mm, thickness with lug 7mm, disc thickness 2mm. Weight 8g. G2455, SF63 [1001] topsoil

Lead alloy spindlewhorl. Biconical whorl with knife trimmed sides and large central hole 10-11mm in diameter. Slightly broken and crushed at the edge of one face. Almost complete. Diameter 18mm, height 12mm, weight 15g. G2455, SF101, [1001] topsoil

Copper alloy coin. No further details available. G2455, SF104 [1005] the lower part of shallow plough soil above the eastern drain

Iron fibre processing spike. Round-sectioned stem tapering to a pointed tip, the other end obliquely chisel cut. Slightly encrusted flaking. Complete. Length 106mm, diameter 7mm. G2455, SF 229 [1040] deposit covering slabs of drain [1066]

Iron lasting nail. Nail with flat, cuboid head with a transverse groove 1-2mm wide, 6 mm below the head and tapering round-sectioned shank. Complete, cleaned. Length 59mm, head 9x8mm. G2455, SF 231, [1006] lower plough soil/upper ditch fill.

Iron blade fragment. Blade with gently convex back curving downward to meet the edge at a sharply pointed tip. The edge is angled and curving upward to the tip, the blade is broken off before the tang. Incomplete. Heavily encrusted. Surviving length 51+mm, width 21mm. G2455, SF52 [1002] plough soil.

References

Allason-Jones, L. 1993 'Small finds', in Casey *et al.,* 165-210.

Biddle, M. 1990 'Weights and Measures', in Biddle, M. (ed.) *Object and economy in Medieval Winchester. Artefacts from Medieval Winchester, Winchester Studies 7.ii*, 908-928. Oxford: The Clarendon Press

Casey, P. J., Davies, J. L. and Evans, J. 1993 *Excavations at Segontium (Caernarfon) Roman Fort, 1975-1979*. Council British Archaeology Research Report 90 (London)

Fowler, E. 1963 'Celtic metalwork of the fifth and sixth centuries A.D. A re-appraisal' *Archaeological J*. 120, 98-160

Goodall, I. H. 2011 *Ironwork in Medieval Britain an archaeological study*. The Society for Medieval Archaeology Monograph 31. London: The Society for Medieval Archaeology

Guest, P. and Wells, N. 2007 Iron Age & Roman coins from Wales. Copyright University of Wales http://archaeologydataservice.ac.uk/archives/view/iarcw_bcs_2007/). Accessed 31/07/2017

Kenney J. 2017 *Hedd yr Ynys Excavation 2016 Lôn Fron, Llangefni, Anglesey Preliminary Excavation Report*. Gwynedd Archaeological Trust (March 2017)

Mackreth, D. F. 2011 *Brooches in Late Iron Age and Roman Britain,* Oxford: Oxbow Books

Salaman, R. A. 1986 *Dictionary of leather-working tools, C. 1700-1950 and the tools of allied trades*. New Jersey: The Astragal Press

Swann, J. 1982 *Shoes.* The Costume Accessories Series. London: B. T. Batsford Ltd

Walton Rogers, P 1997 *Textile Production at 16-22 Coppergate*. The Archaeology of York The Small Finds 17/11, York: CBA

Whitehead, R. 1996 *Buckles 1250-1800,* Chelmsford: Greenlight Publishing

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Appendix VIII.4: Catalogue of Metal Objects

Quita Mould, freelance specialist

Context	Find No	Material	Name	Description	condition	completeness	Length mm	width mm	thickness	diameter mm	Weight g	X-ray No	site description	Metal detected	Date
1000	SF208.1	Glass	bead	Faceted bead of amber coloured glass	good	complete	14	10					spoil heap finds	x	20th century
1000	SF208.2	Copper alloy	coin	2 new pence	encrusted	complete			2	26	7		spoil heap finds	x	1971+
1000	SF208.3	Copper alloy	candlestick	Sheet metal socket from a simple candlestick of 'bunsen'-type or a derivative, with a transverse moulding narrowing to a shoulder below, broken from the stem	good, soil in the socket	incomplete	40+		1 (sheet)	18			spoil heap finds	x	Post medieval/ ?19th/20th century
1000	SF208.4	Copper alloy	plate	Cast square shaped plate with 3 countersunk screw holes, broken across one corner. Brass		almost complete	47	46	3.5				spoil heap finds	x	19th/20th century
1000	SF208.5	Copper alloy	fitting, hollow	Cast, rectangular stepped hollow fitting with 2 flat, round headed rivets and a small dome-headed screw. Brass, from a heavy door fitting or similar	good, soil adhering	complete	64	15	18				spoil heap finds	x	19th/20th century
1000	SF208.6	Copper alloy	U-shaped clip	Cast, heavy semi-circular clip or clamp with small centrally-pierced flange at each end for attachment and a pair of thick transverse mouldings. Turning lines visible on the inner surface. The 2 mouldings have small cut surfaces with filling marks where the clamp has been cut to fit.	good, soil adhering	complete	51	24	10				spoil heap finds	x	19th/20th century
1000	SF208.7	Copper alloy	rivet	Small dome-headed rivet with a separate square-sectioned shank and a flat, round integral foot. Distance between head and foot c. 11mm	good, soil adhering	complete	13			9 (head), 6 (foot)			spoil heap finds	x	19th/20th century

Context	Find No	Material	Name	Description	condition	completeness	Length mm	width mm	thickness	diameter mm	Weight g	X-ray No	site description	Metal detected	Date
1000	SF208.8	Copper alloy	badge	6 sided badge with a central shank that may have attached a central boss, surrounded by 2 raised borders with milled decoration between. Separate back plate with broken hinge for a pin and clasp	good	almost complete	30	25	3				spoil heap finds	x	19th/20th century
1000	SF208.9	Copper alloy	medallion	Stamped metal medallion with small integral suspension loop. One face has bust facing right, 3 shields on the other face. Commemorating the visit of the prince of wales 1928	good	complete			1	21			spoil heap finds	x	1928
1000	SF208.10	Lead alloy	strip, offcut	Broken at each end, one end twisted. Working waste	soil adhering	incomplete	57+	17	4		21		spoil heap finds	x	
1000	SF208.11	Lead alloy	seating	Irregular piece with circular impression in one face, simple seating solidified from the molten state	soil adhering	complete	32	25	7		25		spoil heap finds	x	
Fron Field (SH 455 753)	SF228	Silver, copper alloy, textile	button	Backing plate of a circular disc of copper alloy sheet, gently dished, holding a layer of fibrous material (paper) with a coarser twisted plied fibre from textile above, all held in a silver scalloped border with scrolled decoration with a 3mm deep undecorated flange. The scalloped border stamped sterling silver.		almost complete				17	1		spoil heap finds	x	20th century
1001	SF1	Iron	drain grating	Cast iron corner broken from a drain grating of thick rectangular section. Corner has a small lu, bar at 45 degrees with 2 straight bars joining it to the outer rectangular frame.	not encrusted, some soil and rootlets	incomplete	110+	92+	19		911		topsoil	x	19th/20th century

Context	Find No	Material	Name	Description	condition	completeness	Length mm	width mm	thickness	diameter mm	Weight g	X-ray No	site description	Metal detected	Date
1001	SF2	Iron	nail	Modern wire nail with small round flat head and round sectioned shank. Shank is sinuous so has been used. 4 inch nail	slightly encrusted	complete	102			11 (head)	16	J640	topsoil	x	20th century
1001	SF3	Iron	nail	Modern wire nail with small round, slightly domed, head and round sectioned straight shank. Not used. 2 inch nail	encrusted	complete	52			11 (head)	12	J644	topsoil	x	20th century
1001	SF4	Iron	horseshoe	Plano-convex sectioned heel tapering and curving to gently rounded terminal, broken across wider end. No calkin	encrusted, fissured	incomplete	57+	29	8		31	J640	topsoil	x	19th/20th century
1001	SF5	Iron	nail	Nail with flat, probably rectangular head and straight rectangular sectioned shank	encrusted, flaking	complete	65	20			18	J644	topsoil	x	post medieval
1001	SF6	Iron	nail	Small nail with flat round head and short round sectioned shank broken at the tip	encrusted	almost complete	19+			10 (head)	2	J641	topsoil	x	20th century
1001	SF7	Iron	nut	Small square nut of rectangular section with large central hole	slightly encrusted	complete	14		4		4	J641	topsoil	x	19th/20th century
1001	SF8	Iron	strap	Triangular shaped fragment of flat section with recent break, a straight side and a straight end present	encrusted, flaking	incomplete	28+	19+	3		4	J641	topsoil	x	post medieval
1001	SF9	Copper alloy	handle	Cast rod of oval section with straight cut ends, each bent at a right angle, one terminal facing outward the other upward	good	complete	80	Ht 43		5	26	J641	topsoil	x	post medieval
1001	SF10	Iron	nail shank	2 broken fragments of round sectioned shank	slightly encrusted	incomplete	14+			10	6	J641	topsoil	x	20th century
1001	SF11	Iron	bar, slotted	Rectangular sectioned bar tapering to a gently rounded tip pierced by a large rectangular slot 18x4mm (measured from x-ray), other end is broken	encrusted	incomplete	86+	20	5		45	J640	topsoil	x	post medieval

Context	Find No	Material	Name	Description	condition	completeness	Length mm	width mm	thickness	diameter mm	Weight g	X-ray No	site description	Metal detected	Date
1001	SF12	Iron	bolt	Bolt with flat angular shaped head and round sectioned, straight ended shank with a screw thread for 23mm. C. 4 1/2 in bolt	heavily encrusted	complete	122	33 (head)			216	J642	topsoil	x	20th century
1001	SF13	Iron	nail	Modern wire nail with small, slightly domed round head and straight round sectioned shank. Not used	encrusted, flaking	complete	63			16 (head)	21	J640	topsoil	x	20th century
1001	SF14	Iron	open socket	Strap with a small upstanding flange, 16mm high, at each side of the flat body, appears broken at each end. No nail or rivet hole present	encrusted, some rootlets, fissured	incomplete	49+	36			40	J645	topsoil	x	19/20th century
1001	SF15	Iron	wire	Round sectioned rod or thick wire, now bent, broken at each end	encrusted, flaking	incomplete	76/47			5	10	J641	topsoil	x	modern
1001	SF16	Iron	horseshoe	Branch of narrow webbed horseshoe with a tapering pointed heel (feathered) and thickened calkin, broken at the arch with a single oval nail hole 7x5mm (measured from x-ray) present. No fullered groove	encrusted	incomplete	Ht 96	23 (web)	6, (calkin 13)		67	J642	topsoil	x	post medieval
1001	SF17	Iron	barbed wire	Central wire with a second piece of wire wrapped around it in 4 coils	encrusted	incomplete	26+	12	3 (wire)		3	J641	topsoil	x	20th century
1001	SF18	Lead alloy	strip, offcut	Rectangular sectioned strip, both ends broken, bent. An offcut of thick sheet. Working waste	good, soil adhering	incomplete	33+	8	5		5		topsoil	x	
1001	SF19	Iron	nail	Nail with round slightly domed head and gently curving angular sectioned shank, tip missing	slightly encrusted	almost complete	58+			16 (head)	11	J641	topsoil	x	modern
1001	SF20	Iron	nail	Nail with small round slightly domed head and gently curved angular sectioned shank	encrusted	complete	68			16 (head)	22	J640	topsoil	x	modern

Context	Find No	Material	Name	Description	condition	completeness	Length mm	width mm	thickness	diameter mm	Weight g	X-ray No	site description	Metal detected	Date
1001	SF21	Iron; copper alloy	coin	One new penny. Encased in a non-ferrous metal plating with surface detail visible, lettering and central portcullis, same size and almost same weight as new penny	corroded	complete			2	10	3	J641	topsoil	x	1971+
1001	SF22	Iron	nail	Modern wire nail with a small, slightly domed round head and straight round sectioned shank.	slightly encrusted	complete	68			13 (head)	17	J640	topsoil	x	modern
1001	SF23	Iron	nail	Small 'lost head' nail with small rectangular sectioned faceted head 7x4mm and short angular-sectioned shank.	encrusted, fissured	complete	36	7 (head)			3	J644	topsoil	x	post medieval / modern
1001	SF24	Copper alloy; enamel	badge	Teddy Tail League badge. Flat bedded with white, blue and red enamel on the upper face depicting a mouse portrait facing left in a central circle with Teddy Tail League above and DAILY MAI: below. Hinged pin with loop catch on back face running vertically. Back stamp THOMAS ???DRINT BIRMINGHAM	good, some enamel missing	Complete	Ht 26	21		22	4		topsoil	x	no earlier than 1934
1001	SF25	Lead alloy	sheet, offcut	Elliptical shaped with all edges cut, now bent and twisted. Working waste	good, some soil adhering	complete	52 (folded)	17	2		19		topsoil	x	Modern
1001	SF27	Iron	nail	Medium nail with flat rectangular shaped head 21x12mm and rectangular sectioned, broken shank	encrusted	almost complete	37+	21 (head)			15	J641	topsoil	x	post medieval

Context	Find No	Material	Name	Description	condition	completeness	Length mm	width mm	thickness	diameter mm	Weight g	X-ray No	site description	Metal detected	Date
1001	SF28	Copper alloy	buckle tongue fragment	Cast oval sectioned stem with a knobbed terminal at either end, one oval in shape, 10x7mm, the other round diameter 7mm. The stem has a central, rectangular sectioned, shield shaped projection, with a broken tip. Separate spindle for a pitchfork double tongue (‘pitchfork tongue’ having snapped off)	some corrosion present	incomplete	51			3 (stem)	7		topsoil	x	c. 1720-1790
1001	SF29	Iron	nail	Rectangular sectioned shank with pointed tip, head missing	encrusted	incomplete	64+				15	J644	topsoil	x	post medieval
1001	SF30.1	Iron	nailed binding	Strap 25mm wide with slightly thickened, gently rounded and expanded terminal, pierced by a central round hole.	encrusted	incomplete	85+	33 (terminal)	10			J645	topsoil	x	post medieval / modern
1001	SF30.2	Iron	?cable	2 lengths of iron round sectioned wire, diam 5mm, passing through a sheath with a spirally coiled non-ferrous support	encrusted	incomplete	103+	12				J645	topsoil	x	modern
1001	SF30.3	Iron	nail	Shank with angular section	encrusted	incomplete	53+					J645	topsoil	x	post medieval / modern
1001	SF31.1	Iron	rod	Thick slightly tapering round sectioned rod with a flat end that has not been hit, the other end is broken. A large round hole is close to the wider end, seen in radiograph but not visible on the object. Unlikely to be a broken punch as there is no head.	encrusted, flaking	incomplete	81+			22		J645	topsoil	x	post medieval / modern
1001	SF31.2	Iron	clip/link	Broken, thick, round sectioned wire with sinuous profile, either a large curved-profiled chain link or railway sleeper clip	encrusted, flaking	incomplete	53	50		10		J645	topsoil	x	modern

Context	Find No	Material	Name	Description	condition	completeness	Length mm	width mm	thickness	diameter mm	Weight g	X-ray No	site description	Metal detected	Date
1001	SF31.3	Iron	sheet fragment	Sheet fragment of flat section, very little metal remaining as no image visible in radiograph	encrusted	incomplete	45+	38+	2			J645	topsoil	x	post medieval / modern
1001	SF32	Copper alloy	buckle	Rectangular frame with round section, one side of the frame is the integral pin bar recessed from the downward curving frame and smaller in diameter (4mm diam). Max strap width 18mm	good	complete	Ht 29	36	5		16		topsoil	x	post medieval
1001	SF33	Iron	nail	Straight shank with square section and pointed top from a medium nail	encrusted	incomplete	65				6	J641	topsoil	x	post medieval / modern
1001	SF34	Copper alloy	coin	Penny. No surface detail visible on either face. Victorian?		complete			1	30	7		topsoil	x	Victorian?
1001	SF35.2	Iron	formless fragment		encrusted		24	18	12		10	J641	topsoil	x	
1001	SF36	Silver	coin	Dime. Seated Liberty' dime pierced for suspension, worn but both faces legible. Dated 1838	good	complete			1	18	3		topsoil	x	1838
1001	SF37	Iron	nail	Medium nail with flat head and straight shank	heavily encrusted	complete	40	14 (head)			11	J641	topsoil	x	post medieval / modern
1001	SF38	Iron	nail	Small rectangular, slightly faceted head 14x10mm and straight rectangular-sectioned shank, tip broken	encrusted	almost complete	76+	14 (head)			34	J640	topsoil	x	late medieval through to modern
1001	SF39	Lead alloy	weight, pendant	Conical weight with flat top with small copper alloy wire suspension loop embedded into it, the sides flaring outward to the flat base which has a small roughly central depression in it.	good	complete	Ht 40			18 (top), 35 (base)	271g (9.6oz)		topsoil	x	Roman (286-93)
1001	SF40.1	Iron	nail	Small/medium angular sectioned shank with head missing	encrusted	incomplete	37+					J641	topsoil	x	

Context	Find No	Material	Name	Description	condition	completeness	Length mm	width mm	thickness	diameter mm	Weight g	X-ray No	site description	Metal detected	Date
1001	SF40.2	Iron	nail	Small/medium angular sectioned shank with head missing	encrusted	incomplete	46+					J641	topsoil	x	
1001	SF60	Iron	shank/bar	Fragment of square-sectioned, thick shank. A bar or large nail shank fragment	encrusted, flaking	incomplete	27+	12	12		23	J641	topsoil	x	
1001	SF61	Iron	ring	Annular ring of round section, about half remaining	encrusted, corroding	incomplete		4 (arm diam)		43	9	J641	topsoil	x	
1001	SF62	Iron	open socket	Sheet with U-shaped section and straight sides, tapering into a shoulder at one end pierced by a round rivet/nail hole, the other end is broken. From a tool of sheet metal	heavily encrusted	incomplete	43+	30	2		22	J641	topsoil	x	
1001	SF63	Lead alloy	seal matrix	Part of a flat circular seal with a pierced lug on the back (reverse), die has central cross moline surrounded by double linear groove, inscription H ?L D I : F, broken/torn	good	incomplete			2, with lug 7	28+	8		topsoil	x	medieval 13th century
1001	SF64	Iron	nail	Nail with rectangular sectioned faceted head 14x8mm and a rectangular sectioned shank	encrusted	complete	76	14			24	J644	topsoil	x	
1001	SF65	Iron	nail	Rectangular sectioned shank	encrusted	incomplete	35+	8	5		6	J641	topsoil	x	
1001	SF66	Iron	hook	S-shaped ‘butcher’s’ hook of round section	encrusted	complete	70			6 (arm diam)	36	J644	topsoil	x	
1001	SF67	Iron	bolt	Thick rectangular sectioned head or nut and shank with screw thread, broken	heavily encrusted	almost complete	44+	28 (head)			51	J644	topsoil	x	modern
1001	SF68	Copper alloy	bullet casing	Spent bullet casing with discoidal terminal, no surface detail visible, and broken sides of thin sheet.	soil packing the interior	incomplete				9 (head), 8 (cas-ing)	1		topsoil	x	20th century

Context	Find No	Material	Name	Description	condition	completeness	Length mm	width mm	thickness	diameter mm	Weight g	X-ray No	site description	Metal detected	Date
1001	SF69	Copper alloy	brooch	Cast bow brooch, head and upper bow present in very poor condition. Hollow trumpet like head with a thick flat-sectioned semi-circular projection (not pierced). The high curved bow of plano-convex section has a large central transverse moulding that may be the remains of acanthus ornament. Little green corrosion products, the underside of the bow also has brown colouration. Little detail present, could be a poor miscasting.	poor, corroded	incomplete	40+	13			15		topsoil	x	Roman 2nd century AD
1001	SF70	Iron	split pin	Cotter pin with 2 long straight arms of plano-convex section and a loop head. Appears unused	encrusted heavily, flaking	complete	52	7 (arm)		13 (head)	12	J640	topsoil	x	
1001	SF71	Iron	nail	Modern medium/small wire nail with small flat round head and gently curving short round sectioned shank	slightly heavily, flaking	complete	34			10 (head)	3	J641	topsoil	x	modern
1001	SF72	Iron	key, rotary	Bow missing, round sectioned stem with two decorative transverse mouldings low down just above the square symmetrical bit, the straight ended stem projects below the bit. The bit has internal symmetrical clefts comprising 2 rounded with a rectangular slot between.	encrusted, flaking	almost complete	83+	18 (from x-ray)		10 (stem)	40	J640	topsoil	x	post medieval, long lived type
1001	SF73	Iron	nailed binding	Rectangular sectioned strap with gently curving end, other end broken. A small round nail hole and an angular shaped hole are visible in radiograph	encrusted	incomplete	59+	50	5		51	J640	topsoil	x	

Context	Find No	Material	Name	Description	condition	completeness	Length mm	width mm	thickness	diameter mm	Weight g	X-ray No	site description	Metal detected	Date
1001	SF74	Lead alloy	caulking	Asymmetrical, conical caulking with circular flat base with a hole off-centre tapering but visible emerging on the outside at the side of the top. Caulking rather than a weight	good	complete	Ht 14			21	21		topsoil	x	
1001	SF75	Lead alloy	handle	Pewter plano-convex sectioned stem, now slightly curving and expanding and flattening at one end, both ends are broken. Same width and thickness as the cutlery handle sf149. Dark grey colour	good	incomplete	46+	10	5		10		topsoil	x	post medieval
1001	SF76	Copper alloy	brooch pin	Cast hinged pin with a hollow, cylindrical transverse head at right angle to the virtually straight, tapering round-sectioned stem, broken before the tip. Same light green corrosion products as the bow brooch sf69. From a penannular brooch?	poor, corroded	almost complete	26+	11 (head)	4 (head)		1		topsoil	x	Post medieval 18th century
1001	SF77	Copper alloy; iron	buckle	Cast, rectangular double loop buckle frame with plano -convex section. Central integral offset round sectioned pin bar with remains of an iron wire pin remaining wrapped around the bar. Gently curving profile. No decoration visible. Max strap width 30mm	good, some soil present	complete					40		topsoil	x	post medieval
1001	SF78	Iron	coulter tip	Cast iron asymmetrical triangular shaped with a thick rectangular sectioned flange tapering to a rounded tip. The open socket is pierced by a large central round hole c. 10mm diam (measured from x-ray)	encrusted	complete	118	80	18 (flange)		628	J646	topsoil	x	modern
1001	SF79	Iron	nail	Tapering square sectioned shank and broken head	encrusted, flaking	almost complete	52				14	J644	topsoil	x	

Context	Find No	Material	Name	Description	condition	completeness	Length mm	width mm	thickness	diameter mm	Weight g	X-ray No	site description	Metal detected	Date
1001	SF80	Copper alloy	button	Discoidal button with flat round head and flat back with a cone shank and broken integral loop. White metal coated, no other surface detail present	good	almost complete			1 (head)	26	4		topsoil	x	pre 19th century
1001	SF81	Copper alloy	button	Small flat discoidal button with white metal coating. Back slightly dished with turning lines, cone-shaped shank with loop, now missing.	good	almost complete			2 (head)	15	2		topsoil	x	pre 19th century
1001	SF82	Lead alloy	ingate	Pear-shaped' piece with flat top and base and tapering sides. A chisel cut mark present in the base where the truncated cone extends into a tongue. Casting metal working waste; possibly a casting ingate	good, some soil adhering	complete	29	18	7		21		topsoil	x	post medieval
1001	SF83	Iron	bar/nail	Rectangular sectioned shank tapering and thinning to a chisel-shaped end, the other end is straight and has not been hit. Headless nail or chisel-cut bar beaten flat at one end (see sf93)	encrusted, flaking	complete	74	24	18		49		topsoil	x	
1001	SF84	Copper alloy	handle	Hollow stem of sheet with joining seam clearly visible, bent at right angle at one end with screw thread c 8mm long, broken at each end	good, soil present in each end	incomplete	70+		1 (sheet)	9	18		topsoil	x	post medieval
1001	SF85	Iron	formless fragment	Irregular formless fragment, slag.			30	31	12		18	J644	topsoil	x	
1001	SF86	Copper alloy	mount	Broken sheet mount with a curved side, other edges now broken. The base of a rectangular rivet or a rectangular rivet hole is visible on one face. No surface detail visible	soil present on both faces	incomplete	18+	16+	0.25 (sheet)		0.5		topsoil	x	post medieval

Context	Find No	Material	Name	Description	condition	completeness	Length mm	width mm	thickness	diameter mm	Weight g	X-ray No	site description	Metal detected	Date
1001	SF87	Lead alloy	pipe offcut	Pipe offcut of thick rectangular sectioned sheet with 3 oblique blade cuts running across one cut edge and another 2 running in the opposite direction. Internal diameter of pipe 25x10mm. Metal working waste repair	good	complete		26	5	35	65		topsoil	x	Modern
1001	SF88	Lead alloy	formless fragment	Irregular fragment, slag. Comparable with sf115	good		21+	18+	12		28		topsoil	x	
1001	SF89	Lead alloy	spoon	Pewter spoon bowl fragment with rectangular section and gently curving profile. Small area of the original edge remains, others broken	good, some soil	incomplete	22+	21+	2		4		topsoil	x	post medieval
1001	SF90.1	Iron	cold set	Set with slightly domed round sectioned head, stout round sectioned stem flattening and expanding slightly to the blade. Metal working tool	heavily encrusted	complete	118	35		36 (head)		J646	topsoil	x	
1001	SF90.2	Iron	nail	Clenched rectangular sectioned shank, head missing	encrusted, fissured	incomplete	38/34					J646	topsoil	x	
1001	SF91	Iron	nail puller	Slightly domed round head, thick round sectioned stem ending in a short bifurcated end (the fork is not deep but is deliberate; one side is rounded through wear). Nail pulling tool	heavily encrusted	complete	106	18 (forked termi-nal)		30 (head)	212	J645	topsoil	x	
1001	SF92	Copper alloy	fitting, window/ door furniture	Plate fitting from window or door furniture. Rectangular, gently waisted plate with cropped corners, now fractured. Pierced by a central round rivet hole at each terminal with an oval-sectioned rivet passing through a cone-shaped seating toward one end.	good, soil present	almost complete	70	27			20		topsoil	x	post medieval

Context	Find No	Material	Name	Description	condition	completeness	Length mm	width mm	thickness	diameter mm	Weight g	X-ray No	site description	Metal detected	Date
1001	SF93	Iron	bar/nail	Rectangular sectioned bar/shank tapering in thickness to a chisel-like end, other end is flat and slightly thickened possible hit of chisel cut. See also sf83	encrusted, fissured	complete	78	15	15		36	J640	topsoil	x	
1001	SF94	Copper alloy	coin	Penny. No surface detail visible on either face. ?Victorian	some corrosion present	complete			1	27	7		topsoil	x	post medieval
1001	SF95	Copper alloy	sheet, offcut	Stamped sheet offcut with 2 impressed, stamped ‘dimples’, a circle punched out of the metal, and other irregular cut edges. One edge has a chisel cut mark extending from it. Sheet metal working waste	good	complete	80	73	1		43		topsoil	x	post medieval
1001	SF96	Iron	scythe	Scythe blade fragment, gently curving blade with thickened back 7mm wide and worn edge, broken each end	slightly encrusted, flaking, fissured	incomplete	136+	30	7 (back)		108	J642	topsoil	x	post medieval
1001	SF97	Lead alloy	spillage	Small roughly oval shaped, flat spillage. Metal working waste	good		6	12	2.5		2		topsoil	x	
1001	SF98	Iron	bolt	Large bolt with thick flat round head and long relatively narrow round sectioned stem with screw thread visible in the corrosion products but only faintly visible in radiograph, tip now broken	encrusted, flaking	complete	150	12		25 (head)	142	J645	topsoil	x	modern
1001	SF101	Lead alloy	spindle whorl	Biconical (biconvex) spindlewhorl with knife trimmed sides with large central hole 10-11 diameter. The edge of one face of the central hole is broken and crushed. Walton rogers form c	good	almost complete	Ht 12			18	15		topsoil	x	medieval

Context	Find No	Material	Name	Description	condition	completeness	Length mm	width mm	thickness	diameter mm	Weight g	X-ray No	site description	Metal detected	Date
1001	SF102	Iron	nail, horseshoe	Gently curving shank of rectangular section expanding in thickness toward the flat head 10x8mm, the tip of the shank is broken	slightly encrusted	almost complete	23+	10			4	J641	topsoil	x	post medieval
1001	SF105	Lead alloy	disc, offcut	Disc of flat sheet, edge slightly irregular where circle has been hand cut. Offcut from washer.	good	complete			2	26	7		topsoil	x	
1001	SF106	Lead alloy	sheet, offcut	Rectangular sheet offcut with cut edges, folded for disposal. A semi-circle, diameter 13mm, of impressed dots with a single outlier, each 2mm in diameter, visible on one face. Sheet metal working waste/repair	good, much soil adhering	complete	35 (folded), estimat-ed 85	73	3		126		topsoil	x	
1001	SF107	Copper alloy	ring with thumb rest	Cast rectangular-sectioned ring with casting flashing still present on the interior (unfettled) and a large thumb rest with three transverse mouldings. Unfinished casting, metal working waste	good, some soil present	complete	47		17	25 (ring)	25		topsoil	x	post medieval
1001	SF108	Copper alloy	sheet, offcut, folded	Thin sheet with a large oval hole (35mm long c. 15mm wide) cut out of it and another curved cut edge visible above and below. Now folded upon itself at least twice ready for disposal. Sheet metal working waste	good	complete	45 (folded)	24	10, 0.5 (sheet)		14		topsoil	x	post medieval
1001	SF109	Lead alloy	pipe offcut	Pipe offcut of thick rectangular sectioned sheet with a straight cut edge and oblique cut edge, tapering in width. Now squashed into an oval section. Internal diameter of pipe 41x12mm. Metal working waste repair	good	complete		50	4	49	150		topsoil	x	Modern
1001	SF110	Lead alloy	stem	Triangular sectioned stem, broken each end, possibly a handle fragment but thicker than a spoon.	good	incomplete	35+	12	8		13		topsoil	x	post medieval

Context	Find No	Material	Name	Description	condition	completeness	Length mm	width mm	thickness	diameter mm	Weight g	X-ray No	site description	Metal detected	Date
1001	SF111	Copper alloy; iron	buckle	D-shaped buckle frame of flattened oval section with a recessed integral pin bar. Iron encrustation with charcoal present at one end of the pin bar and the junction with the frame may suggest the presence of a broken iron wire pin. Max strap width 20mm	good, some iron encrustation	complete	Ht 34	30		3	8		topsoil	x	post medieval
1001	SF112	Copper alloy	coin	Penny. Victoria 189?	good	complete			2	30	7		topsoil	x	1890's
1001	SF113	Copper alloy	disc	Discoidal with some surface detail (APD) visible on one face, possibly 'patent applied' and gold coloured surface coating. Similar size to a penny but thinner metal. Likely to be disc top from an air rifle cartridge or similar	good	complete			0.25	28	3		topsoil	x	20th century
1001	SF114	Copper alloy	button	Shirt button' discoidal button of stamped sheet with outer flange and gently concave dished inner area with four large circular holes for thread attachment. No back stamp visible.	good	complete			0.5 (head)	17	2		topsoil	x	late 19th/20th century
1001	SF115	Lead alloy	formless fragment	Irregular formless fragment, slag. Like sf88	good		30+	23+	15		22		topsoil	x	
1001	SF116	Lead alloy	disc, offcut	Disc of flat sheet, edge gently bevelled. Disc folded for disposal. Offcut from washer. Sheet metal working waste/washer cutting	good, soil in the fold	complete			1	42	26		topsoil	x	

Context	Find No	Material	Name	Description	condition	completeness	Length mm	width mm	thickness	diameter mm	Weight g	X-ray No	site description	Metal detected	Date
1001	SF117	Copper alloy	button	Discoidal button with flat round head with small area of original surface surviving suggesting it was white metal plated. Back has two concentric raised mouldings with a hint of lettering with, now too faint to read, and central metal wire loop, now squashed and distorted.	good	complete			1 (head)	23	5		topsoil	x	19th century+
1001	SF118	Lead alloy	sheet, offcut	Tapering sheet with cut edges, slightly rounded in places, folded over at the narrower end. Tool marks visible on one surface. Sheet metal working waste/repair	good, some soil	complete	38	18-29	1.5		14		topsoil	x	
1001	SF119	Copper alloy	coin	Penny George V 191?(2?)	good, some soil present	complete			1.5	30	8		topsoil	x	1910's
1001	SF120	Lead alloy	sheet, offcut	Rectangular offcut one side torn, others cut. Much folded in one corner, now broken off. Sheet metal working waste/repair	good, soil present	incomplete	35 (folded), estimat-ed 53	31	1		20		topsoil	x	
1001	SF121	Copper alloy	coin	Penny Victoria 1891	good	complete			1.5	31	7		topsoil	x	1890's
1001	SF122	Copper alloy	vessel fragment	Triangular sectioned, thick strip with gently curving profile and turning lines visible on the inner and outer faces, both edges and ends are broken. Broken from the wall of a large thick walled vessel	good	incomplete	27+	12+	2.5-4		9		topsoil	x	? post medieval
1001	SF123	Copper alloy	chain	Row of 13 articulated, gently curving, links of round sectioned wire with an additional 2 articulated links dropping from one link. A chain from harness or similar. Individual links 22mm, wire 3mm in diameter	good		190 (total)			3	68		topsoil	x	post medieval

Context	Find No	Material	Name	Description	condition	completeness	Length mm	width mm	thickness	diameter mm	Weight g	X-ray No	site description	Metal detected	Date
1001	SF124	Lead alloy	sheet, offcut	Rectangular piece, torn at each end, one is folded over, gently curved in profile. Sheet metal working/repair	good, soil present	incomplete	62+	23-27	4		63		topsoil	x	
1001	SF126	Lead alloy	shot	Spherical musket ball	good	complete				17	30		topsoil	x	post medieval
1001	SF128	Lead alloy	stem	Round sectioned stem tapering to a pointed tip, other end cut off. Nail head or bowl etc removed. Metal working waste?	good, some soil adhering	complete	102			10	27		topsoil	x	
1001	SF129	Lead alloy	pipe offcut	Pipe offcut of thick rectangular sectioned sheet, pipe tapers and is now oval in section, both edges are straight cut. Internal diameter 23x14mm. Metal working waste repair	good	complete		18	4	40	58		topsoil	x	Modern
1001	SF130	Lead alloy	seating offcut	Irregular piece cut from a plano-concave thick seating possibly a masonry cramp seating. 2 flat cut surfaces present. Working waste	good	complete	65	35	24		182		topsoil	x	
1001	SF131	Lead alloy	seating offcut	Irregular rectangular sectioned fragment with 1 flat cut surface possibly cut from a masonry cramp seating, similar to SF130, 169. Working waste	good, some soil adhering	complete	48	40	17		165		topsoil	x	
1001	SF132	Copper alloy	curtain ring	Annular ring of round section.	good	complete				32, arm diam 2.5	3		topsoil	x	post medieval
1001	SF133	Lead alloy	buckle	Pewter buckle frame fragment. Arm of near flat section broken from a large frame of angular shape with a pair of shallowly impressed grooves in the upper face. Comparable in size and shape to a Georgian shoe buckle	good	incomplete	Ht 53+	6 (arm)	1.5		3		topsoil	x	c1720-1790

Context	Find No	Material	Name	Description	condition	completeness	Length mm	width mm	thickness	diameter mm	Weight g	X-ray No	site description	Metal detected	Date
1001	SF134	Copper alloy	sheet fragment	Sub-rectangular fragment of thin sheet, now fractured into two pieces, all edges broken	good, some soil present	incomplete	52+	40+	0.25		3		topsoil	x	post medieval
1001	SF135	Copper alloy	sheet fitting, riveted	Fitting of broken sheet c. 1mm thick with a second piece of similar thickness lying on top of it. A large rivet hole has encrustation present suggesting it was secured by an iron rivet or nail originally. One edge is curved, the others are broken	slight corrosion, some soil adhering	incomplete	42+	26+	1		8		topsoil	x	post medieval
1001	SF136	Lead alloy	washer	Washer of flat sectioned sheet, folded twice over for disposal. Size of central hole difficult to estimate	good, some soil adhering	complete	63 (fold-ed)	20 arm width	2	64	68		topsoil	x	
1001	SF137	Iron	wall anchor	Thick square sectioned shank tapering in thickness to the pointed end, other end beaten over into a rounded, thickened head 23x19mm. The shank is gently curved in profile suggesting it has been used and removed. Wall anchor or spiked cramp	encrusted	complete	111	13			128	J642	topsoil	x	
1001	SF138	Copper alloy	button	Military or livery button, hollow discoidal two part button with a gently domed front of stamped sheet bearing the royal coat of arms, and a flat back with a separate wire loop shank, backstamp now illegible. Dried vegetable matter visible in the interior. Front plate is fractured	good	almost complete				29	3		topsoil	x	19th century+

Context	Find No	Material	Name	Description	condition	completeness	Length mm	width mm	thickness	diameter mm	Weight g	X-ray No	site description	Metal detected	Date
1001	SF139	Copper alloy; enamel	buckle	Rectangular frame of plano-convex section, one side of the frame forms the integral pin bar recessed from the downward curving frame and smaller in width c. 3mm. The corresponding pin rest, c. 6mm wide, is slightly raised. The flat top surface is decorated with a layer of enamel now appearing dark red/ chestnut brown in colour. Max strap width 19mm	good, some soil present	complete	Ht 34	36			16		topsoil	x	post medieval
1001	SF140	Iron	wall cramp	Rectangular sectioned straight ended strap upturning at a right angle at one end	encrusted, fissured	complete	106	28	7		150	J645	topsoil	x	
1001	SF141	Copper alloy	lock plate	Rectangular brass plate c.2mm thick with a countersunk screw hole in each corner, key hole with a decorative cut out above in the centre with a countersunk circular h ole above and below.	good, some soil adhering	complete	Ht 63	38	2		35		topsoil	x	post medieval
1001	SF142	Copper alloy	seating/ collar	Broken circular flanged seating or collar of thin sheet pierced by a hole through which passes a long, round sectioned pin stem, 30mm long, with a star-shaped head, 10mm diameter, that resembles a small cog wheel and pin from a clockwork mechanism	good	incomplete	Ht/ depth 7	4 (flange width)		34	4		topsoil	x	19th century+
1001	SF143.1	Iron	handle, loop	Large penannular loop(swing) handle of round section (11mm) with rolled ring terminals 28mm diam	slightly encrusted, flaking	complete	120	96		11 (arm diam)		J642	topsoil	x	modern
1001	SF143.2	Iron	handle	Straight rod of round section, upturning and reducing in thickness at each end, broken handle	slightly encrusted	almost complete	85+			8		J642	topsoil	x	modern

Context	Find No	Material	Name	Description	condition	completeness	Length mm	width mm	thickness	diameter mm	Weight g	X-ray No	site description	Metal detected	Date
1001	SF143.3	Iron	handle fragment	Fragment of round sectioned rob broken at each end, similar to SF143.2 but from a second example	slightly encrusted	incomplete	62+			8		J642	topsoil	x	modern
1001	SF144	Copper alloy	button	Discoidal head with stamped of central plain rondel and concentric band separated by a band of milled decoration with another around the edge. Slightly dished back with central cone and broken loop shank of a differing alloy. No back stamp	good, soil adhering	almost complete			0.5 (head)	28	5		topsoil	x	post medieval
1001	SF145	Iron	Donkey shoe	One heel has a calkin, probably folded, the other is pointed (feathered). 3 rectangular nails holes in 1 side and 4 in the other all within a fullered groove. 4 nail holes have broken nail shanks within. Max web width 32mm (24mm from radiograph)	encrusted, flaking	complete	Ht 110	75			310	J646	topsoil	x	post medieval
1001	SF146	Copper alloy	buckle	Cast rectangular frame of round section, the integral pin rest is slightly wider that the rest of the frame. Separate pin present wrapped around the pin bar with the slightly downward pointing tip resting on the pin bar. To take a strap less than 20mm wide	good, some soil adhering	complete	Ht 26	21 (with pin 23)			7		topsoil	x	post medieval
1001	SF147	Lead alloy	washer	Small washer of flat sectioned sheet	good, soil present	complete		5 arm width	1.5	20	4		topsoil	x	

Context	Find No	Material	Name	Description	condition	completeness	Length mm	width mm	thickness	diameter mm	Weight g	X-ray No	site description	Metal detected	Date
1001	SF148	Lead alloy; copper alloy; stone	hone?	Rectangular sectioned 'strap' of grey, slate like stone with rounded sides, snapped off close to a cast lead alloy shoulder cap with a central round sectioned tang ending in a copper alloy cap with a screw thread terminal. The copper alloy cap was a milled edge suggesting it was intended to be unscrewed and removed. The lead alloy shoulder cap has 1914 stamped on one face and silturn or similar stamped on the other. Possibly a hone stone?	good	incomplete	44+	46 (collar), 40 stone	6		54		topsoil	x	20th century
1001	SF149	Lead alloy	handle, spoon	Pewter spoon handle with plano-convex sectioned stem fragment extending and flattening into a flat sectioned handle terminal with sloping shoulders. The handle has at least 2 stamps of oval shape remaining, 1 appears to be a dagger stamp. The stem has a raised central rib. Relatively large probably a basting spoon handle. Hanoverian pattern	good	incomplete	63+	23			13		topsoil	x	18th century
1001	SF150	Copper alloy; iron	buckle	Cast rectangular frame of round section, with recessed pin bar, the pin rest flattens and assumes a rectangular section. Remains of an iron pin is wrapped around the pin bar. To take a strap no wider than 16mm wide							9		topsoil	x	post medieval
1001	SF151	Copper alloy	table fork	Stamped sheet fork with 4 broken tines, flaring neck of plano-convex section and tang, now broken, for insertion into an organic handle	good	almost complete	61+	21	3		8		topsoil	x	20th century

Context	Find No	Material	Name	Description	condition	completeness	Length mm	width mm	thickness	diameter mm	Weight g	X-ray No	site description	Metal detected	Date
1001	SF152	Copper alloy	button	Discoidal button, white metal colour possibly tombac a zinc alloy, no surface decoration. Broken cone seating on the back.	good	almost complete			2 (head)	17	3		topsoil	x	pre 19th century
1001	SF154	Lead alloy	finial, scrolled	Pewter hollow socket with transverse moulding at the opening, tapering and curling round into a scroll terminal. A wide central raised rib runs down both sides. Cast in 2 parts with the joining seams clearly visible. Chestnut brown organic remains in socket may be the remains of wood.	good, soil and organic in socket	complete	38		17 (socket)		29		topsoil	x	post medieval
1001	SF160	Lead alloy	pipe offcut	Pipe offcut of thick rectangular sectioned sheet with a straight cut edge, a second straight cut through the middle and a third irregularly cut edge with oblique blade cuts present. Internal diameter 25x20mm. Metal working waste repair	good, coke and soil in the pipe bore	complete		17	6	41	72		topsoil	x	Modern
1001	SF161	Copper alloy	lid	Discoidal flat lid with pair of cast pierced loops for a hinge on one side. White metal surface coating (now in poor condition and lifting off the surface) on upper face, not present on the lower. Inkwell, mustard pot or similar	good, soil adhering	complete	32		1.5	28	4		topsoil	x	19th century+
1001	SF162	Iron; copper alloy; horn	pocket knife	Folding knife with rounded terminal with a pair of copper alloy end caps with remains of small iron blade present, pair of riveted copper alloy plates with remains of 2 iron blades within and horn handle plates on the exterior. Other end snapped off. 3 blades visible in radiograph	encrusted, soil adhering	incomplete	78+	25	10		35	J644	topsoil	x	19th/20th century

Context	Find No	Material	Name	Description	condition	completeness	Length mm	width mm	thickness	diameter mm	Weight g	X-ray No	site description	Metal detected	Date
1001	SF163	Copper alloy; enamel	badge	Discoidal badge with central motif (lion holding torch on a ?bicycle) on red enamel with the legend THE BOY ? SEMPER IDEM surrounding. Back retains its gold colour in places, with horizontal pin with wire loop catch. School or Society badge	good	complete				26	6		topsoil	x	20th century
1001	SF164	Lead alloy	formless fragment	Slag fragment, green colouration visible suggests presence of copper alloy also. See also sf88, 115			16	17	7		8		topsoil	x	
1001	SF165	Copper alloy; iron	buckle	Cast rectangular frame of round section with slightly recessed downward curving integral pin bar on one side. A complete iron pin is heavily encrusted. To take a strap no wider than 20mm. Same as sf32	good, iron heavily encrusted	complete	Ht 29	33	5		18		topsoil	x	post medieval
1001	SF166	Copper alloy	coin	Half penny. No surface detail visible		complete			1	24	4		topsoil	x	19th/20th century
1001	SF167	Copper alloy; iron	pocket knife	Paired copper alloy strip plates with rounded ends each with a copper alloy rivet and a balance rivet in the centre of the back. 2 corroded iron blades between the copper alloy plates visible at each end. Smaller than sf162	slightly encrusted	almost complete	78	15	5		23	J640	topsoil	x	19th/20th century
1001	SF168	Copper alloy	button	Small, discoidal button (possibly tombac) no surface detail on upper face. Back stamp ‘super ?? supplied’ , central fitting. Green colour visible in central fitting and in one small area of the upper face, the rest is silver coloured suggesting a zinc alloy possibly.	good	almost complete			1	17	2		topsoil	x	post medieval

Context	Find No	Material	Name	Description	condition	completeness	Length mm	width mm	thickness	diameter mm	Weight g	X-ray No	site description	Metal detected	Date
1001	SF169	Lead alloy	seating offcut	Rectangular shaped and sectioned piece with 2 flat cut faces, slightly dished face and an irregular face. Comparable with sf130, 131. Working waste	good, soil present	complete	46	34	19		118		topsoil	x	
1001	SF170	Lead alloy	sheet offcut	Flat sheet with a cut scalloped edge, a concave curving edge and a straight cut edge, with a circle cut out of the centre, now folded for disposal. The scalloped edge suggests that multiple circles have been cut from the sheet. Blade cut marks present. Small areas of tar like substance present on both faces. Sheet metal working waste/washer cutting	good, soil and some tar present	complete	35+	30+	1.5		16		topsoil	x	
1001	SF171.1	Copper alloy	button	Discoidal button with no surface detail present on the upper face. Lower face still gold coloured and back-stamped gilt with central cast alpha shank	good	complete			1	20			topsoil	x	19th century
1001	SF171.2	Copper alloy	slotted hook	Tongue-shaped stamped sheet fitting with spatulate-ended hook and 3 rectangular slots. Back plate from clip for braces or similar	good	complete	28	16					topsoil	x	19th/20th century
1001	SF179	Copper alloy	coin	Half penny, Victorian. Some surface detail visible on both faces	good	complete				25	4		topsoil	x	Victorian
1001	SF538	Lead alloy	disc, offcut	Disc of flat sheet with cut edge, folded in half for disposal. Sheet metal working waste/washer cutting	good	complete			2	37	21		topsoil	x	

Context	Find No	Material	Name	Description	condition	completeness	Length mm	width mm	thickness	diameter mm	Weight g	X-ray No	site description	Metal detected	Date
1002	SF41	Iron	blade	Small blade with thick, slightly concave back and convex curving edge meeting at a slightly upturning tip. The other end is broken but assumes a round section suggesting a bolster. No indication of a pivot pin or other means of attachment. Possibly a blade from a folding knife	heavily encrusted, flaking	incomplete	67+	29	8 (back)	16 (bol-ster)	26	J639, J640	plough soil	x	early modern/ modern
1002	SF42.1	Iron	nail	Medium nail with flat round head and straight pointed shank	heavily encrusted	complete	42			14 (head)		J641	plough soil	x	post medieval
1002	SF42.2	Iron	nail	Medium nail with flat round head and square sectioned clenched shank	heavily encrusted	complete	33/24			16 (head)		J641	plough soil	x	post medieval
1002	SF43	Lead alloy	shot	Hemispherical, fired	good	complete	Ht 7			9	3		plough soil		post medieval
1002	SF44.1	Iron	nail fragment	Possibly a flat round nail head	heavily encrusted	incomplete				25		J644	plough soil	x	
1002	SF44.2	Iron	nail fragment	Formless fragment possibly a nail fragment	heavily encrusted	incomplete	25+	19+				J644	plough soil	x	
1002	SF45	Copper alloy	handle, window catch	Loop ring handle formed from two round sectioned rods with cut edges bent upward to form a loop. The loop springs from a cast round-sectioned neck with two transverse mouldings with a flared moulding below, ending in a round sectioned screw thread to attach to the window catch.	good, some soil present	complete	72	18 (loop)		loop 33 (loop)	42		plough soil	x	post medieval
1002	SF46	Iron	nail	Modern nail with flat round head and slightly curving shank with a pointed tip	heavily encrusted	complete	85			17 (head)	45	J640	plough soil	x	modern
1002	SF47.1	Iron	nail	Modern nail with small slightly domed head and straight pointed shank	heavily encrusted	complete	56			17(head)		J641	plough soil	x	modern

Context	Find No	Material	Name	Description	condition	completeness	Length mm	width mm	thickness	diameter mm	Weight g	X-ray No	site description	Metal detected	Date
1002	SF47.2	Iron	nail	Straight shank with pointed tip	heavily encrusted	incomplete	39+					J641	plough soil	x	
1002	SF48.1	Iron	nail	Modern wire nail with flat round head and straight round-sectioned shank with a broken tip	encrusted	almost complete	41+			12 (head)		J641	plough soil	x	modern
1002	SF48.2	Iron	nail	Modern small nail/tack with flat oval shaped head and round sectioned shank with broken tip	encrusted	almost complete	24+			8 (head)		J641	plough soil	x	modern
1002	SF48.3	Iron	nail	Small fragment of angular sectioned shank, not joining other SF48 nails	encrusted	almost complete	15+					J641	plough soil	x	
1002	SF49.1	Iron	screw	Round slightly domed head and broken shank with a screw thread	encrusted	almost complete	26+			16 (head)		J644	plough soil	x	modern
1002	SF49.2	Iron	nail	Rectangular faceted head 8+x4mm, now broken, and straight shank	encrusted	almost complete	56	8+				J644	plough soil	x	
1002	SF49.3	Iron	nail	Small nail with flat round head and straight shank, broken	heavily encrusted	almost complete	29+			12 (head)		J644	plough soil	x	
1002	SF52	Iron	blade	Curving blade fragment. The blade has a gently curving convex back curving downward to meet the edge at a downward pointing tip. The edge is angled and curved. The blade is broken before a tang, bolster or handle. Craft blade such as a leatherworker's clicking knife	heavily encrusted	incomplete	51+	21			17	J640	plough soil	x	
1002	SF53	Iron	nail	Medium nail with flat ?oval shaped head and straight angular-sectioned shank with pointed tip	encrusted	complete	40	22 (head)			10	J641	plough soil	x	
1002	SF54	Copper alloy	coin	Penny. No surface detail visible on either face					0.5	28	8		plough soil	x	post medieval
1002	SF100	Iron	rod/bar	Straight, narrow shank, section appears oval to sub-angular in places, one end now broken is more angular the other appears gently pointed. Bar iron	encrusted, flaking	almost complete	107+			7	25	J644	plough soil	x	

Context	Find No	Material	Name	Description	condition	completeness	Length mm	width mm	thickness	diameter mm	Weight g	X-ray No	site description	Metal detected	Date
1002	SF175	Copper alloy	coin	Radiate, ?Carausius (AD287-93) obverse bust right, reverse Pax. Surface detail present on both faces	good, dark green patination, gold colour visible in places	complete			1.5	20	5		plough soil	x	Roman AD287-93
1005	SF104	Copper alloy	coin	Thought to be medieval. Lost during excavation											Medieval?
1005	SF205.1	Iron	chain link	Figure of eight chain link with remains of a second link articulating with it	encrusted heavily	complete	40	26				J644	lower ploughsoil	x	
1005	SF205.2	Iron	bar/cramp/ staple	Rectangular sectioned shank/bar curving upward and tapering at one end, other end is broken. Possibly broken arm from a cramp or large u-shaped staple	encrusted	incomplete	108	13	16			J644	lower ploughsoil	x	
1005	SF205.3	Iron	nail	Small nail with flat head, possibly broken, and short rectangular sectioned shank	encrusted	complete?	27	15 (head)				J644	lower ploughsoil	x	
1005	SF205.4	Iron	nail	Angular sectioned nail shank curved at the tip, head missing	encrusted	incomplete	29					J644	lower ploughsoil	x	
1005	SF205.5	Iron	nail	Small flat round headed nail with short shank, now fractured and in 2 pieces	encrusted, fractured	complete	28			12 (head)		J644	lower ploughsoil	x	
1005	SF205.6	Iron	nail	Small flat headed nail fragment with a straight shank with the tip missing	encrusted	incomplete	13+	10 (head)				J644	lower ploughsoil	x	
1005	SF205.7	Iron	nail	Small flat headed nail with straight shank with the tip broken	encrusted	almost complete	16+	j8 (head)				J644	lower ploughsoil	x	
1005	SF205.8	Iron	nail	Shank fragment	encrusted	incomplete	15+					J644	lower ploughsoil	x	

Context	Find No	Material	Name	Description	condition	completeness	Length mm	width mm	thickness	diameter mm	Weight g	X-ray No	site description	Metal detected	Date
1005	SF205.9	iron	sheet fragment	Triangular shaped fragment of flat sheet, now fractured and in 2 pieces, very little metal visible in radiograph	encrusted	incomplete	34+	23+	2			J644	lower ploughsoil	x	
1005	SF205.10	iron	nail	Shank fragment	encrusted	incomplete	17+					J644	lower ploughsoil	x	
1005	SF205.11	iron	hook fastening	Wire hook from a hook and eye fastening made from a double strand of wire 1mm diameter with a hook and two integral loops for attachment	encrusted	complete	18	18		1-1.5		J644	lower ploughsoil	x	early post medieval
1006	SF187.1	Iron	horseshoe	Heel of horse or donkey shoe with a folded or upset calkin, broken from the rest of the shoe.	encrusted	incomplete	Ht 46+	22	15 (calkin)			J640	lower ploughsoil	x	
1006	SF231 (previously SF187.2)	Iron	nail, lasting	Flat topped, cuboid headed nail with a transverse groove 6mm below and a tapering, round sectioned shank with a pointed tip. Now cleaned.	encrusted	complete	60	10	10		7	J640	lower ploughsoil	x	
1006	SF187.3	Iron	nail, horseshoe	Rectangular sectioned shank with a curled end, expanding slightly at the head 11x8mm.	encrusted	?complete	33	11 (head)				J640	lower ploughsoil	x	post medieval
1006	SF187.4	Iron	nail/tack	Small nail/tack with flat round head and short, straight, square sectioned shank with tip now missing	slightly encrusted	almost complete	21+			8 (head)		J640	lower ploughsoil	x	
1006	SF187.5	Iron	nail	Small curved shank fragment, very little metal visible in x-ray	slightly encrusted	incomplete	17+					J640	lower ploughsoil	x	
1038	181	Iron	formless fragment	Formless fragment with irregular surface and small pieces of charcoal and stone present in the surface soil layer. May be a natural nodule		complete	59	40	46		152	J647	fill of ditch (1039)		Natural?

Context	Find No	Material	Name	Description	condition	completeness	Length mm	width mm	thickness	diameter mm	Weight g	X-ray No	site description	Metal detected	Date
1040	SF230 (previously SF156.1)	Lead alloy	shank	Shank of square section broken at each end	spalling	incomplete	67+	6	5		8	J641	layer over slabs (1066)	x	
1040	SF156.3	Iron	nail	Rectangular sectioned nail shank fragment, broken each end	slightly encrusted	incomplete	23+	5	3			J641			
1040	SF156.4	Iron; stone	nail	Nail shank fragment adhering to a fragment of chalk	slightly encrusted	incomplete	25+	5	5			J641			
1040	SF229 (previously SF156.2)	Iron	FPS/bar iron	Round sectioned stem tapering to a pointed tip, other end obliquely chisel cut. Fibre processing spike or (equally) bar iron, nail shank with a chisel cut end	slightly encrusted, flaking	complete	106			7	17	J641	layer over slabs (1066)	x	medieval/ post medieval
1053	SF176	Iron	Concreted nails	Concreted round nail heads, c. 13mm in diameter, 2 are well formed, but potentially two others also present, large central shanks broken off. Shanks too large for Roman hobnails; post medieval hobnails or timber nails. Small fragments of copper alloy present in the encrustation	heavily encrusted	incomplete	48	45	13		38	J647	fill of ditch (1039)		post medieval

16. APPENDIX IX: Stone Objects

By George Smith, freelance lithics specialist

Flint, Chert and Quartz

A small quantity of objects of 31 pieces, the largest number from a single context are from the topsoil/ploughsoil. The remainder are scattered within the fill of a variety of features. The objects are summarised in Table IX.1 and catalogued in Table IX.2.

Table IX.1

Category	***Topsoil/Ploughsoil***	***Other excavated contexts***
Retouched piece	2	1
?Utilised flake	1	1
Flake/flake fragment	1	2
Irregular fragment	2	4
Split pebble fragment	2	0
Natural piece	4	11
Total	12	19

Raw material

The assemblage is dominated by small natural pieces of unworked broken gravel pebbles including flint, black chert and two pieces of crystal quartz and these could be discarded. The flint fragments are of varied colours and generally poor quality representing the variety of material that would have been available locally from the drift gravels or from beaches as glacially transported pebbles. None of the flint pieces are of finer material that could have been deliberately imported. Black chert is available as *in situ* tabular material from within the limestone deposits of Anglesey and also from secondary deposits, such as beaches.

Technology

There are 8 pieces that are worked or fairly certainly so and 6 irregular fragments that could be debitage but which could be just naturally fragmented pieces, for instance from cultivation damage. One flake fragment is probably from a blade that was punch-struck and another flake is thin and invasive, probably from fine, possibly pressure shaping of a knife. The remainder are light hammer-struck including three pieces with simple, steep edge retouch. One of these is a complete small convex scraper (SF56) and the other two are probably snapped-off edge pieces of similar scrapers (SF 193.1 and SF 210.1). Two sharp flakes show probable utilisation. There are no cores or core-trimming pieces.

Interpretation comments

The pieces came from widely scattered contexts both in the topsoil and within features. There is no concentration that could suggest a particular activity area. The small number of pieces recorded from the topsoil must represent just a sample of what was actually present. However, the equally small number of pieces in presumably secondary contexts from the fill of the extensive excavated features indicates that there was never any considerable scatter of worked flint and chert in the area excavated although there was clearly some activity. The small number of waste pieces and the lack of cores or unworked pebbles, despite the presence of three retouched and two utilised pieces suggest this was the residue of some activity that did not include primary production. Scrapers are generally regarded as part of 'home site' activity associated with meat processing but that could be quite short-lived. Convex scrapers are rather undiagnostic as a type in terms of date, especially where the raw material is small and of poor quality but the lack of other associated tools or working evidence suggests an Early Neolithic date. The scraper and scraper fragments are quite fresh and so could have derived originally from features within the excavated area rather than being just surface scatter, potentially exposed for a long period.

Table IX.2 Catalogue of flaked stone objects in context order
Dimensions: mm to nearest 0.5mm. L Length. B Breadth. D Depth. ( ) incomplete. i.e. broken dimension
Colour: blk black. Gy Grey. Y yellow. Br brown. Bf buff. Trans translucent. L light. M mid. Dk dark.
Type: Rpf retouched piece frag. Up utilised piece. Flf flake frag. If Irregular frag. Spf split pebble frag.

Find No.	*Feature No.*	*Context No.*	*Raw material*	*Colour*	*Type*	*Dimensions (mm)*			*Description*
						L	*B*	*D*	
177	Topsoil	1001	Flint	Mgy	Spf	23	14	11	Possibly natural
56	Plough soil	1002	Flint	Mgy	Rpf	26.5	31	8	Small convex scraper on a thick tertiary flake with a plain platform and a prominent bulb
125	Plough soil	1002	Flint	Mgy	up?	16.5	17	3	Thin flake with pressure type bulb and some patchy gloss, probably from fire. Unifacial edge microflaking. Possibly from utilisation or possibly just trample damage
157	Plough soil	1002	Flint	Ybr	If	15	7	4	Pebble cortex. Possibly natural
180	Plough soil	1002	Flint	Ybr	NAT	26	18	18	Natural gravel
210.1	Plough soil	1002	Flint	Mgy	Rpf	12.5	5	2.5	Fragment of a convex edged piece with shallow invasive unifacial retouch. Possibly the snapped-off edge of a convex scraper
210.2	Plough soil	1002	Flint	Lgy	NAT				Natural gravel fragment, broken by burning
210.3	Plough soil	1002			NAT				Natural gravel fragment
210.4	Plough soil	1002	Flint	Lgy	Spf	24	20	11	Heavily burnt pebble fragment
210.5	Plough soil	1002	Chert	Blk	Fl	57	29	14	Thick secondary flake from a cobble
210.6	Plough soil	1002	Chert	Blk	Chip	12	8	3.5	Small tertiary chip or flake fragment
210.7	Plough soil	1002	Shale		NAT				Natural rock fragment
201.1	Soil spread	1016	Chert	Blk	Chip	16	11	3.5	Small tertiary chip or flake fragment
201.2	Soil spread	1016	Vein quartz		NAT				Natural rock fragment
198	Pit 1018	1017	Fl	Bf	NAT				Natural rock fragment. Irregular with deep cream patina and irregular facets – ice-shattered
189	Ditch 1023	1022	Ch	Blk	NAT	14	8	6	Small, angular tertiary chip with edge damage. Probably natural gravel
190	Ditch 1025	1024	Fl	Lgy	If	14	8	5	Translucent flint. Small irregular fragment reddened by burning on one earlier face

193.1	Pit 1032	1031	fl	Lgy	Rpf	22	12	5.5	Tertiary flake fragment with some secondary retouch. Possibly part of a convex scraper
193.2	Pit 1032	1031	fl	Rbr	Ff	8	10	2.5	Butt part of a tertiary flake, probably punch-struck. Reddened by heat
193.3	Pit 1032	1031	ch	Blk	NAT				Irregular fragment, probably natural gravel
183	Ditch 1039	1038	ch	Blk	If	26	27	10	Angular tertiary fragment, possibly humanly struck
158.1	Ditch 1048	1047	ch	Blk	Ff	(12.5)	12	4	Butt part of a tertiary flake. Possibly punch-struck
158.2	Ditch 1048	1047	cq	Trans	If				Small irregular angular fragment
186.1	Hollow 1062	1061	cq	Trans	NAT?				Irregular shattered fragment, probably natural
186.2 to 186.5	Hollow 1062	1061	ch	Blk	NAT?				Four small angular fragments with some edge rounding and battering. Probably natural gravel
220	Ditch 1039	1068	fl	Dkgy	Up?	18	15	5	Small secondary flake, possibly punch-struck. Microchipping on distal, sharp edge suggests utilised
195.1	Ditch 1039	1068	fl	Bf	NAT				Angular fragment with deep concave facets. Natural ice-shattered
195.2	Ditch 1039	1068	cq	Trans	NAT				Small angular fragment. Natural gravel
174			ch	Blk	NAT				Bag of several pieces of naturally shattered chert

Other Stone

Description
The details of the objects are catalogued in Table IX.3.

SF103. Polishing stone fragment
A thick fragment of slate that has been ground to a rectangular shape, tapering to one end, the other snapped off. It has been worn on all both flat faces and both flat edges and there is a worn groove down the centre of one face, which extends around the end part of the opposing face.

Similar but simpler pieces found on Bronze Age and Iron Age sites have been interpreted as leather working tools. This piece is more deliberately shaped and suggests use for more complex working, perhaps shoe or saddle making. The central groove could be from stropping of narrow leather cords.

SF127. Ground and polished unidentified object fragment
Slate piece, ground and polished to an accurate rectangular section, with a neat facetted point on one end, the other snapped off. It has not been worn in use so is not an implement or, for instance the handle of an implement. Similar shapes in glass used in Victorian decorative objects. Decorative use of slate was common at the height of the slate industry in North Wales, up to the early 20th century.

SF172. Spindle whorl, unfinished
Unfinished spindle whorl, 55mm diameter. A neatly shaped thick disc of coarse sandstone. Probably made from a suitable pebble, then ground to shape. Although not perforated it falls within the normal size range for spindle whorls and such unperforated discs, presumably unfinished examples, are occasionally found. Stone spindle whorls are found in prehistoric, Roman period and Medieval period contexts. The thickness of this one suggests it would have been best perforated by an iron drill and an Iron Age or Roman period date seems likely.

SF173. Bake stone/working slab
Large split cobble with the split, flat face formerly used as a saddle quern top stone. Apparently set in a shallow pit with the ground face set horizontally and facing up and re-used as a bake stone or possibly a working slab. Face discoloured from possible burning, which would fit with the bake stone interpretation.

SF184.1 and 184.2 Quern fragments
Two fragments of conglomerate, probably from the same object. The larger has a worn facet with flattened crystals. Probably fragments of a quern of some kind. By its shallow cross section probably a quern topstone.

SF185. Possible hammer stone fragment
Oval, sub-rounded cobble of conglomerate with one half broken off. No evidence of wear or shaping but must have been collected and brought to the site from a beach deposit and so almost certainly for use, probably as a hammer stone. There are no wear signs of hammering but it can be assumed that these were on the missing end and the breaking of the cobble would have required some force.

SF199. Split slate fragment
A small fragment of split slate, subsequently worn, probably from topsoil cultivation. Possibly a fragment of a roofing slate. If so pre mid-19th century.

SF211. Perforated stone
A fragment of an unshaped thin natural plaque of weathered shale, recently broken. It was probably of roughly square shape and has an approximately central hourglass perforation. Such types of perforation usually means that it has been made with a flint point, suggesting a Neolithic or Bronze Age date although that seems unlikely in the context here. It would also be expected to have been made to create a spindle whorl although the poor quality of the material makes that seem unlikely too. Its survival in the ploughsoil suggests it was only recently disturbed from a buried context. Perhaps just a trial or child's play piece? Undatable.

Comments
These objects came from widely scattered locations within the excavated area making any association between them unclear. The two polished slate objects could be related contextually in terms of their material but were found some distance apart. Only one piece was certainly *in situ* in a primary context, the possible bake stone

SF 173, found, probably in its working position, in a shallow hollow 1085, itself probably related to the nearby possible structural feature 1119. Other pieces were likely to be in secondary contexts in the fill of pits and ditches.

The slate objects are undatable by type but are suggested to be of post-medieval date. The quern fragments (SF184.1 and 2), the quern stone that was re-used as a bake stone (SF173) and the unfinished spindle whorl (SF172) are likely to be of Iron Age or Roman period date and indicate that some of the activity here was of that date.

Table IX.3. Catalogue of other stone objects in context order

Find No.	***Feature No.***	***Context No.***	***Material***	***Dimensions (mm)***			***Description***
				L	***B***	***D***	
103	Plough Soil	1002	Slate	(56)	34	20	Polishing stone fragment
211	Plough Soil	1002	Shale	42	(37)	10	Thin, irregular frag with hourglass perforation. Trial piece?
127	Ditch 1008	1007	Slate	55	15	15	Unidentified object frag. ?pendant/ handle
185	Land drain 1058	1050	Conglomerate	(110)	75	70	Broken sub-rounded cobble. No evidence of wear or shaping but one end broken off, perhaps during use as a hammer stone.
184.1	Stone spread	1056	Conglomerate	(203)	(110)	80	Shattered fragment with worn facet. Probably from a shattered quern
184.2	Stone spread	1056	Conglomerate	90			Probably small part of same object as 184.1 but no worn facet
172	?Surface 1065	1065	Coarse sand stone	55	55	25	Unfinished spindle whorl, 55mm diam.
199	Ditch 1039	1068	Slate	(43)	(39)	9	Probable frag of roof slate
173	Hollow 1085	1084	Coarse sand stone	(195)	186	60	Large split cobble with the split, flat face used as a bake stone or working slab. Face discoloured from possible burning or the type of use

17. APPENDIX X: Charcoal and Charred Plant Remains

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Introduction

A series of seven samples from deposits excavated at Hedd yr Ynys: Lon Fron, Llangefni, Anglesey (cantered on NGR SH 456 752) were submitted for an evaluation of their environmental potential. The excavation was carried out by Gwynedd Archaeological Trust in July 2016. The features uncovered during excavations included pits, ditches, enclosure ditches, post holes and drains. The features range in date from the Romano British period to the Medieval period, as well as some features which are undated.

A programme of soil sampling from sealed contexts was implemented during the excavation. The aim of the sampling was to:
assess the type of preservation and the potential of the biological remains
identify suitable samples for possible radiocarbon dating
identify if any human activities were undertaken on the site
reconstruct the environment of the surrounding area

Methods

The initial material was submitted to the author in a processed state. It was processed by staff at Gwynedd Archaeological Trust using their standard water flotation methods. The flot (the sum of the material from each sample that floats) was sieved to 0.25mm and air dried. The heavy residue (the material which does not float) was not examined by the author, and therefore the results presented here are based entirely on the material from the flot. The flot was examined under a low-power binocular microscope at magnifications between x12 and x40.

A four point semi quantative scale was used, from '1' – one or a few specimens (less than an estimated six per kg of raw sediment) to '4' – abundant remains (many specimens per kg or a major component of the matrix). Data were recorded on paper and subsequently on a personal computer using a Microsoft Access database.

Identification was carried out using published keys (Jacomet 2006, Biejerinkc 1976, Jones – unpublished and Zohary & Hopf 2000), online resources (http://www.plantatlas.eu/za.php), and the authors own reference collection. The full species list appears in Table X.2. Taxonomy and nomenclature follow Stace (1997).

The flot was then sieved into convenient fractions (4, 2, 1 and 0.3mm) for sorting and identification of charcoal fragments. Identifiable material was only present within the 4 and 2mm fractions. The number of charcoal fragments to be identified is dependent on the diversity of the flora. A study by Keepax (1988, 120-124) has indicated that depending on the location of the archaeology site, 100-400 fragments of charcoal would need to be identified in order to obtain a full range of species. A random selection of ideally 100 fragments of charcoal of varying sizes was made, which were then identified. Where samples did not contain 100 identifiable fragments, all fragments were studied and recorded. This information is recorded with the results of the assessment in Table X.3 below. Identification was made using the wood identification guides of Schweingruber (1978) and Hather (2000).

Taxa identified only to genus cannot be identified more closely due to a lack of defining characteristics in charcoal material.

Results

Table X.1 below shows the components recorded from each of the samples.

Of the seven samples submitted, charred plant macrofossils were present in six, and scored between a '1' and '2' on the abundance scale. They were generally poorly preserved, and were lacking in most identifying morphological characteristics. Where remains could be identified, oat was recorded in very small numbers. The results of this analysis can be seen in Table X.2 below. The samples produced small assemblages of plant remains both in volume and diversity.

The most abundant remain was indeterminate cereal grains, which were present in six of the samples. These grains, which lacked identifying morphological characteristics, were therefore recorded as 'indeterminate cereal'. Where it was possible to ascertain identifications, oat was present in one sample. The presence of cereal chaff may also indicate the use of cereals at the site, and this was present in small numbers in two of the samples. Another,

more indirect, indicator of cereals being used on site is the remains of arable weeds that were found in four of the samples. Charred hazel nut shell fragments were also present in two samples.

Charcoal remains were present in all seven of the samples and scored between '1' and '4' on the abundance scale. There were identifiable remains in three of the samples. The preservation of the charcoal fragments was relatively variable even within the samples. Some of the charcoal was firm and crisp and allowed for clean breaks to the material permitting clean surfaces where identifiable characteristics were visible. However, most of the fragments were very brittle, and the material tended to crumble or break in uneven patterns making the identifying characteristics harder to distinguish and interpret. Table X.3 below shows the results of the charcoal assessment.

One of the samples that produced identifiable remains was containing purely oak charcoal. One of the samples were dominated by willow/poplar, and also contained a smaller amount of oak. Hazel was dominant in the final samples, also containing a smaller amount of oak charcoal

The total range of taxa comprises oak (Quercus), willow/poplar (Salix/Populus), and hazel (Corylus). These taxa belong to the groups of species represented in the native British flora. A local environment with a range of trees and shrub is indicated from the charcoal of the site, and it is possible that these were the preferred fuel wood obtained from a local environment containing a broader choice of species.

Root / rootlet fragments were also present within all seven of the samples. This indicates disturbance of the archaeological features, and this may be due to the nature of some features being relatively close to the surface, as well as deep root action from vegetation that covered the site. The presence of earthworm egg capsules and insect fragments in the samples further confirms this disturbance.

Discussion

The charcoal remains showed the exploitation of several species native to Britain. Oak has good burning properties and would have made a fire suitable for most purposes (Edlin 1949). Oak is a particularly useful fire fuel as well as being a commonly used structural/artefactual wood that may have had subsequent use as a fire fuel (Rossen and Olsen 1985). Willow/Poplar was present in smaller numbers. These are species that are ideal to use for kindling. They are anatomically less dense than for example, oak and ash and burn quickly at relatively high temperatures (Gale and Cutler 2000, 34, 236, Grogan *et al.* 2007, 29-31). This property makes them good to use as kindling, as the high temperatures produced would encourage the oak to ignite and start to burn. Hazel is recorded as a good fuel wood and was widely available within oak woodlands, particularly on the fringes of cleared areas (Grogan *et al.* 2007, 30).

Dryland wood species indicates the presence of an oak woodland close to the site. This would have consisted of oak which would be the dominant large tree species (Gale & Cutler 2000, 120, 205) together with a range of shrubs, and at the extents of this type of woodland, hazel thrives. The evidence of carr fen woodland indicates a damp environment close to the site. This type of woodland would have consisted of alder, willow and poplar which are all trees that thrive in waterlogged and damp soils, particularly in areas close to streams or with a high water table (Stuits 2005, 143 and Gale & Cutler 2000).

As asserted by Scholtz (1986) cited in Prins and Shackleton (1992:632), the "Principle of Least Effort" suggests that communities of the past collected firewood from the closest possible available wooded area, and in particular the collection of economically less important kindling fuel wood (which was most likely obtained from the area close to the site), the charcoal assemblage does suggest that the local vegetation would have consisted of an oak woodland close to the site.

Generally, there are various, largely unquantifiable, factors that effect the representation of species in charcoal samples including bias in contemporary collection, inclusive of social and economic factors, and various factors of taphonomy and conservation (Thiery-Parisot 2002). On account of these considerations, the identified taxa are not considered to be proportionately representative of the availability of wood resources in the environment in a definitive sense, and are possibly reflective of particular choice of fire making fuel from these resources. Bark was also present on some of the charcoal fragments, and this indicates that the material is more likely to have been firewood, or the result of a natural fire.

The archaeobotanical evidence found in the samples was all very similar. The samples all produced small assemblages of plant macrofossils both in terms of abundance and diversity. These were all in small numbers, and

so little interpretation can be made other than to state their presence.

If cereal processing were occurring at the site, it would be expected that some remains (most probably in high numbers) of cereal chaff – a by-product of the crop processing sequence as stated in Hillman (1981; 1984) would be found. There was chaff present but only in small amounts in two samples. However, the rarity of chaff is a phenomenon repeatedly reported from archaeological deposits, and although this may suggest that the grain was already threshed and winnowed, if not also milled, by the time it reached the site, it may also show that any chaff was burnt up completely in the fires in which it was deposited. The former of these two theories is however the more plausible.

The deposits contain a mixture of grain and similarly sized weed seeds, such as grasses (POACEAE), which most likely represent the fine sieve product (i.e. the cereal grain and larger sized weed seeds retained by a fine sieve) in the crop processing sequence (Hillman 1981; 1984; and Jones 1984). Fine sieving was most likely performed just before milling (Jones 1984, 46) or some other use, such as malting or parching (Hillman 1981, 137). Large seeded weeds of crops were most likely removed by hand prior to preparing the grain for use in milling, parching, malting, cooking etc. (Jones 1984, 46). There was no sign of sprouting on the grains, so it does not seem to have been charred during roasting of the malt. It is therefore probable that the plant macrofossils represent the waste from a cooking accident.

Another, more indirect, indicator of cereals being used on site is the remains of arable weeds that were found in four of the samples. Among these weeds, some of which are characteristic of cereal fields and rarely found elsewhere, are docks (Rumes), and seeds from the cabbage family (BRASSICACEAE).

Overall, the low numbers of grains and weed seeds in the samples indicates the accidental burning of cleaned grain and its subsequent disposal.

Two samples produced single remains of hazel nut shell fragments. Hazel-nuts are valuable nutritionally, as well as being readily available. In addition, the nut shell is hard and resistant to decay ensuring its survival in some quantities. Together with the hazel charcoal also recorded, it may indicate that they are merely representative of hazel wood trees being burnt, which could be either a natural or a man-made process.

Conclusion

The samples produced some environmental material, with the charcoal from three of the samples and the plant macrofossils from six of the samples. The deposits, from which the samples derive, probably represent the domestic waste associated with fires.

The archaeobotanical evidence found in the samples shows indeterminate cereal grains and oats were present, possibly indicating an exploitation of cereals. The hazelnut shell fragments show no marks typically associated with processed shells. Together with the presence of hazel charcoal, this may indicate that they are merely representative of hazel wood trees being burnt, which could be either a natural or a man-made process. However, with the remains of several cereal grains throughout the samples it is more likely that the samples represent occupation build-up of domestic waste. Due to the small numbers of cereal grains and associated weed seeds in the samples, there is limited interpretative information.

In terms of taphonomy, it is likely that these samples all represent secondary deposition of charred plant remains. This probably occurred through intentional dumping. The use of cereal processing waste as fuel is well attested (Hillman 1981; 1984) and disposal of spent fuel either into features such as pits or ditches/gullies or directly dumped onto the site seems a likely explanation for the arrival of this material on site. As the majority of the plant remains were found together with charcoal remains, intentional dumping of charred debris (such as spent fuel, charred debris from parched crops etc.) seems the most likely explanation for the formation of the deposits encountered here.

There are several variables that affect the reconstruction of local woodland using charcoal assemblages, however if the charcoal were to be used as a ‘presence’ indicator it can be assumed that as the fuel wood (in particular kindling material) is usually selected from local woodlands these charcoal remains have also made it possible to suggest that the woodland in the close vicinity to the site would have consisted of an oak dominant woodland.

The fuel used appears to have been exploited mainly from an oak dominant woodland. The oak would most likely

have provided the main fuel for the fire as it provides long lasting heat at relatively high temperatures. A fen carr woodland would also have been located within the wider environment. Willow and poplar, are trees that thrive in waterlogged and damp soils, particularly in areas close to streams or with a high water table (Stuijts 2005, 143 and Gale & Cutler 2000) and hint at a damp/wet area within close proximity to the site.

It is thought to be problematic using charcoal and plant macrofossil records from archaeological sites, as they do not accurately reflect the surrounding environment. Wood was gathered before burning or was used for building which introduces an element of bias. Plant remains were also gathered foods, and were generally only burnt by accident. Despite this, plant and charcoal remains can provide good information about the landscapes surrounding the sites presuming that people did not travel too far to gather food and fuel.

Recommendations

The samples have been assessed, and any interpretable data has been retrieved. No further work is required on the samples. Any material recovered by further excavations should be processed to 0.3mm in accordance with standardised processing methods such as Kenward *et al.* 1980, and the English Heritage guidelines for Environmental Archaeology. A list of samples containing material viable for the radiocarbon dating process has been forwarded to GAT, and a decision will be made as to which samples are to undergo this process.

References

Biejerinck, W, 1976, *Zadenatlas der Nederlandsche Flora: Ten Behoeve van de Botanie, Palaeontology, Bodemcultuur en Warenkennis.* Backhuys and Meesters. Amsterdam.

English Heritage (2002) *Environmental Archaeology: A guide to the theory and practise of methods, from sampling and recovery to post-excavation.* English Heritage Publications. Swindon.

Edlin, H L, 1949. *Woodland crafts in Britain: an account of the traditional uses of trees and timbers in the British countryside*, London, Batsford

Gale, R, & Cutler, D F, 2000, *Plants in Archaeology – Identification Manual of Artefacts of plant origin from Europe and the Mediterranean*, Westbury Scientific Publishing and Royal Botanic Gardens, Kew

Grogan, E, Johnston, P, O'Donnell, L, 2007, *The Bronze Age Landscapes of the Pipeline to the West: An Integrated Archaeological and Environmental Assessment*, Wordwell Ltd, Bray, Co Wicklow.

Hather, J G. 2000 *The identification of Northern European woods; a guide for archaeologists and conservators*, London. Archetype Press.

Hillman, G. 1981, *Reconstructing crop husbandry practises from the charred remains of crops.* In Mercer, R.J. *Farming practise in British prehistory.*

Hillman, G. 1984, *Traditional husbandry and processing of archaic cereals in recent times: the operations, products and equipment which might feature in Sumerian texts. Part 1: the glume wheats.* Bulletin on Sumerian Agriculture 1, 114-152.

Hillman, G. 1984 *Traditional husbandry and processing of archaic cereals in recent times: the operations, products and equipment which might feature in Sumerian texts. Part 2: the free-threshing cereals.* Bulletin on Sumerian Agriculture 2, 1-31.

Jacomet, S, 2006, *Identification of cereal remains from archaeological sites.* IPAS. Basel.

Jones, G (1984) *Interpretation of Archaeological Plant Remains: Ethnographic Models from Greece.* In *Plants and Ancient Man.* Balkema. Rotterdam.

Jones, G, *Teaching Notes for Archaeobotany*. Unpublished.

Keepax, C. A., 1988, *Charcoal analysis with particular reference to archaeological sites in Britain*. Unpublished PhD thesis, University of London

Kenward, H.K., Hall, A.R. and Jones A.K.G. (1980) *A tested set of techniques for the extraction of plant and animal macrofossils from waterlogged archaeological deposits*. Science and Archaeology 22, 315.

Prins, F and Shackleton, CM 1992 Charcoal analysis and the "Principle of Least Effort" - A conceptual Model. *Journal of Archaeological Science*, 19, 631-637.

Rossen, J, and Olson, J, 1985 *The controlled carbonisation and archaeological analysis of SE US wood charcoals*, Journal of Field Archaeology **12**, 445-456

Scholtz, A, 1986, *Palynological and Palaeobotanical Studies in the Southern Cape*, MA Thesis of Stellenbosch, Stellenbosch, South Africa

Schweingruber, F H, 1978 *Microscopic wood anatomy.* Birmensdorf. Swiss Federal Institute of Forestry Research

Stace, C, 1997, *New flora of the British Isles*, Cambridge University Press, Cambridge

Stuijts, I, 2005, 'Wood and Charcoal Identification' in Gowen, M., O'Néill, J. and Phillips, M., *The Lisheen Mine Archaeological Project 1996-1998*, Wordwell Ltd, Bray, Co Wicklow

Théry-Parisot, I, 2002, 'Gathering of firewood during the Palaeolithic' in S Thiébault (ed), *Charcoal Analysis, Methodological Approaches, Palaeoecological Results and Wood Uses*, BAR International Series 1063
Zohary, D, & Hopf, M, 2000, *Domestication of Plants on the Old World.* Oxford University Press Ltd. Oxford.
http://www.plantatlas.eu/za.php - Online Digital Plant Atlas

Table X.1. Components of the samples from deposits recovered at Hedd yr Ynys

Semi quantitative score of the components of the samples is based on a four point scale, from '1' – one or a few remains (less than an estimated six per kg of raw sediment) to '4' – abundant remains (many per kg or a major component of the matrix).

Sample	**1**	**2**	**3**	**4**	**5**	**6**	**7**
Cut	**1066**	**1064**	**1039**	**1046**	**1101**		**1039**
Deposit	**1051**	**1063**	**1068**	**1045**	**1100**	**1099**	**1038**
Feature type	**Drain fill**	**Pit fill**	**Ditch fill**	**Ditch fill**	**Hollow/ Pit fill**	**Layer**	**Ditch fill**
Bone fgts.							
Charcoal fgts.	3	4	3	2	4	3	2
Earthworm egg capsules	1	1	1	1	1	1	1
Insect fgts.	1						
Plant macros. (ch.)	2		1	1	1	2	1
Plant macros. (m/c)	1	1	1	1	1	1	1
Root/rootlet fgts.	4	2	4	4	2	4	4
Sand	2	2	2	2	3	2	3

Table X.2: Complete list of taxa recovered from deposits at Hedd yr Ynys

Taxa and nomenclature follow Stace (1997)

Sample	**1**	**3**	**4**	**5**	**6**	**7**	
Cut	**1066**	**1039**	**1046**	**1101**		**1039**	
Deposit	**1051**	**1068**	**1045**	**1100**	**1099**	**1038**	
Feature type	**Drain fill**	**Ditch fill**	**Ditch fill**	**Hollow /Pit fill**	**Layer**	**Ditch fill**	
Sample volume (ml)	**>5**	**20**	**>5**	**220**	**40**	**25**	
LATIN BINOMIAL							**COMMON NAME**
Corylus avellana (fgts.)		1			1		Hazelnut shell fgts.
Chenepodium / *Atriplex*	2				1		Goosefoot / Orache
Rumex sp.				2	1		Dock
BRASSICACEAE	1						Cabbage family
Crataegus monogyna Jacq.		1					Hawthorn
CYPERACEAE	2						Sedge family
POACEAE	53	5			2	1	Grass Family
Avena spp.	9						Oat
Indeterminate cereal	13	16	3	3	141	14	Indeterminate cereal
Indeterminate cereal chaff fragments	2			1	1		Indeterminate cereal chaff fragments
Indeterminate		1					Indeterminate

Table X.3. Complete list of taxa recovered from deposits at Hedd yr Ynys
Taxonomy and nomenclature follow Schweingruber (1978). Numbers are identified charcoal fragment for each sample.

Sample		**2**	**3**	**5**
Cut		**1064**	**1039**	**1101**
Deposit		**1063**	**1068**	**1100**
Feature type		**Pit fill**	**Ditch fill**	**Hollow / pit fill**
No fragments		**5000+**	**50+**	**1000+**
Max size (mm)		**48**	**14**	**16**
Name	**Vernacular**			
Corylus avellana	Hazel		9	
Salix / Populus	Willow / Poplar			80
Quercus	Oak	100	3	20
	Indeterminate		38	

18. APPENDIX XI: Animal Bone

Sian James

The majority of the 43 fragments of animal bone were too small to be identifiable to species or element (Table XI.1.). The bones were recorded under six find numbers due to the small size of some of the remains and the assumption that they represent the same bone in many fragments. This assemblage is very small so it is hard to make any meaningful conclusions regarding its formation and significance, however, even a small sample can still provide some useful facts about a site (O'Connor 2003:205).

The majority of remains came from ditches and were very fragmentary in nature, suggesting damage through crushing, trampling or other interference. Apart from Finds 202 and 213, all the bones displayed white colouration indicative of burning. This too could account for their fragmentary nature. No butchery marks or animal gnawing was identifiable on the remains.

The largest fragment was Find 202 (context number: 1006 from the lower topsoil), which is a right articular process fragment from the lumbar vertebrae of a cattle (Hillson, 1992). It is too fragmentary to ascertain which of the six lumbar vertebrae is represented. Find 213, previously thought to be a tooth, is actually a fragment from a long bone from a sheep/goat-sized animal, although again it is too fragmentary to be identified further to element or species (Bossneck, 1969). Finds 202 and 213 highlight the agricultural activity in the area, but the assemblage is too small to make conclusions about animal husbandry practises.

None of the finds are suitable candidates for radiocarbon dating due to their size or find location.

COUNT OF SPECIES:	SPECIES:			
Element:	Cattle	Non- identifiable	Sheep/Goat-sized	**Grand Total**
Long bone			1	1
Lumbar vertebrae	1			1
Non- identifiable		41		41
Grand Total	1	41	1	**43**

Table XI.1. Number of Identified Specimens Present (NISP) for all Species and Elements (N=43).

Recommendations for future excavation at the site would be to continue to sample, sieve and use floatation methods to collect and collate small remains from the site. Recording methods for each find type need to be clearly identified in the reports to inform future practice (Stallibrass and Huntley, 1995:4).

References

Bossneck, J. 1969, Osteological differences between sheep and goat, in D. Brothwell and E. Higgs (Eds) Science in Archaeology, Bristol: Thames and Hudson, 331-358.

Hillson, S, 1992, Mammal Bones and Teeth: An Introductory Guide to Methods of Identification, London: Institute of Archaeology.

O'Connor, T. 2003, The analysis of urban animal bone assemblages, York: CBA.

Stallibrass, S. and Huntley, J. 1995, Introduction, in J. Huntley, and S. Stallibrass (Eds), Plant and vertebrate remains from archaeological sites in northern England: data reviews and future directions, Research Report No. 4, 1-6.

19. APPENDIX XII: Radiocarbon Certificates

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RADIOCARBON DATING CERTIFICATE
30 August 2017

Laboratory Code	SUERC-74652 (GU44646)
Submitter	Jane Kenney Gwynedd Archaeological Trust Craig Beuno, Ffordd y Garth Bangor Gwynedd LL57 2RT
Site Reference	G2455 Hedd yr Ynys
Context Reference	1051 - fill of drain with cut [1066]
Sample Reference	G2455/01A
Material	Charred plant remains : Cereal grain (Avena sp.)
$\delta^{13}C$ relative to VPDB	-25.1 ‰
Radiocarbon Age BP	288 ± 25

N.B. The above ^{14}C age is quoted in conventional years BP (before 1950 AD) and requires calibration to the calendar timescale. The error, expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.

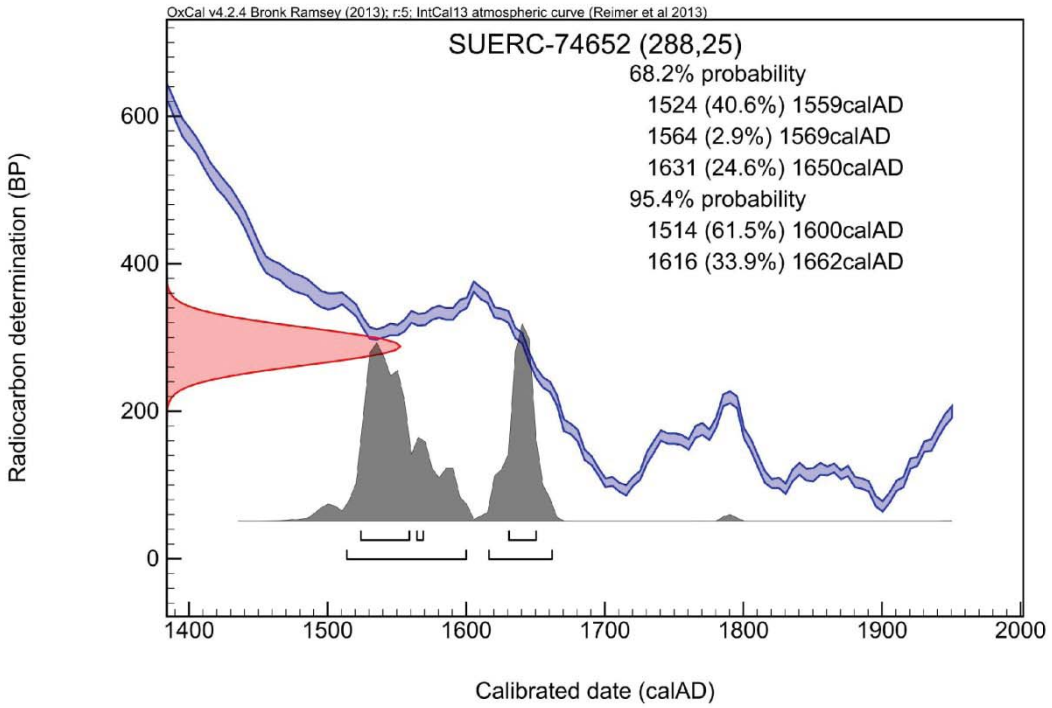
Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Facility and should be quoted as such in any reports within the scientific literature. The laboratory GU coding should also be given in parentheses after the SUERC code.

Detailed descriptions of the methods employed by the SUERC Radiocarbon Laboratory can be found in Dunbar et al. (2016) *Radiocarbon 58(1) pp.9-23.*

For any queries relating to this certificate, the laboratory can be contacted at suerc-c14lab@glasgow.ac.uk.

Conventional age and calibration age ranges calculated by : E. Dunbar

Checked and signed off by : P. Naysmith



The radiocarbon age given overleaf is calibrated to the calendar timescale using the Oxford Radiocarbon Accelerator Unit calibration program OxCal 4.*

The above date ranges have been calibrated using the IntCal13 atmospheric calibration curve†

Please contact the laboratory if you wish to discuss this further.

* Bronk Ramsey (2009) *Radiocarbon 51(1) pp.337-60*
† Reimer et al. (2013) *Radiocarbon 55(4) pp.1869-87*

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RADIOCARBON DATING CERTIFICATE
30 August 2017

Laboratory Code	SUERC-74653 (GU44647)
Submitter	Jane Kenney Gwynedd Archaeological Trust Craig Beuno, Ffordd y Garth Bangor Gwynedd LL57 2RT
Site Reference	G2455 Hedd yr Ynys
Context Reference	1051 - fill of drain with cut [1066]
Sample Reference	G2455/01B
Material	Charred plant remains : Cereal grain (Avena sp.)
$\delta^{13}C$ relative to VPDB	-24.2 ‰
Radiocarbon Age BP	329 ± 29

N.B. The above ^{14}C age is quoted in conventional years BP (before 1950 AD) and requires calibration to the calendar timescale. The error, expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.

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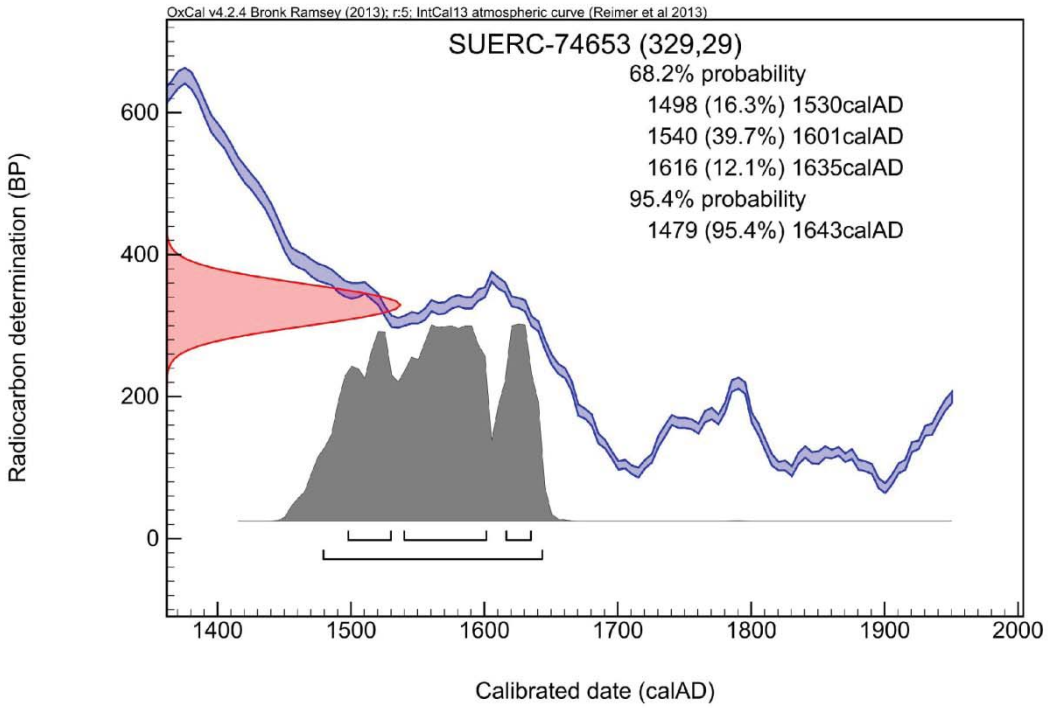
For any queries relating to this certificate, the laboratory can be contacted at suerc-c14lab@glasgow.ac.uk.

Conventional age and calibration age ranges calculated by : E. Dunbar

Checked and signed off by : P. Nayont



The radiocarbon age given overleaf is calibrated to the calendar timescale using the Oxford Radiocarbon Accelerator Unit calibration program OxCal 4.*

The above date ranges have been calibrated using the IntCal13 atmospheric calibration curve†

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† Reimer et al. (2013) *Radiocarbon 55(4) pp.1869-87*

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RADIOCARBON DATING CERTIFICATE
30 August 2017

Laboratory Code	SUERC-74654 (GU44648)
Submitter	Jane Kenney Gwynedd Archaeological Trust Craig Beuno, Ffordd y Garth Bangor Gwynedd LL57 2RT
Site Reference	G2455 Hedd yr Ynys
Context Reference	1068 - fill of ditch [1039]
Sample Reference	G2455/03
Material	Charred plant remains : Cereal grain (indeterminate species)
$\delta^{13}C$ relative to VPDB	-22.0 ‰
Radiocarbon Age BP	1433 ± 29

N.B. The above ^{14}C age is quoted in conventional years BP (before 1950 AD) and requires calibration to the calendar timescale. The error, expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.

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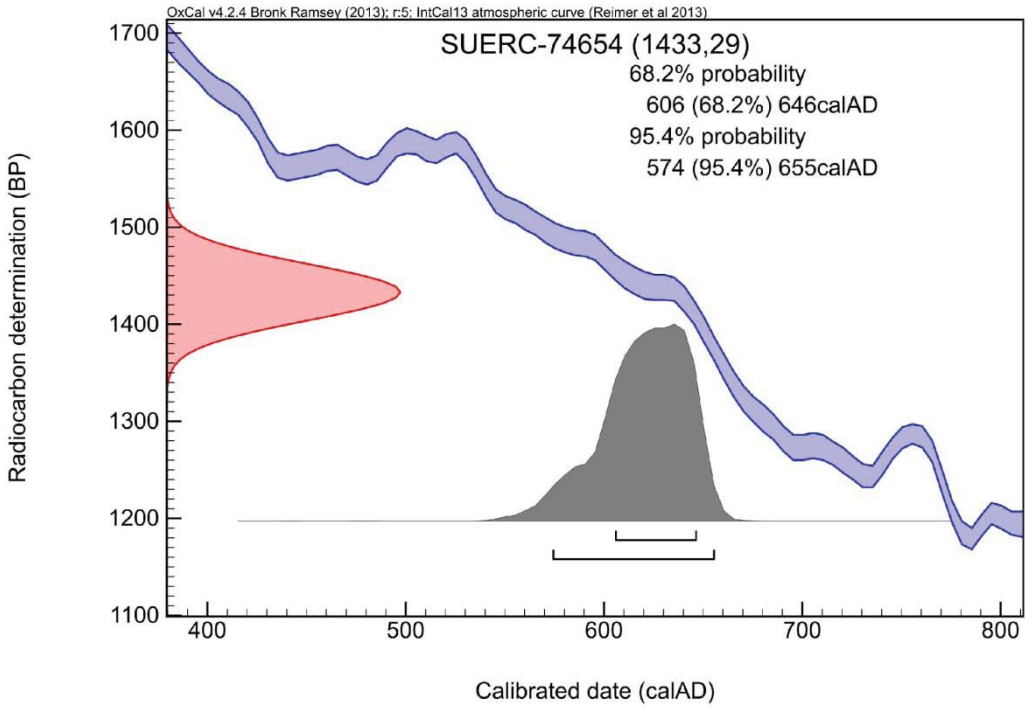
Detailed descriptions of the methods employed by the SUERC Radiocarbon Laboratory can be found in Dunbar et al. (2016) *Radiocarbon 58(1) pp.9-23.*

For any queries relating to this certificate, the laboratory can be contacted at suerc-c14lab@glasgow.ac.uk.

Conventional age and calibration age ranges calculated by : E. Dunbar

Checked and signed off by : P. Nayont



The radiocarbon age given overleaf is calibrated to the calendar timescale using the Oxford Radiocarbon Accelerator Unit calibration program OxCal 4.*

The above date ranges have been calibrated using the IntCal13 atmospheric calibration curve†

Please contact the laboratory if you wish to discuss this further.

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† Reimer et al. (2013) *Radiocarbon 55(4) pp.1869-87*

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RADIOCARBON DATING CERTIFICATE
30 August 2017

Laboratory Code	SUERC-74655 (GU44649)
Submitter	Jane Kenney Gwynedd Archaeological Trust Craig Beuno, Ffordd y Garth Bangor Gwynedd LL57 2RT
Site Reference	G2455 Hedd yr Ynys
Context Reference	1038 - fill of ditch [1039]
Sample Reference	G2455/07
Material	Charred plant remains : Cereal grain (indeterminate species)
$\delta^{13}C$ relative to VPDB	-22.4 ‰
Radiocarbon Age BP	144 ± 29

N.B. The above ^{14}C age is quoted in conventional years BP (before 1950 AD) and requires calibration to the calendar timescale. The error, expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.

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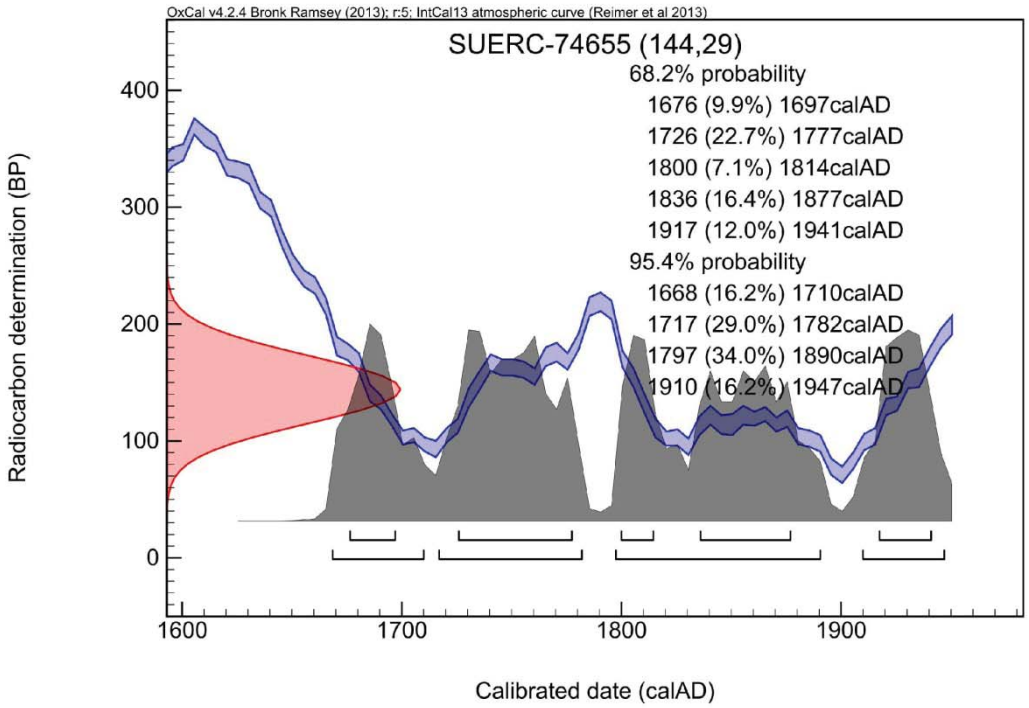
Conventional age and calibration age ranges calculated by : E. Dunbar

Checked and signed off by : P. Nayont



The radiocarbon age given overleaf is calibrated to the calendar timescale using the Oxford Radiocarbon Accelerator Unit calibration program OxCal 4.*

The above date ranges have been calibrated using the IntCal13 atmospheric calibration curve†

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RADIOCARBON DATING CERTIFICATE
30 August 2017

Laboratory Code	SUERC-74656 (GU44650)
Submitter	Jane Kenney Gwynedd Archaeological Trust Craig Beuno, Ffordd y Garth Bangor Gwynedd LL57 2RT
Site Reference	G2455 Hedd yr Ynys
Context Reference	1099 - charred deposit cut by enclosure ditch [1037]
Sample Reference	G2455/06A
Material	Charred plant remains : Cereal grain (indeterminate species)
$\delta^{13}C$ relative to VPDB	-24.0 ‰
Radiocarbon Age BP	1468 ± 28

N.B. The above ^{14}C age is quoted in conventional years BP (before 1950 AD) and requires calibration to the calendar timescale. The error, expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.

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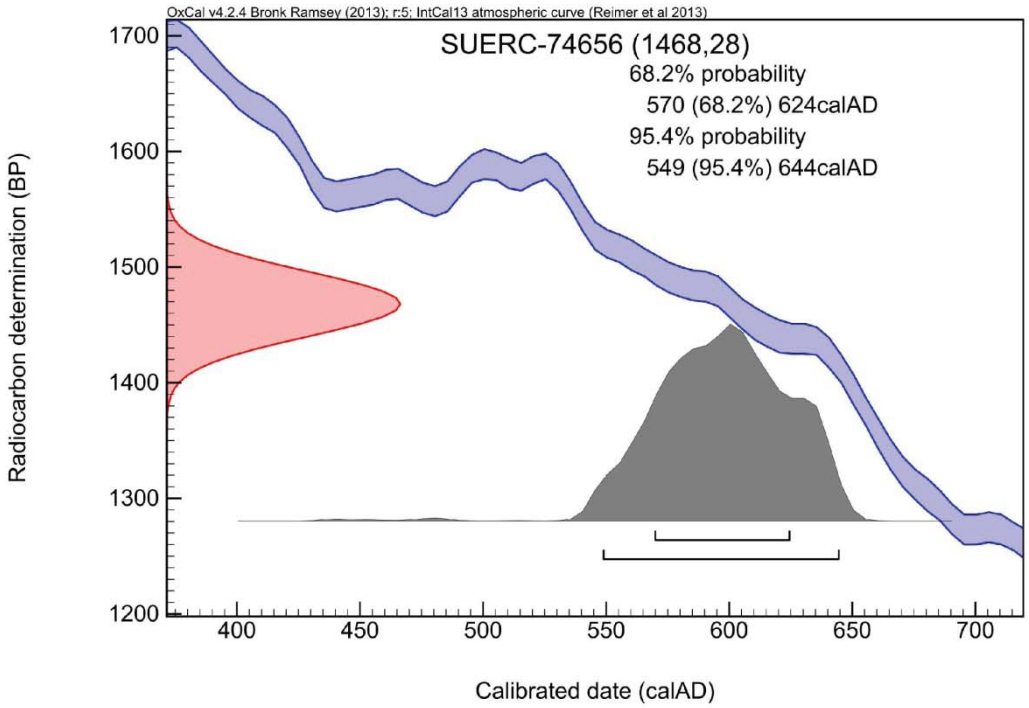
Conventional age and calibration age ranges calculated by : E. Dunbar

Checked and signed off by : P. Nayont



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The above date ranges have been calibrated using the IntCal13 atmospheric calibration curve†

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* Bronk Ramsey (2009) *Radiocarbon 51(1) pp.337-60*
† Reimer et al. (2013) *Radiocarbon 55(4) pp.1869-87*

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RADIOCARBON DATING CERTIFICATE
30 August 2017

Laboratory Code	SUERC-74660 (GU44651)
Submitter	Jane Kenney Gwynedd Archaeological Trust Craig Beuno, Ffordd y Garth Bangor Gwynedd LL57 2RT
Site Reference	G2455 Hedd yr Ynys
Context Reference	1099 - charred deposit cut by enclosure ditch [1037]
Sample Reference	G2455/06B
Material	Charred plant remains : Cereal grain (indeterminate species)
$\delta^{13}C$ relative to VPDB	-23.6 ‰
Radiocarbon Age BP	1468 ± 29

N.B. The above ^{14}C age is quoted in conventional years BP (before 1950 AD) and requires calibration to the calendar timescale. The error, expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.

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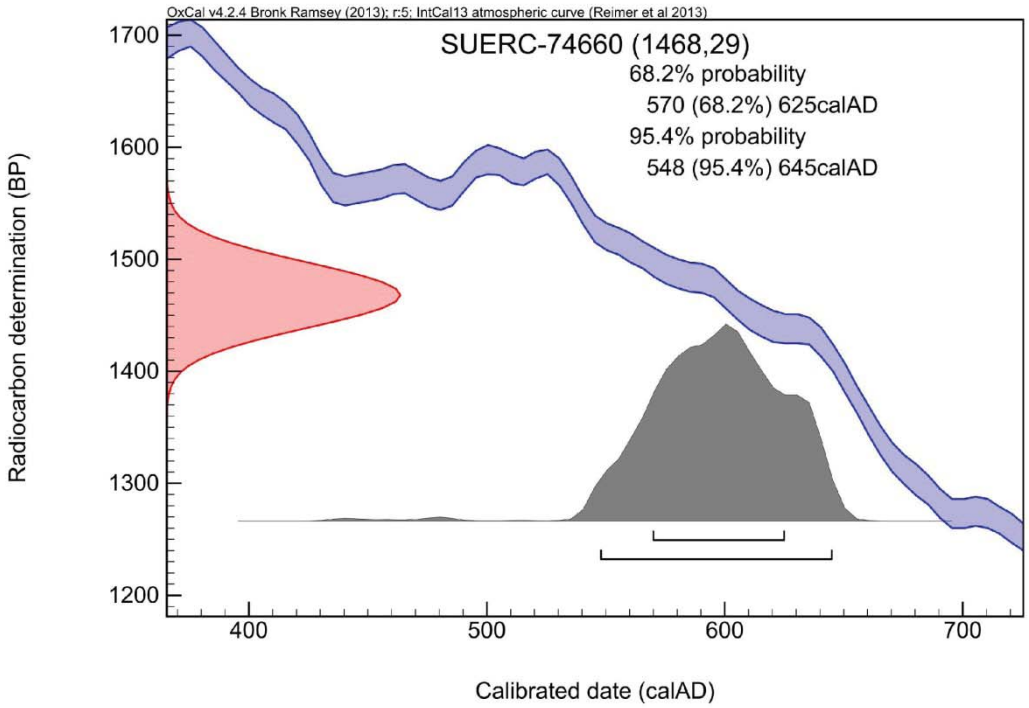
Conventional age and calibration age ranges calculated by : E. Dunbar

Checked and signed off by : P. Nayont



The radiocarbon age given overleaf is calibrated to the calendar timescale using the Oxford Radiocarbon Accelerator Unit calibration program OxCal 4.*

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Cadw

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