context one
HERITAGE & ARCHAEOLOGY

Land at Lodes Lane & Broomfield Road Broomfield Somerset

AN ARCHAEOLOGICAL COMMUNITY EXCAVATION

December 2024

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Quantock Landscape Partnership Scheme

Quantock Hills National Landscape

Made possible with Heritage Fund

Looking after the past today...

EXECUTIVE SUMMARY

Context One Heritage & Archaeology carried out an archaeological community excavation and Open Day in a field at Lodes Lane, between Kingston St Mary and Broomfield, Somerset, in August and September 2023. Over ten days, 34 volunteers came to investigate the site of a large circular ditch and members of Mick Aston's Young Archaeologists (MAYA) also joined the excavation for one day. The project was commissioned by the Quantock Landscape Partnership Scheme (QLPS).

The range of tasks included hand excavation, GPS survey, geophysical survey, soil sieving, finds processing, and site record keeping. Community groups and residents popped by during the excavation and around 100 local people attended the open day and watched the final hours of the excavation unfold.

This was the third excavation to take place during QLPS's five-year programme of works and activities in and around the Quantock Hills. The site was already known from aerial photography which shows a large 93m diameter circular cropmark. Repeated ploughing meant that no trace of the ditch was visible on LiDAR data or at ground level. However, geophysical survey revealed an almost continuous ring-ditch with two possible entrances, along with other sub-surface features in and around the enclosure. The Quantock Hills are rich in prehistoric archaeology spanning the Mesolithic to Iron Age periods, and possible interpretations of the ring-ditch included a henge monument of the Later Neolithic to Early Bronze Age period, and a Late Bronze Age ring-work around a farmstead.

The excavation established that the ring-ditch was 3m wide and 1m deep with a wide flat base, probably with an internal bank. Only a few dateable artefacts were recovered from the fills, revealing that the ditch was mostly infilled in the Middle to Late Iron Age. Two trenches targeted some of the possible features in the enclosed area to investigate whether the ring-ditch originated as a monument or perhaps delineated an area of occupation. This revealed evidence of small-scale Middle to Late Iron Age occupation with post-structures and part of an undated circular structure. Another trench positioned on the outer edge of the ring-ditch established that a Romano-British field system cut through one side of the ring-ditch.

The excavations produced a small assemblage of finds, mostly pottery spanning the Middle Iron Age to Romano-British periods, and two radiocarbon dates of the Middle to Late Iron Age. Some of the pottery relates to cooking and food storage, and together with burnt animal bone, cereal and plant remains reveals that people were living here (sporadically at least) in the Middle to Late Iron Age. There is also tentative evidence that metal working may have been taking place. A few pieces of copper and iron were found, along with a possible hammerstone for smashing ore, and two whetstones suitable for honing finished tools.

While the origins of the monument remain speculative it seems likely that it is of greater antiquity than the Iron Age and was subsequently re-used as an existing enclosure offering a level of protection. Evidence of metal working activity (albeit very modest) may be of relevance here; local mineral resources of copper, iron, lead and silver are thought to have served as a magnet for the enclosed or defended farms which were filling up the southern slopes of the Quantock Hills in the Bronze Age and Iron Age. The ring-ditch may have begun life as a henge monument however recent recognition of Late Bronze Age to Early Iron Age ring-works in western Britain presents another possibility. These sites emulate henges in terms of their size and precise circularity but served as enclosures for a single farmstead. Further excavation would be necessary to explore this in greater detail, targeting two circular geophysical responses within the enclosure that may be round-houses, and two possible entranceways in the ring-ditch (one of which is flanked by two ditches).

The hard work and enthusiasm of the volunteers has provided the very first archaeological data for the Broomfield ring-ditch. They endured rain then hot sun to find out as much about the Site as possible in a very short space of time. The archaeological significance is that they may have found another example in the growing corpus of Late Bronze Age to Early Iron Age ring-works being recognised outside of eastern England. At the very least, the excavations have shown that there is more to the Site than meets the eye, with evidence for repeated activity right through into the Romano-British periods, and for that the volunteers should be applauded.

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PROJECT DETAILS

Collecting museum: South West Heritage Trust

Somerset Historic Environment Record ref.: 48224

Museum accession ref.: TTNCM 75/2024

OASIS ref.: context01-529701

The excavation was co-ordinated and supervised by Richard McConnell BA (Hons), MCIfA, Cheryl Green FSA, PhD, BA (hons), MCIfA, and Tara Fairclough BA (Hons), PCIfA, of Context One Heritage & Archaeology.

The report was authored by Cheryl Green and compiled by Tara Fairclough, with finds specialist contributions from Imogen Wood, Clare Randall and Wendy J Carruthers.

Geophysical survey and soil sample processing and sorting was carried out by GeoFlo Southwest Geophysical and Flotation Services.

The illustrations were prepared by Tara Fairclough. Photographs by Context One.

Post-excavation work was carried out by Cheryl Green and Tara Fairclough.

FRONT COVER: Section across ring-ditch, looking NNW towards Broomfield & NW towards Cothelstone Hill (© Context One Heritage & Archaeology)

FIGURES

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ACKNOWLEDGEMENTS

Context One would like to thank Andrew Quick, the landowner and farmer, for facilitating the excavation. Also to Andrew and his family for showing such an interest throughout the project, paying regular visits to see the excavations progress. We would also like to thank the local residents for frequently popping by and giving us the benefit of their extensive local knowledge.

Kerry Ely did a fantastic job of stripping the trenches down to the archaeological horizons and undertaking the sad job of backfilling the trenches.

Liz Caldwell and Nigel Harvey were responsible for three very important aspects of the project; the geophysical survey; the flotation, soil sieving and sorting of material for analysis; and bringing the Mick Aston Young Archaeologists along for a day so they could take part in the excavations. As always, their enthusiasm and dedication were greatly appreciated, and everyone enjoyed having the chance to join in with the geophysical survey.

Fyne Court (National Trust) played host to the volunteers vehicles so that they could be ferried to the Site. We also made good use of the tea room and ice-cream purchasing opportunities! Thanks also for providing us with a room to conduct the Site introductory slide show and inductions for the volunteers on their first (rainy) day.

We very much enjoyed seeing Bob Croft (Head of Historic Environment, South West Heritage Trust) and Richard Brunning (Senior Historic Environment Officer, South West Heritage Trust) during their visit to the Site, and benefited from their knowledge of the environs and ideas about the Site.

We would like to thank the Quantock Landscape Partnership Scheme (QLPS) for giving us the opportunity to run the excavation on their behalf for the second time. Thanks also to the Quantock Hills National Landscape (QHNL) for leading the partnership with QLPS.

Dan Broadbent (Historic Heritage Officer, QLPS) deserves a particularly special mention. Dan skilfully looks after the archaeological side of QLPS's volunteer outreach and we have thoroughly enjoyed working and digging alongside him. Dan also deserves a special award for managing the rota so that everyone got the very utmost from the experience.

Finally, this project was made possible by the National Lottery Heritage Fund (NLHF). A grant was awarded to QLPS for a five-year programme of works and activities in and around the Quantock Hills, and was also supported by funding from a variety of sources and in the form of volunteer time.

The volunteers who gave up their time to take part in the dig are as follows:

Charlie Bosworth
Ruth Conley
Tony Eggar
Karen Fear
Anthony Haskins
Ben Lewis
Trudi Mansfield
Zach Palmer
Sue Powley
Ralph Sandoe
Nicola Taylor
Toby Wooton
Phillip Chidgey
Rob Cooke
Siobhan Elson
Sandie French
Amal Khreisheh
Robert Major
Denise Moyse
Linda Pitman
Gaynor Preece
Chris Smith
Veronica Wilcox
Ben Clarke
Jane Davies
William Elson
Karen Goodlet
Chantelle Lawrence
Anita Maney
James Palmer
Bobby Powley
Richard Rolls
Jack Taylor
Becca Wooton

GLOSSARY

BCE
Abbreviation for "Before Common Era." When used as a suffix to a date, it indicates the number of years prior to the traditional date of the birth of Christ (or the beginning of the Christian era) that an event occurred. The expression is intended as a non-denominational dating system.

Bronze Age
2600 - 800/700 BCE

- Chalcolithic (Beaker) (2600 - 1900 BCE)
- Early Bronze Age (1900 - 1600 BCE)
- Middle Bronze Age (1600 - 1200 BCE)
- Late Bronze Age (1200 - 800/700 BCE)

CE
Abbreviation for "Common Era." When used as a suffix to a date, it indicates the number of years after the traditional date of the birth of Christ (or the beginning of the Christian era) that an event occurred. C.E. is thus equivalent to A.D. or "of the Christian era" and is intended as a non-denominational dating system.

Context
A single unit of excavation, which is often referred to numerically, and can be any feature, layer or single element of a structure. A pit for example would have a context number for the cut and a separate number for each fill within the cut.

Cropmark
An archaeological site no longer visible on the ground due to the removal of upstanding remains (often by ploughing). The sites are recorded from Aerial Photographs by differential crop growth over buried features such as pits, ditches and walls.

Digital Data
All records in digital form, including specifications, notes, records, indexes, catalogues, reports, maps, plans, section drawings, elevations, site photographs, object images, CAD files, databases, digital aerial photograph interpretations, geophysical and other survey data, GIS files, audio records, images, satellite imagery, spreadsheets, text files, analytical results and 3-D data.

Harris matrix
A diagrammatic tool to order stratigraphical units (contexts) into ordered sequences to establish relationships and chronology.

HER
Historic Environment Record. A database of known designated, non-designated and locally listed heritage assets.

Early medieval (Anglo-Saxon)
410 - 1066 CE

Fieldwalking
Fieldwalking involves an ordered surface collection of artefacts from ploughed fields. The aim is to identify areas of former activity on a site by plotting the distribution and concentration of material and assessing it by period.

Geophysical survey
A method of seeing beneath the ground surface using a number of methodologies, including Ground Penetrating Radar (GPR), Resistivity and Magnetometry. It takes a specialist to both use the field equipment and interpret the data. When used with Topographic survey the results can be very effective, though it is very dependent on soil and geological conditions within the site area.

GPS (Global Positioning Satellite) survey
Very often this can be used for both Field Survey to provide accurate location of newly discovered sites and also as a tool for topographic survey, to provide a fast method for recovering thousands of 3D coordinates. There are a range of GPS receivers available, from the handheld (with a accuracy of 20m+/-) to the Satellite base station variety that can be millimetre accurate. It should be remembered though that GPS could be affected by the landscape, such as tree cover, mountains, tall buildings etc.

In-situ
A term applied to archaeological remains/deposits that are found in their original undisturbed location or position during excavation or survey.

Iron Age
800/700 BCE - 43 CE

- Early Iron Age (800/700 - 300 BCE)
- Middle Iron Age (300 - 100 BCE)
- Late Iron Age (100 BCE - 43 CE)

LiDAR (light detecting and ranging)
Airborne LiDAR measures the height of the ground surface and other features in large areas of landscape with a very high resolution and accuracy. It provides highly detailed and accurate models of the land surface at metre and sub-metre resolution. This provides archaeologists with the capability to recognise and record otherwise hard to detect features.

Medieval
1066 - 1540 CE

Mesolithic
10,000 - 4000 BCE

- Early Mesolithic (10,000 - 7000 BCE)
- Later Mesolithic (7000 - 4000 BCE)

Modern
1800 CE - present

Neolithic
4000 - 2300 BCE

- Early Neolithic (4000 - 3300 BCE)
- Middle Neolithic (3300 - 2900 BCE)
- Late Neolithic (2900 - 2300 BCE)

Orthogonal
The computer generation of a 2D surface model from multiple photographs.

Post-medieval
1540 - 1800 CE

Photogrammetry
The creation of accurate, fully textured 3D models of objects, features, excavation sites and landscapes from photographs using computer software.

Prehistoric
c. 10,000 BCE - 42 CE

PRN
Primary Record Number. Assigned to the known designated and non-designated heritage assets recorded in the HER.

Romano-British
(43 - 410 CE)

Scheduled Monument
An archaeological site that is of national historic importance and legally protected under the terms of the Ancient Monuments and Archaeological Areas Act, 1979.

SHC
Somerset Heritage Centre, Taunton.

Sondage
A small test excavation to investigate part of a larger trench/area.

Temporary Bench Mark (TBM)
A reference point relating to a height above sea level (above Ordnance Datum - aOD) against which archaeological features and deposits can be measured against using a dumpy level. The TBM is often established with its aOD height taken from a GPS although an arbitrary measurement can be used in the field and re-calculated with its actual aOD height during post-excavation.

Terminus ante quem, Terminus post quem
Reference points in the dating of a stratigraphic sequence on a site before which (ante) or after which (post) a context was formed. (similar to relative dating).

Written Scheme of Investigation (WSI)
A document setting out the rationale, strategy, excavation methodology and post-excavation tasks to successfully carry out an archaeological programme of works.

INTRODUCTION

Figure 1. Aerial photo of cropmark, looking N towards Broomfield (image taken from Bing maps)

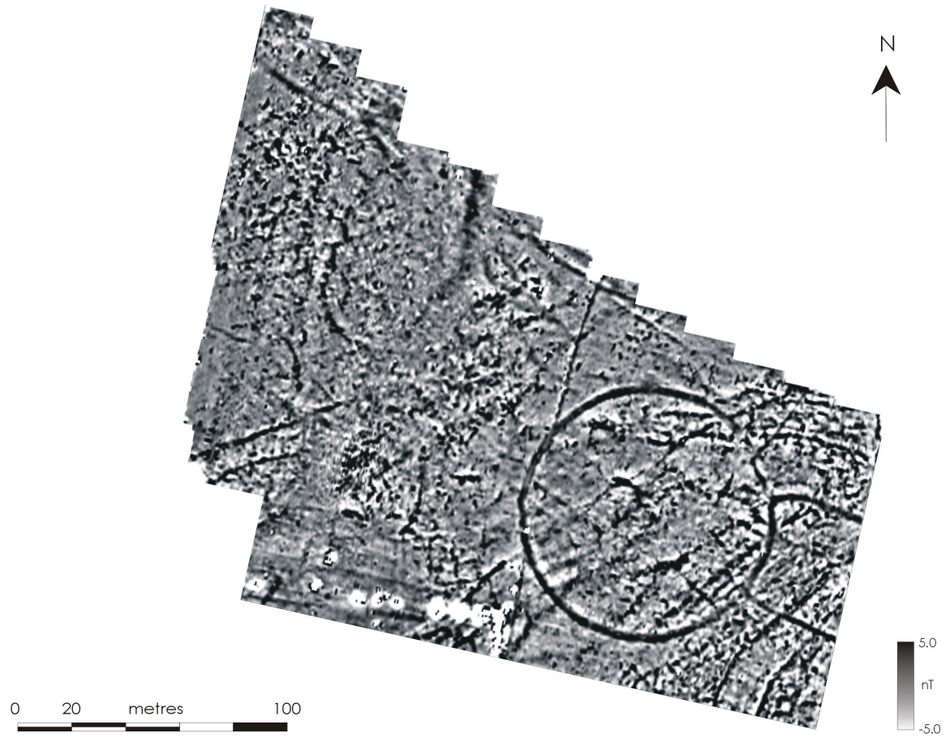


Figure 2. Gradiometer survey results (Geoflo South West)

Context One Heritage & Archaeology (C1) carried out an archaeological community excavation and Open Day at Broomfield, Somerset for the Quantock Landscape Partnership Scheme (QLPS) over 10 days in August and September 2023.

The QLPS is a five-year programme of works and activities in and around the Quantock Hills led by Quantock Hills National Landscape (QHNL) and grant-funded by the National Lottery Heritage Fund (NLHF) and other partnership sources. The scheme commenced in 2020 and includes 23 projects grouped under the themes of *Inspire, Live and Learn*. The excavation forms Project 3.5 under the *Learn* theme, *Understanding the Landscape*, and is aimed at involving the local community to improve an understanding of the landscape history of the Quantocks through archaeological fieldwork.

The purpose of the excavation was to investigate a possible prehistoric henge site that has been identified through aerial photography as a circular cropmark (Figure 1). The cropmark is recorded on the Somerset Historic Environment Record (HER) as PRN 10247 and was first noted in aerial reconnaissance in 1975. Subsequent transcription of the aerial photo dataset by QLPS volunteers provided a clearer picture of the cropmark arrangement. Somerset Council recently commissioned a detailed LiDAR survey across the Quantocks which is revealing a far richer archaeological landscape than previously appreciated. However, the enhanced survey adds little clarity to the Broomfield cropmark, suggesting it was comprehensively flattened through repeated ploughing. Geophysical survey enabled the excavation trenches to be targeted effectively. During the excavation this survey was extended to help place the cropmark in context (Figure 2).

This report presents the results of the excavation together with an assessment of the finds, culminating in a discussion on interpretation and signposts for future work.

VOLUNTEERS

Figure 3. Volunteers at work

Community Archaeology projects are the central component of the QLPS 'Understanding the Landscape' theme, and are designed to provide a range of opportunities for volunteers to get involved in archaeology.

The ultimate aim of the projects are to harness a better understanding of the historic environment of the Quantock Hills and the environs by training a group of local volunteers to investigate its history and archaeology and take the story forward.

The programme includes desk-based analysis of records such as historic map analysis and LiDAR interpretation while fieldwork comprises geophysical survey, fieldwalking, and test-pitting, all of which culminate in an annual community excavation and public open day in the summer. The excavation at Broomfield forms the third of four planned excavations during the life of the QLPS, the first being the excavation of a Late Bronze Age 'slight univallate hillfort' at Cothelstone Hill in 2021 and the second being the excavation at Crowcombe Court in 2022.

Figure 4. End-of-day update!

Figure 5. MAYA's getting stuck in

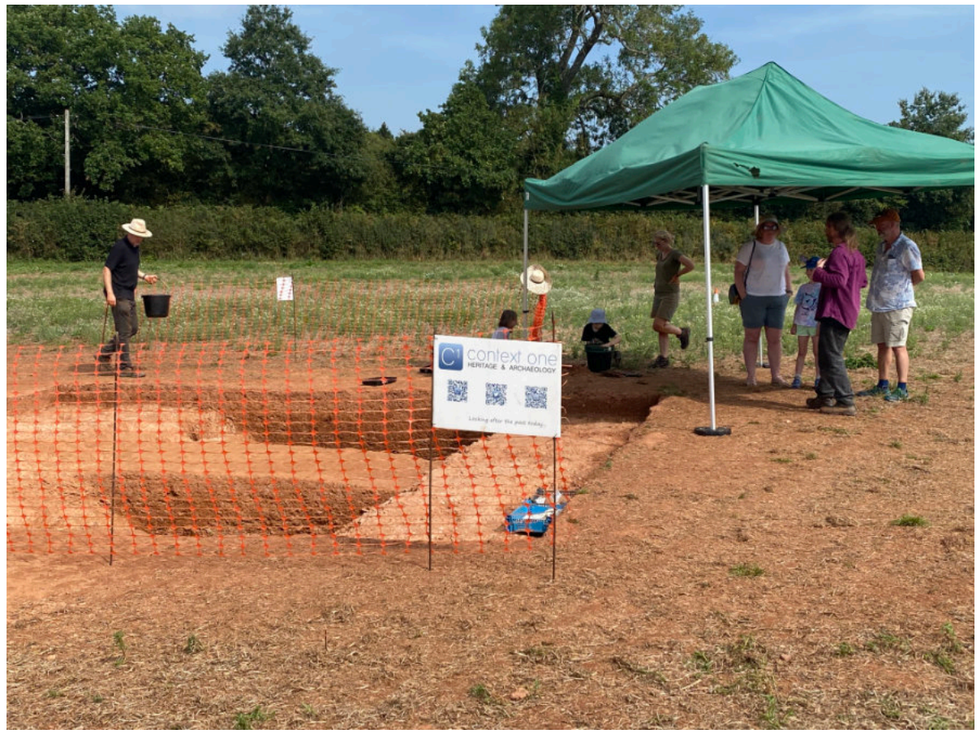


Figure 6. Open day!

Across the 10 days of the excavation at Broomfield, 34 individual volunteers took part, contributing 68 days of work. In addition, 32 members of Mick Aston's Young Archaeologists (MAYA) (https://www.yac-uk.org/clubs/mick-astons-young-archaeologists-somerset), joined the excavation for one day. The range of tasks included hand excavation, GPS survey, levels survey, soil sieving for finds, finds processing, site record keeping, and open day preparation. Volunteers also assisted with additional geophysical survey conducted during the excavation.

Community groups and local residents visited during the course of the excavation and around 100 local people attended the open day to view the dig, handle an array of finds on display in the excavation tent, and watch the final hours of the excavation unfold.

Filming was carried out during the early phases of the project by Antony Jones of the Local Film Company, and commissioned by QLPS. This can be accessed through the QLPS website at https://qlps.org/community-excavation-and-open-day-broomfield-2023 and can be viewed on YouTube:

https://www.youtube.com/watch?v=bAVpYTEBQek
https://www.youtube.com/watch?v=HCOzeAUGPGs
https://youtube/rIioljsfv2E?si=ZQ6KNDbFxk3eQMYA
https://www.youtube.com/watch?v=rIioljsfv2E

Context One produced regular social media posts throughout the excavation detailing the days activities and findings.

Figure 7. Filming the first day

Figure 8. Nearing the bottom of the ditch

THE SITE

Location

The Site (centred on NGR ST 22520 31316) is situated near the north-east corner of a field between Broomfield Road and Lodes Lane. It lies *c.* 750m south-south-east of the small village of Broomfield, just to the south-east of the QHNL, and *c.* 10km south-west of Bridgwater. To the north-west, *c.* 3.5km distant, is Cothelstone Hill where QLPS conducted excavations in 2021 and 2024 (Figure 9).

Topography & Geology

The Site is situated on high ground between two knolls and at a height of *c.* 207m above Ordnance Datum (aOD). A partly wooded escarpment at the southern edge of the field descends steeply into the valley, with Lodes Lane following a less severe gradient towards the village of Kingston St Mary. There are far reaching views southwards with the Blackdown Hills forming a distant backdrop, while westwards the high moors of Exmoor are visible on the horizon. The Quantock Hills themselves are screened by woodland and hedgerows which constrain views towards the north.

The recorded geology for the Site is slate of the Morte Slates Formation. (BGS 2024). There is no recorded superficial geology. The soils are characterised as freely draining slightly acid loamy soils (CSAIS 2024). The Site is in arable use and at the time of the excavation had been recently harvested, with stubble and straw still on the ground surface.

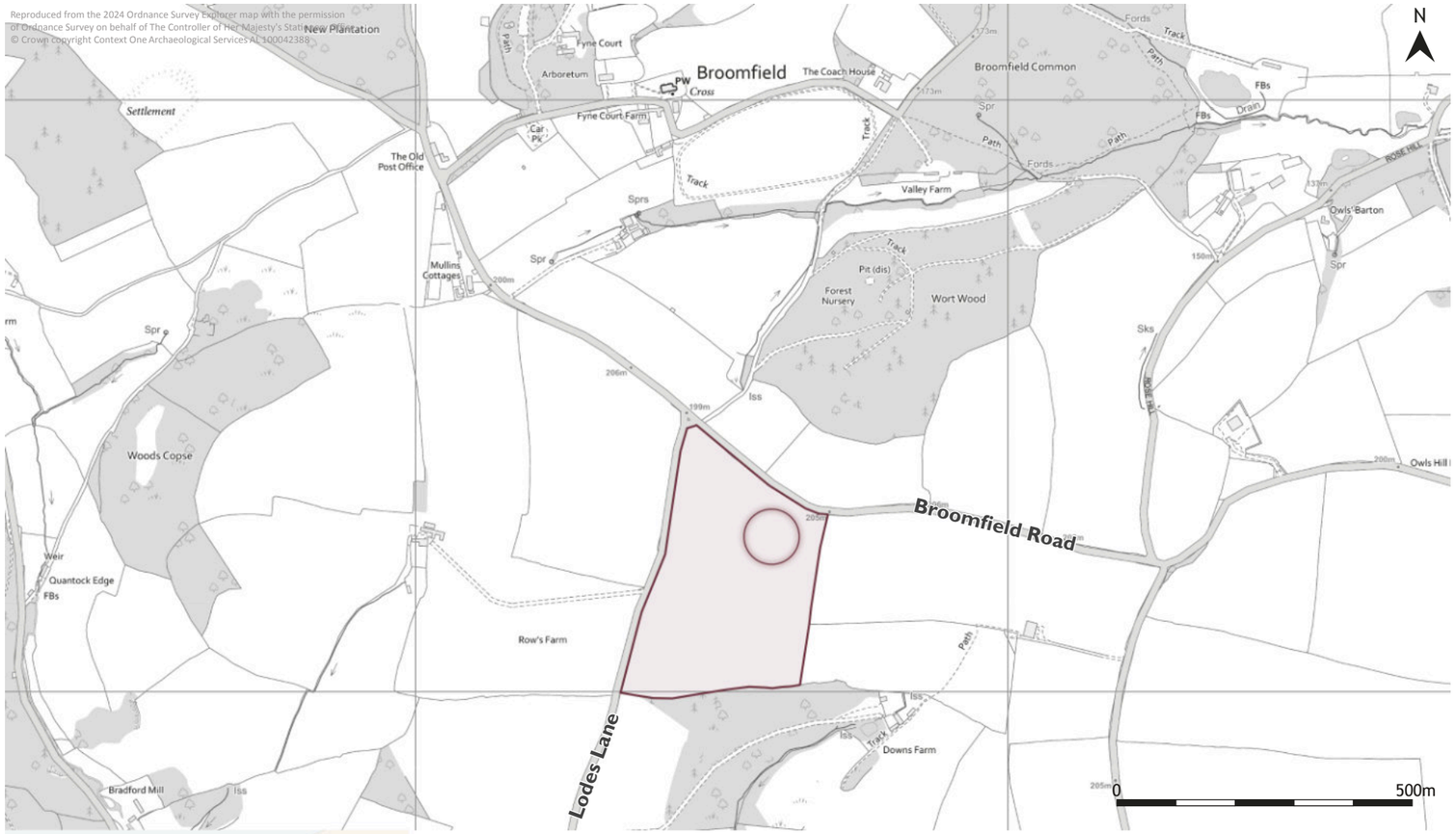


Figure 9. Site setting with inset showing topography

ARCHAEOLOGICAL BACKGROUND

The archaeological background is informed by data available on the Somerset HER with sites depicted on Figure 10. It also draws on a 2006 English Heritage publication by Hazel Riley that traces the development of the historic landscape of the Quantock Hills and summarises the known archaeology. The information available at that time has been significantly enhanced by the 25cm resolution LiDAR survey of the entire QHNL. This was undertaken by Bluesky International with ArcHeritage commissioned to provide data enhancement using a variety of analytical techniques (ArcHeritage 2021).

The Quantock Hills have attracted people throughout the prehistoric period and the landscape is littered with remains spanning the Mesolithic to Iron Age periods. Using the enhanced LiDAR data, volunteers have already identified over 1,400 previously unknown archaeological sites which are being assimilated fully into the archaeological records. The data also provides greater clarity for known sites unless, as at the Broomfield cropmark, no ground surface features survive. Even so, very few of these sites will be closely dateable without a further phase of investigation. At Broomfield, this required geophysical survey and ground-truthing through targeted excavation.

The full Somerset HER entry for the circular cropmark (PRN 10247) is as follows:

> *"AP taken by Scott-Whiting in 1975 shows circular cropmark. {1}*
>
> *Large areas of vague cropmarks to the W, SW and S. A possible rectangular enclosure to the E. {2}*
>
> *Fieldwalking of the site in Feb 1984 produced no datable finds. {3}*
>
> *Aerial photographs show clearly a large apparently circular enclosure with less clear features within and without. {4}*
>
> *Tithe map shows a barn with a large rectangular yard to the east of this location. {6}*
>
> *The cropmark shows on a number of photographs taken over different years which means that it is less likely to be a modern, ephemeral feature as suggested previously. It is the regularity that distinguishes the feature from other curvilinear, and probably late prehistoric and/or Roman settlements or stock enclosures, in the vicinity of the southern Quantock Hills. It is defined by a very regular circular ditched enclosure with a diameter of 93m. Because of its size, it is unlikely to be the remains of a barrow, as implied by the "ring-ditch" interpretation of Harding and Lee. A break in the south west of the enclosure may be an entrance. Opposite this, to the north east, is another possible entrance, flanked by two ditches which splay out for 28m. The southern of these may have another ditch parallel to it and also may continue for another 100m to the south east. Another ditch, 44m long, appears to extend out from the south east part of the enclosure. This ditch also may continue, to the east, for 335m. Neither of the continuations of these ditches is very convincing. The enclosure appears to be situated on a plateau between two knolls, at 205m above OD, with a south western aspect. {7}"*

1. *Aerial photograph: (1975) Colour print marked "Scott-Whiting" on rear. Copy in HER file.*
2. *Verbal communication: Fraser, David, Somerset County Council, Sites and Monuments Record (December 1982). No written material.*
3. *Verbal communication: Burrow, Ian, Somerset County Council (13/02/1984). No written material.*
4. *Aerial photograph: DAP OT14,15, OU3,4, QY4,5, SH4,5, TQ15 (1991). Copy in HER digital information, prints in archive at Somerset Heritage Centre.*
5. *Aerial photograph: Aston, M (2/7/1976) 5 monochrome prints. Copy in HER file.*
6. *Letter: Dunning, RW, Victoria History of Somerset to Somerset County Council. (16/12/1987). Location: HER file 10232.*
7. *Data transfer from National Record of the Historic Environment (English Heritage) (Last recorded update before transfer: 31/10/2002) Source record ID: ST 23 SW 27.*

The cropmark was not clearly defined by the LiDAR survey with any positive features associated with the monument having been ploughed flat over time. The LiDAR data suggested a slight rise in the vicinity of the circular feature but nothing to imply form or possible function (https://maps.nls.uk/geo/explore/side-by-side/#zoom=16.2&lat=51.07447&lon=-3.10745&layers=LIDAR_DTM_1m&right=ESRIWorld). The geophysical survey was carried out by GeoFlo Southwest and, after the initial survey of the circular cropmark, eventually covered approximately 4ha of the north of the field (Caldwell 2023). This comprised a gradiometer survey using a Bartington Grad 601-2 dual system gradiometer, a form of magnetometer:

> *"Magnetometers are especially effective for discovering thoroughly decayed organic materials, such as those which accumulate in ditches and pits, and matter exposed to intensive firing, including industrial areas, hearths and larger ceramics. All of these are likely to give a positive magnetic response, sometimes with a negative halo, giving a dipolar effect. Non-igneous stone features, such as walls and banks, are usually perceived as negative anomalies against a background enhanced by decayed organics." (Caldwell 2023, 2).*

The survey area was divided into 20m squares and tied into the OS grid using an Emlid Reach RS2 RTK GNSS Receiver, with readings logged at 0.25m intervals along southeast to northwest traverses set 1m apart, in a zigzag pattern (Caldwell 2023, 3).

The survey results are dominated by the large circular anomaly which corresponded exactly with the cropmark (see Figure 2). The confidence rating in the interpretation of other major linear ditches was also considered to be high:

> *"The survey has detected major linears which appear to intersect with the cropmark, plus other linears on varying alignments which could suggest multiple activity phases. The results were also able to provide targets for the subsequent community excavation." (Caldwell 2023, 6).*

There are also a number of weaker linears and non-linear anomalies which are more difficult to interpret and may represent natural geological features.

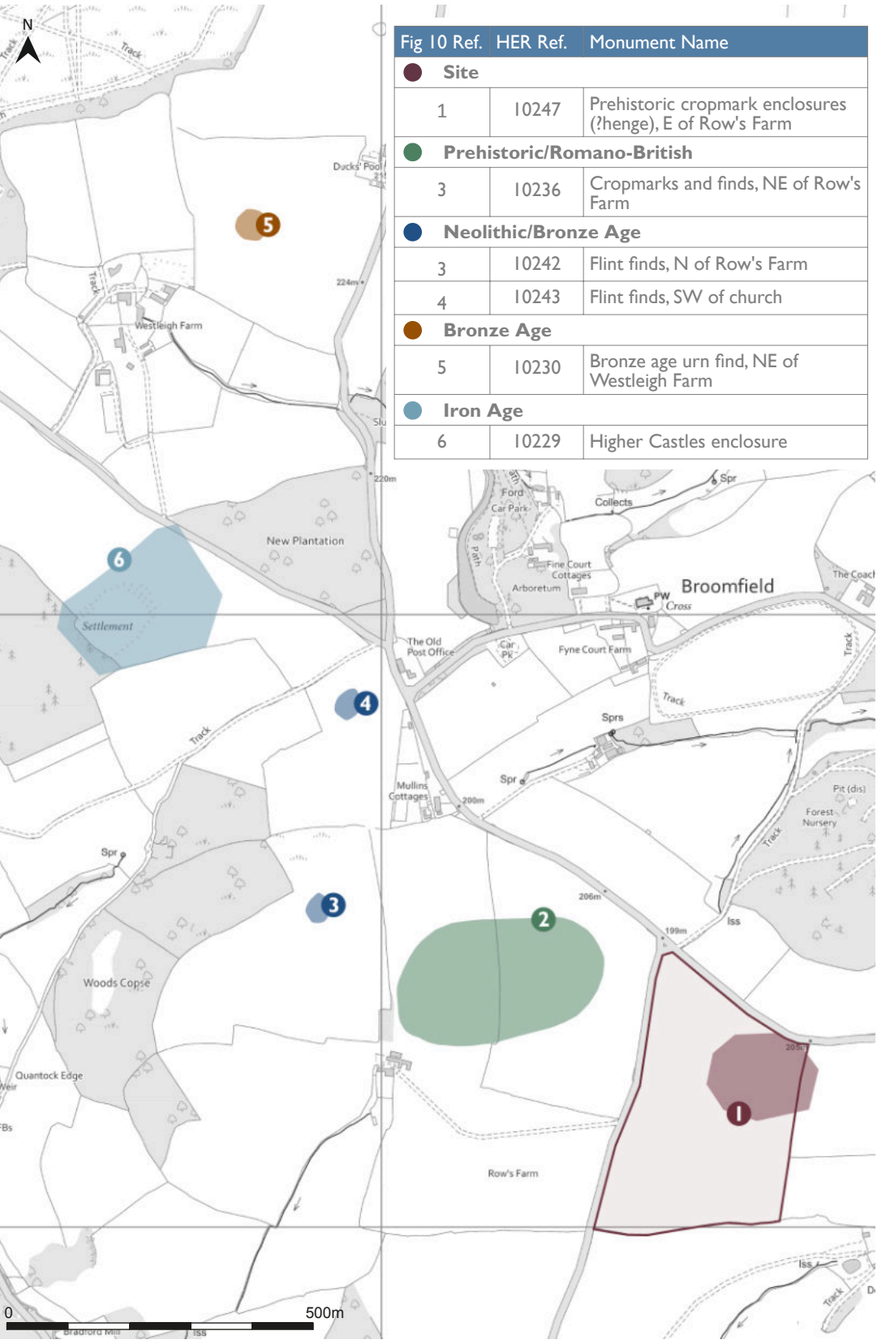


Fig 10 Ref.	HER Ref.	Monument Name
Site		
1	10247	Prehistoric cropmark enclosures (?henge), E of Row's Farm
Prehistoric/Romano-British		
3	10236	Cropmarks and finds, NE of Row's Farm
Neolithic/Bronze Age		
3	10242	Flint finds, N of Row's Farm
4	10243	Flint finds, SW of church
Bronze Age		
5	10230	Bronze age urn find, NE of Westleigh Farm
Iron Age		
6	10229	Higher Castles enclosure

Figure 10. Archaeological sites referenced in text

Looking at the surrounding landscape, the cropmark does not exist in isolation and several sites and findspots help set the scene. Drone photos taken in 2018 and kindly supplied by Andrew Quick clearly show the circular cropmark with traces of internal features and a rectilinear enclosure to the east (Figure 11). These photographs also show cropmarks in adjacent fields albeit less monumental in scale. Most notably, several linear and rectilinear cropmarks continue across into the two fields west of the Site (Row's Farm), on the west side of Lodes Lane (Figure 12). The linears generally appear in pairs, either running approximately parallel to each other or forming funnels. There is also one large circular cropmark, rectilinear enclosures, a large lozenge-shaped enclosure and smaller circular cropmarks. Most of these features are encompassed by HER record 'Cropmarks and finds NE of Row's Farm, Broomfield' (HER 10236) (Figure 10). Possible interpretations include prehistoric and/ or Roman ditched enclosures. However, more recent interpretation of nearby rectangular features as possible post-medieval and modern drainage might suggest some of the cropmarks are more recent in origin.

In terms of dateable evidence, a single palaeolithic core was found at Row's Farm. Flint working debutage and implements dated as Neolithic or Bronze Age (including a leaf-shaped arrowhead) have been found further west, to the north of Row's Farm (HER 10242), and further north, to the south-west of Broomfield church (HER 10243).

Figure 11. Drone photo of circular cropmark, looking E (2018, photograph provided by Andrew Quick)

S H Price made extensive collections of Neolithic flint tools recovered from ploughed fields between Broomfield and Merridge (Riley 2006, 21), indicating extensive settlement in this area during the 4th and 3rd millennia BCE. An urn was found during ploughing at Westleigh Farm, Broomfield, in 1908 and is one of only a few good examples of earlier Bronze Age pottery from on or around the Quantock Hills (HER 10230). Now in Somerset County Museum, the empty pot had been placed, upside down, in a hole with no traces of a barrow mound evident (Riley 2006, 29). To the west of Broomfield, an Iron Age hill-slope enclosure at Higher Castles has been subject to several investigations following its identification in 1951 from aerial photographs (HER 10229). The enclosure is now only visible as a cropmark due to 50 years of ploughing (now pasture). It comprises a large single bank and ditch enclosing a rectangular area measuring 100m by 90m with an outer upslope kidney-shaped enclosure on the eastern side surrounded by a ploughed-out bank. This is one of four hill-slope enclosures known on the Quantock Hills. Evidence from Dartmoor and Exmoor found that iron working was sometimes carried out at these types of sites (Riley 2006, 61 & 67). Higher Castles is a larger site and its possible that more specialised tasks were carried out here too (spinning, weaving, tool making, pottery production and so forth) (Riley 2006, 67).

Figure 12. Drone photo of cropmarks at Row's Farm, looking NW (2018, photograph provided by Andrew Quick)

EXCAVATION

The excavation comprised four elements: the production of a Written Scheme of Investigation which sets out the project strategy; excavation and public open day; post-excavation and report production (this document); and archive preparation and deposition.

Excavation strategy

The principal aims of the archaeological excavation were to:

- identify, investigate and record all significant buried archaeological deposits encountered;
- determine the character of the archaeological remains, where present;
- recover environmental information, which may provide further information relating to the local historic environment of the area.

The research objective was to:

- ascertain the character and chronology of the large circular cropmark and associated features.

The broader research objective accords with an aim of the South West Archaeological Research Framework 2008 & 2012 (SWARF):

- Research Aim 4: Encourage wide involvement in archaeological research and present modern accounts of the past to the public.

The choice of trench location and size was based on a number of criteria:

- To maximise the experience of daily beneficiaries and volunteers through tangible archaeological features.
- To provide trench sizes that would safely accommodate daily beneficiaries and volunteers while aiming to ensure that the trenches will be completed.
- To provide a core understanding of the cropmark and signal the potential for any future investigative work.

Figure 13. Excavation trench locations and geophysical survey interpretation plot

The data from aerial photography indicated numerous potential targets for the excavation trenches. Of these, it was proposed excavating two trenches totalling 63m² (Figure 13; Trench 1 (Tr1) (7m long by 6m wide) straddling the large circular cropmark and Trench 2 (Tr2) (7m long by 3m wide) investigating the centre of the interior. Tr1 was positioned across one of the widest sections of the cropmark. Prior to the excavation, Tr2 was adjusted to 11m long by 2m wide and rotated to investigate possible features indicated by the initial geophysical survey results. An additional trench was also introduced; Trench 3 (Tr3) (7m long by 2m wide) was primarily intended to be an insurance trench across a semi-circular anomaly shown on the geophysical survey. In the final days of the excavation, a further trench, Trench 4 (Tr4) (4.6m long by 4.3m wide) was excavated. Together, this gave a total excavation area of 97.78m² (Figure 13).

Site set-up and preparation

An initial Site visit was carried out on 22 August 2023 with the principal objective of assessing ground conditions and meeting with GeoFlo who had begun surveying the interior of the cropmark. A further visit took place on the following day to set-out Trenches 1-3. The grid implemented for the geophysical survey would serve as a framework for any measurements in and around the excavation areas and calibrate the location of the geophysical anomalies and the trenches.

Machine excavation in Tr's1-3 of the turf, topsoil and subsoils down to suspected archaeological horizons was carried out on 29 August 2023 using a 360-degree tracked excavator equipped with a toothless (grading) bucket. Spoil was mounded 5m beyond the edges of the trenches with the nearest part of the spoil heap to each trench fenced off with netlon barrier fencing. Site set-up also included an event tent near the trenches for shelter, bulky tools, and finds processing. Temporary toilets were positioned in an open area near the field gate with a GP360 providing site office facilities for desk-based work and welfare.

Volunteers arrived on 31 August and the excavation took place continuously across ten days until 9 September which coincided with the Open Day. Closing the site took place on 11 September with just C1 staff. Immediate post-site work consisted of checking the site archive, residual finds processing, and data input.

Excavation methodology

Following the machine excavation of soils down to the suspected archaeological horizon, all subsequent investigation was carried out by hand, and in accordance with the *Somerset Archaeological Handbook* issued by South West Heritage Trust (SWHT) in 2017 (amended 2021) and *Standard and guidance for archaeological excavation* published by the Chartered Institute for Archaeologists (ClfA) in 2014 (updated 2020). Context One adhered to the *Code of Conduct: professional ethics in archaeology* of the ClfA (2014, revised 2021) and the *Regulations for Professional Conduct* (2019, revised 2021), at all times during the course of the excavation.

All trenches were initially hand-cleaned using a combination of shovel scraping and trowelling to clean the trench edges and surfaces. Tr's 1 and 2 were re-trowelled to clarify features and deposits, and familiarise the volunteers with the archaeology encountered and deliver basic training. Tr3 was initially held-back for the Mick Aston Young Archaeologists (MAYA) to investigate. Thereafter the trench formed part of the main excavation. Towards the end of the excavation, Tr4 was hand-excavated to explore the relationship between the large circular ring-ditch and a rectilinear enclosure to the east. This investigation was led by Anthony Haskins (QLPS volunteer and Oxford Archaeology) with a small sub-team of volunteers.

The archaeology comprised linear and curvilinear features, smaller discrete features and occupation deposits. In Tr1, the anticipated depth (up to 2.20m from the reduced surface) of the circular ring-ditch meant the trench was configured to ensure safe excavation to the base of the ditch and permit access for less able volunteers. Each long side of the trench was stepped with 0.75m wide shelves as excavation proceeded leaving a working width of 3m. In the event, the trench was shallower than anticipated (1m) and the step adjacent to the west baulk was removed. The step on the east side of the working area was retained (measuring 1.30m) however an additional slot was excavated on the eastern side up to the baulk. Primarily this was intended for retrieval of dating evidence and to provide another area for volunteers to excavate.

Deposits were excavated and recorded via sondages. Small discrete features were fully excavated; larger discrete features were half-sectioned (50% excavated); and linear features were sampled along their length with investigative excavations of terminals, junctions and relationships with other features.

All excavated features were fully recorded and this involved a photographic record; a hand drawn plan and section and/or photogrammetric equivalent; and a written record using pro-forma recording sheets in digital format. Stratigraphic relationships were recorded using a "Harris-Winchester matrix" diagram. Soil colours were logged using a Munsell soil colour chart. Features selected for drawing were carried out on dimensionally stable media at 1:20 for plans and 1:10 for sections. All archaeological remains were levelled to Ordnance Datum, and manually referenced against a Temporary Bench Mark (TBM) established by GPS during the Site set-up. A photographic record of the excavation was carried out, and involved the sole use of digital images. This included detailed and general photographs of the principal features discovered and working shots of the excavation as it progressed.

All recording was carried out in accordance with a Selection Strategy for the project and follows advice set-out in the Selection Toolkit produced by the ClfA (accessed January 2024). The Selection Strategy is guided by the principal aims, research objectives, and broader research objectives of the project; by the requirements of the depository; consultation with appointed specialists; and preferences of the landowner. The Selection Strategy includes a Data Management Plan (DMP)) and follows ClfA advice (https://www.archaeologists.net/digdigital/planning).

Material that met the criteria of the project Selection Strategy was collected and stored by context, with appropriate labelling and packaging, ready for processing. De-selected material was noted by context. Initial cleaning, conservation, packaging and any stabilisation or longer-term conservation measures were undertaken in accordance with relevant professional guidance.

Secure archaeological deposits were sampled for palaeoenvironmental evidence. This included material deemed suitable for C14 scientific dating. Bulk samples were collected in environmental sample bags (between 5 and 20 litres per context) with 50-100% of each context submitted for processing for the recovery of, for example, plant macrofossil and foraminiferal data. Processing of samples was undertaken by specialist archaeological soil sample processing firm GeoFlo Southwest, in accordance with Historic England (formerly English Heritage) guidelines (Campbell et al. 2011).

The deposits and features encountered during the excavation are listed and described in the Appendices and summarised in the following sections. In accordance with standard archaeological practice, context numbers for cuts appear in square brackets, e.g. [100]; layer and fill numbers appear in standard brackets, e.g. (100) with the first digit indicating the trench number: (100) Tr1, (200) Tr2.

Photogrammetry and 3D capture

Photogrammetric plans were assembled on completion of the excavation work and this involved taking horizontal images along each trench at 1m intervals. These were processed using Agisoft Metashape software to produce composite, high resolution, orthogonal images for post-excavation digitisation.

3D models of the trenches were generated using Polycam on an iPhone 15 pro using LiDAR technology. The models will form part of the Site archive and will also be available to view and interact with on our Sketchfab page at https://sketchfab.com/Context_One.

Aerial images were captured with a DJI Mavic Pro drone to produce orthogonal photos of the Site and images as part of the excavation record.

RESULTS: Trench 1

See Figure 14 for orthogonal plan view of excavated trench and Figure 16 for section drawing, and Appendix 1 for context summary with Figure 51 for detailed plan. Other photos are included in Figures 15 & 17-18.

Tr1 was positioned across the large circular cropmark. The corresponding geophysical anomaly (number 30) is consistent with a major ditch with a possible entrance to the north-east (Caldwell 2023, 5).

Both sections in Tr1 [101] and [115] revealed that the ditch had moderately steeply sloping sides and a flat base, and measured c. 3.20m wide between the top edges and between 1.00m and 1.50m wide in the base (depending on the extent of erosion). Section [101] was the main intervention and was carried through to the base of the feature, establishing a depth of 1.00m. The ditch had been cut through the natural slate (102); while this appeared to be stable, it was found to fragment easily and may have eroded reasonably quickly. This may account for several depressions in the upper surface of the natural on either side of the ditch, which were initially thought to be post-holes but on excavation were found to have no convincing form.

Figure 15. Initial cleaning of Tr1 (looking NW)

Twelve fills were identified with no evidence of a re-cut however there were at least two distinct phases. The upper fills were less stoney while the lower fills were considerably more slatey. This suggests that the latter may have derived from erosion and slumping of a bank on the interior/ south-east side, formed by upcast from digging through the bedrock.

The primary fill (114) (125) extended across the base of the trench and measured 0.12m deep. Almost exclusively it consisted of slates, some large at <0.10m and all within a loose matrix, and may represent initial stabilisation of the feature edges or early bank collapse. Thinner deposits covered (114) at the inner (113) and outer (111) edges respectively. The inner deposit (113) (124) consisted of a fine soil with very rare inclusions, and was possibly gradually washed or blown into the ditch as sediment. The outer deposit (111) (122) was very slatey within a loose matrix and was probably a continuation of the erosion process. This was very similar to a slatey deposit (112) (123) (above (113) (124)) and probably represents a similar process on the inner side of the ditch. These lower fills were sealed by a thick deposit (110) (121) measuring 0.25m deep, which extended throughout the ditch width and rose up to the present ground surface on the south-east side. This was also a very slatey deposit with a loose matrix and possibly represents collapse from an inner bank. It contained two pottery sherds dated as Middle to Late Iron Age (see Finds section). Of similar character was the overlying deposit (109) (120), measuring 0.11m thick and containing slightly more slates but smaller in size. Again, this rose to the ground surface on the south-east side but did not continue up the north-west side, reinforcing the notion of collapse of an inner bank.

Figure 14. Orthogonal post-excavation plan view of Tr1

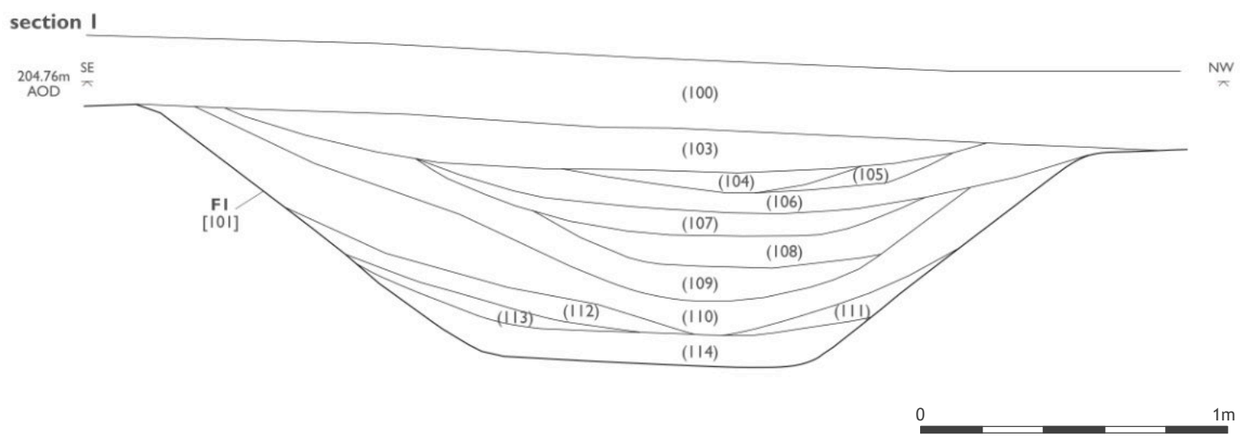


Figure 16. Section drawing of ring-ditch in Tr1

Figure 17. Photograph of drawn section across ring-ditch (1 x 1m scale, looking NNW)

Figure 18. Sections across ring-ditch (2 x 1m scales, looking WSW)

The ditch fills associated with a possible bank collapse were covered by a series of five fills extending from the central part of the ditch towards/ against the north-west side. The lowest of these fills (108) (119) measured *c.* 0.12m deep and contained abundant small fragments of slate. It was similar to the overlying 0.10m deep fill (107) (118) and the overlying 0.14m fill (106) (117). The latter yielded sherds from a small globular jar and several sherds from other vessels, all dated as Middle Iron Age (see Finds section). All three fills represent a combination of silting and erosion gradually deposited over time with a higher degree of material derived from the feature sides. Fill (106) sloped up to the surface of the feature and was partially covered by a small deposit (105); this measured 0.06m deep and contained larger more angular fragments of feldspar, which was observed to varying degrees in most of the contexts. Filling a depression above (105) and (106) was a tertiary fill (104) measuring 0.07m deep. Both (104) and (105) contained notably less slate than the underlying fills and were probably derived from historic ploughing. The uppermost fill (103) (116) almost extended to the the ditch edges and measured 0.15m deep; containing similarly small fragments of slate to (104) and (105), this was also a tertiary fill likely drawn into the remaining depression by historic ploughing.

Figure 19. Excavated sections across ring-ditch from inside the enclosure (1 x 1m scale, looking NNW)

RESULTS: Trench 2

See Figure 20 for orthogonal plan view of excavated trench and Figure 22 for section and profiles, and Appendix 1 for context summary with Figure 52 for detailed plan. Other photographs are referenced in the text.

Trench 2 was positioned across the central area of the large circular cropmark. Initial results of the geophysical survey suggested anomalies that could relate to a circular post-built structure however this was not included as a potential archaeological feature in the geophysical survey report issued after the excavation (Caldwell 2023, 5).

Figure 21. Early stages of excavating Tr2 (looking SE)

The topsoil (200) measured *c.* 0.25m deep, beneath which was an intermittent soil horizon (201) covering the natural geology (202), which comprised interleaving beds of Mort slate and red shillet with small patches of red clay. The compacted soil horizon (201) had a relatively smooth and level upper surface and contained tiny fragments of crushed slate (Figure 21). This might suggest a trample horizon. The 0.05m depth was removed during two episodes of trowelling (including by the older members of MAYA). It was present throughout much of the trench except for the south-east end (*c.* 3m) where the topsoil directly covered the geology (202), which in this location was fissured Mort slate.

Seven archaeological features were initially identified within the trench, although excavation showed that a possible gully [210] was very ephemeral. Also, a small circular feature F4 measuring 0.10m deep and 0.13m by 0.15m wide was only interpreted as a possible post-setting on the basis of its proximity to other small post features.

More convincing were two small post-holes, F2 and F3, excavated at the north-west end of the trench. The largest F3 [206] measured 0.23m by 0.27m with vertical edges to a depth of 0.16-0.20m, descending to a sloping shelf from which a post-pipe [221] had been excavated (Figure 23). The post-pipe [221] element of the feature measured 0.16m in diameter with an additional depth of 0.13m. It had straight steeply sloping sides and a flat base; the slightly squarish shape suggests this may have held an oak post. The soil fill (205) of the post-hole contained charcoal while the post-pipe fill (211) also contained burnt slate, charcoal fragments and burnt bone, above a primary fill (220) which yielded charcoal flecks, burnt bone (identified as probable animal bone) and small stones. A sample of burnt bone from this layer was radiocarbon-dated to 329-52 cal. BCE at 95.4% probability (SUERC-127992; 2118±24 BP) (see Appendix 2), within the Middle to Late Iron Age. A couple of pottery sherds from the post-pipe fills are both dated to the Middle to Late Iron Age (see Finds section). In a straight line to the north-east was a small post-hole F2 [204]; this measured 0.14m by 0.16m but was only 0.08m deep; the shallowness might indicate a post-setting of similar size to that represented by post-pipe [221] although the edge and base were concave.

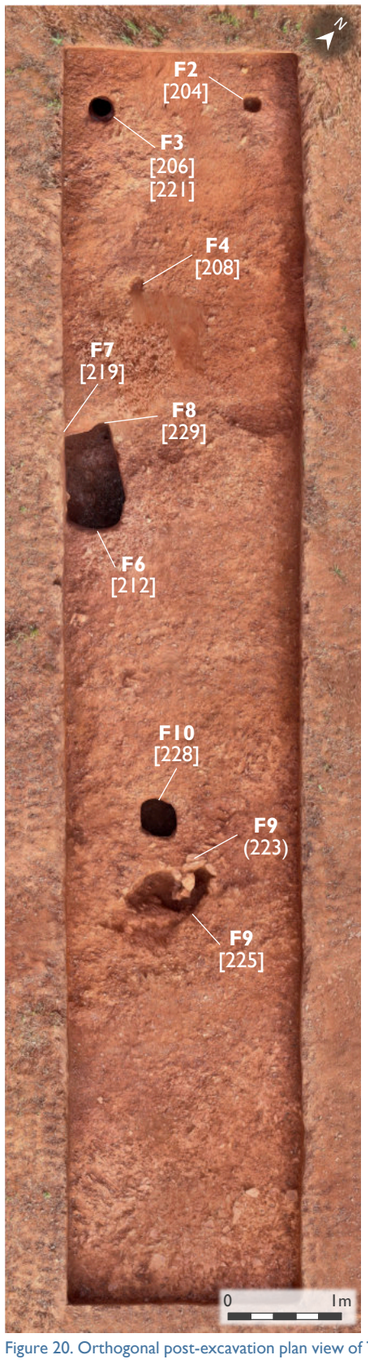


Figure 20. Orthogonal post-excavation plan view of Tr2

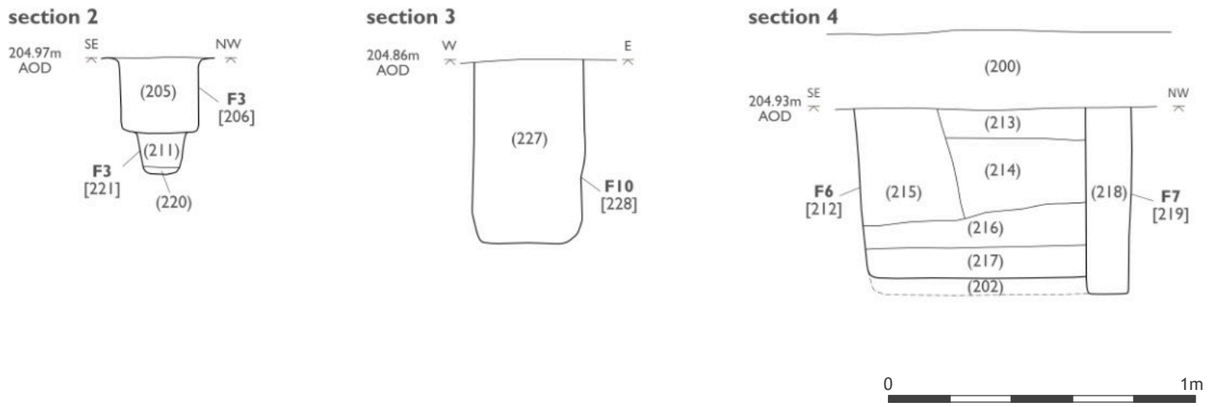


Figure 22. Section drawings of features in Tr2

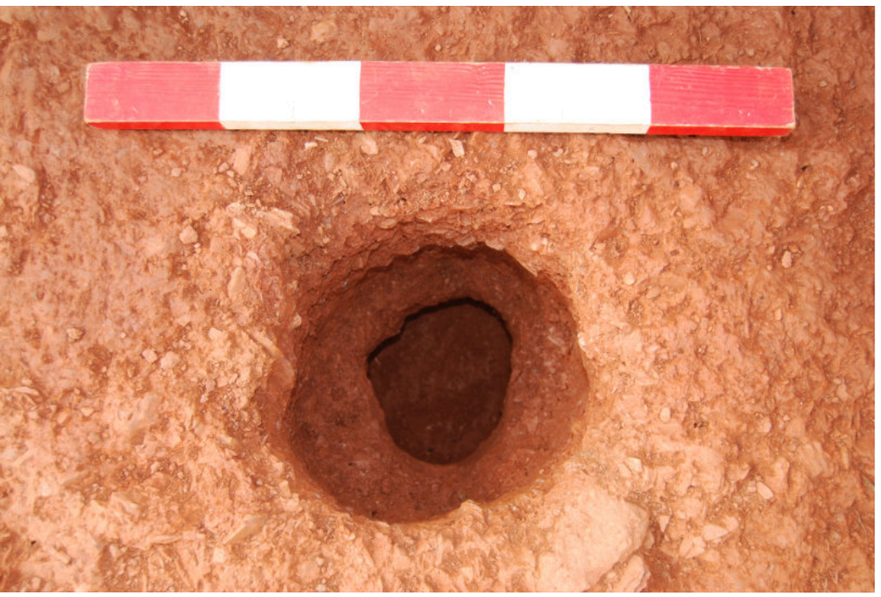


Figure 23. Post-hole F3 (1 x 0.50m scale,looking SW)

The largest feature in the trench was situated c. 3m from F3, and comprised a pit F6 [212] with two post-pipes F7 [219] and F8 [229]. The south-west baulk provided a section during excavation, the excavated width within the trench indicating a feature exceeding 0.60m in width and 0.90m long (Figure 24). The pit had steeply sloping straight sides although the soft slate natural horizon was over-excavated by *c.* 0.05m and the flat base was therefore uncertain (Figure 25). The primary fill (217) measured 0.10m deep as did the overlying fill (216). Both layers contained charcoal flecks but were also very stoney suggesting they were partly derived from slumping of the natural. A single dateable artefact was recovered from fill (216); this was the only iron nail recovered from the Site and is broadly dateable as Iron Age. Burnt bone (identified as probable animal bone) from this layer was radiocarbon-dated to 348-74 cal. BCE at 95.4% probability (SUERC-127991; 2142±22 BP) (see Appendix 2), within the Middle to Late Iron Age. On the south-eastern side of the pit was a column of darker soil containing pitched large slates (215) sloping towards the centre of the pit. This may represent collapsed packing stones following the removal of a large post. Two fills abutted the north-west side of this column; both fills contained charcoal flecks, burnt bone and small stones, the lower fill (214) measuring 0.20m deep and the upper fill (213) measuring 0.10m. One or two pottery sherds of Romano-British date were recovered from both these fills along with two pieces of burnt clay from (213) (see Finds section). Fill (214) yielded charcoal (five large pieces and smaller fragments) and a nutshell fragment. These fills probably relate to backfilling following extraction of the post represented by the stone packing (215). The two post-pipes were at the north-west edge of pit F3 and measured 0.60m deep, therefore

Figure 24. Pit F6 with post-pipes F7 & F8 (1 x 1m scale, looking SW)

Figure 25. Overhead shot of pit F6 with post-pipes F7 & F8 (1 x 0.50m scale, looking SE)

0.05m deeper than the excavated base of the pit. Post-pipe F7 [219] was circular in plan (0.15m diameter) with steeply sloping straight sides and a flat base, and was captured in the trench section. The fill (218) was slightly stonier than pit fills (213) and (214), suggesting the post-pipe was still present when backfilling of the main pit took place. However it should be noted that the trench section appears to have been close to the edge of the pit and post-pipe and therefore relationships could not be reliably established. Post-pipe F8 [229] was sub-circular (0.22m by 0.15m) but also with steeply sloping straight sides and a flat base. The backfill (230) was the same as that of the other post-pipe. Several layers of slates had been placed at the base of both post-pipes presumably to support the posts.

A further post-hole F10 [228] was situated 3m to the south-east of pit [212]. This large post-hole was sub-circular in plan measuring 0.31m by 0.35m and 0.59m deep, with vertical straight edges and a flat base lined with slate. Stone packing (227) for the post was still present around the edges with voids between the stones, suggesting they were dislodged by removal of the post (Figure 26). The main fill (226) relates to backfilling after the post was extracted and contained small slates. A sherd of pottery was recovered from the upper edge of the stone packing (227), indicating a Middle to Late Iron Age date for the feature (see Finds section).

Immediately south-east of post-hole F10, was a double post-setting F9 [225] formed by Mort slate (223). The north-east side was well-defined delineating a 0.15m squarish recess presumably for a post (Figure 27). The south-west side had either been disturbed so that only the stones bordering the other side were *in situ*. Both post-settings had steeply sloping concave sides and slightly concave bases. A single backfill (224) within both post settings contained flecks of charcoal, small burnt slate, small stones and large fragments of Mort slate.

Figure 26. Post-hole F10 with post-packing (1 x 0.50m scale, looking SE)

Figure 27. Post-setting F9 (1 x 1m scale, looking NW)

RESULTS: Trench 3

See Figure 28 for orthogonal plan view of excavated trench, and Appendix 1 for context summary with Figure 53 for detailed plan. Other photographs are referenced in the text.

Trench 3 was positioned within the north-east quadrant of the area enclosed by the large circular cropmark. The initial results of the geophysical survey suggested an anomaly that could relate to a circular construction however this was not included as a potential archaeological feature in the subsequent geophysical survey report, which showed nothing in the trench location (Caldwell 2023, 5).

The topsoil (300) measured *c.* 0.12m deep, above a subsoil (301) measuring *c.* 0.13m deep and containing sparse quantities of tiny crushed slate fragments. This subsoil covered the uppermost archaeological horizon (302), a relatively homogenous 0.10m deep soil layer with spare quantities of small slate fragments slate, burnt slate and degraded limestone. This layer extended across the entire trench and was partially excavated by MAYA. Small burnt clay pieces were recovered from beneath the northern end of this layer, and initially thought to be pottery.

Figure 29. Removal of soil layer (302) (2 x 1m scales, looking SSE)

A further soil layer (303) was exposed following removal of the overlying (302) (Figure 29). This measured 0.10m thick and was present at the southern end of the trench, and extending over and concealing gully F11. It commonly contained burnt crushed slate and

Figure 30. Excavation of surfaces (303) & (304) (looking SSE)

charcoal, with charcoal patches and concentrations on the eastern side of the trench but not at the southern end. The inclusions and the smooth upper surface point towards this being a trample layer. This gave way to another possibly contemporary occupation surface (304) towards the middle of the trench which extended northwards, with (303) possibly lapping over the southern tail edge of (304) (Figure 30). This layer (304) was more compacted than (303) and measured only 0.05m deep. It contained similar quantities of burnt crushed slate and tiny slate fragments however the presence of larger slate pieces gave it a cobbled appearance. Patches of degraded yellowish-white limestone (resembling lime mortar) and charcoal trample were noted.

Layer (304) was removed along the eastern half of the trench to expose a further underlying soil horizon (305) also measuring 0.05m deep (Figure 31). This also contained moderate quantities of burnt crushed slate and tiny slate fragments but very few larger stones, the smooth upper surface suggesting this was an earlier surface. The northern 0.60m of the trench was different, having been discoloured to

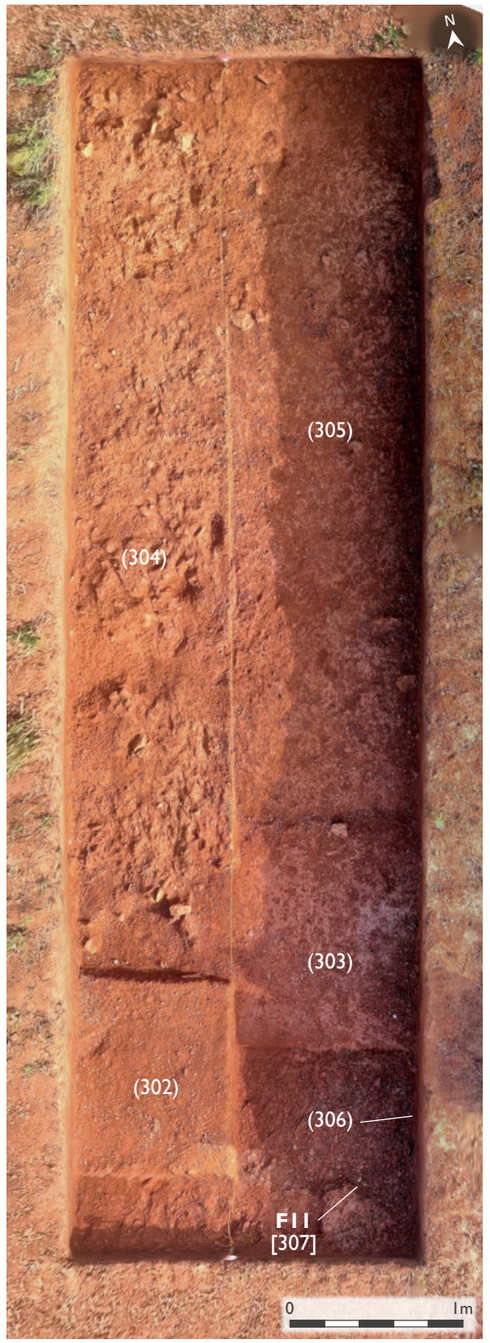


Figure 28. Orthogonal post-excavation plan view of Tr3

a pale yellow colour with some burnt stone. The whole surface (305) seems slightly heat-affected and it was suspected that a hearth may have been situated just outside the northern end of the trench. There was insufficient time to excavate this layer however the depth of 0.05m was established within the north side of gully F11 [307].

Gully F11 [307] was found beneath layer (303) on the last day of the excavation, corresponding with a faint anomaly indicated on the unfiltered geophysics plot. It measured 0.73m wide and 0.17m deep, with moderately sloping concave sides and a flat base (Figure 32). Although only a short stretch was exposed within the sondage on the eastern side of the trench, a slight arc was evident which revealed it enclosed the area with the surfaces. The backfill (306) was similar to the occupation horizons although friable in consistency as opposed to compact, and commonly containing burnt crushed slate but also small slates and stones. The flat base of the gully suggests it may have contained flat timbers perhaps indicating it was a wall-trench for a curved structure (Figure 33).

To the south of the arc-shaped gully F11 occupation layer (303) directly covered the natural shillet (308), whereas to the north layer (303) was directly above surface (305). This reveals that surface (305) was only present inside the arc-shaped gully and was probably contemporary with the structure. By contrast, layer (303) spread over the gully fill (306) and therefore post-dated abandonment of the structure.

Figure 31. Cobble surface (304) & earth surface (305) with arc-shaped gully F at far end (2 x 1m scales, looking SSE)

Figure 32. Arc-shaped gully F11 with earth surface (305) & cobble surface (304) extending northwards (2 x 1m scales, looking NNW)

Figure 33. Arc-shaped gully F11 (1 x 0.50m scale, looking WNW)

RESULTS: Trench 4

See Figure 34 for orthogonal plan view of excavated trench, and Appendix 1 for context summary with Figure 54 for detailed plan. Other photographs are referenced in the text.

Trench 4 was positioned at the intersection of the large circular ring-ditch with a major linear ditch to the east (Figure 35). The latter is geophysical anomaly number 43 which together with number 44 relates to a possible rectangular enclosure already recognised from cropmarks (Caldwell 2023, 5).

Figure 35. Excavation underway in Tr4

The topsoil (400) measured c. 0.26m deep and directly covered the two ditches and the natural geology (401). The edge of the large circular enclosure ditch F12 [402] ran from north to south through the western edge of the trench, with moderately sloping straight sides and a flat base. The ditch was excavated to a depth of 0.75m and two fills were noted; the lower fill (403) measured 0.30m deep and commonly contained small slate fragments and the overlying layer (404) was similar but with slightly more slate and measured 0.40m deep.

The large linear ditch F13 [405] cut through both layers of the circular ditch

Figure 36. Section of ditch F12 cut by ditch F13 (1 x 1m scale, looking WSW)

F12 (Figure 36) . The full depth of this feature could not be ascertained due to constraints of working within a small sondage. However, the lowest fill (410) comprised a small deposit of large flat slates laid horizontally within a soil matrix - this may represent a slumped deposit at the base of the ditch. The ditch [405] was excavated to a depth of 0.75m and the sides were straight and moderately sloping (Figure 37). Further backfills were recorded within the ditch, all broadly similar comprising friable soil. The lowest layer (406) measured 0.10m deep and contained small amounts of crushed slate and some larger slate pitched on edge, probably relating to tips. This also yielded several sherds of later Romano-British pottery (see Finds section). The overlying layer (407) measured 0.15m deep and represented a slate and stone tip line. This was covered by a deeper fill (408) measuring 0.20m thick also with sparse small slates but with charcoal. The uppermost fill (409) was similar but without charcoal, and measured 0.30m deep.

Figure 34. Orthogonal post-excavation plan view of Tr4

Figure 37. South-east edge of ditch F13 running into ditch F12 (1 x 1m scale, looking SSE)

THE FINDS

General

A small assemblage of artefacts and ecofacts were recovered from the excavation, comprising pottery; worked stone; a single Fe nail; fired clay; burnt bone; charcoal; and carbonised plant remains.

The artefacts

Pottery, by Dr Imogen Wood

Summary

The assemblage is very small, consisting of 33 sherds weighing 113g, the dates of which range from Middle Iron Age to the Romano-British period. The assessment of this material provides provisional dating evidence for many of the excavated features on the Site and supports the stratigraphical interpretation.

Methods

The methods and terminology used conform to the 'Standards in pottery studies in archaeology' guidance (2016) and CIFA guidelines for specialist reporting (https://www.archaeologists.net/reporting-toolkit). The sherds were counted and weighed, and the sherd type noted (rim/body/handle), as far as possible, individual sherds were identified to a broad class. General observations of fabric and surface treatment were noted.

33 sherds from 11 contexts were examined macroscopically with a hand lens at x2 magnification to identify initial fabric groups; these groups were then examined under a binocular microscope at a magnification of x10. This enabled large areas of the surface and edges of sherds to be examined, and in many cases useful diagnostic mineral and rock components to be identified. Sherds have been assessed by a subjective measure of 'condition' from level 1 good, level 2 moderately good, to level 3 abraded using Sorensen's method (Sorensen 1996).

Quantification

Period	No of sherds	Weight (grams)
Middle Iron Age	13	74
Middle to Late Iron Age	5	33
Romano-British	9	35
Undiagnostic/CBM/Stone	6	6
Total	33	148

Table 1. Quantification of pottery by period

Condition of the Assemblage

The condition of the pottery is poor with most sherds being abrasion level 2, followed by level 3 very abraded. This suggests that the sherds are not in their primary deposits, which is unsurprising as most were found in ditches, gullies, pits and post-holes. The vesicular fabric sherd is softer so may have abraded faster.

Fabrics

Siltstone Grog (121) and (227)

10% inclusions, poorly sorted, reduced, soft fired.

Common, fine sandstone/siltstone, muscovite rich yellowish grey in colour, laminated tabular pieces, sub-rounded in shape between 2mm-4mm in size. Very few Grog pieces, grey to pinkish in colour well-rounded 1mm-2mm in size.

Comment, Silty clay tempered with fine sandstone/siltstone and rounded grog pellets.

Vesicular (211)

20% inclusions, poorly sorted, reduced, very soft fired.

Common voids, on surfaces and core of sherd, sub-rounded to rounded in shape and between 1mm-4mm in size. No other inclusions.

Comment, the common voids most likely represent the loss of limestone temper in firing or in an acidic post depositional environment, suggesting it was a calcareous temper.

Organic Tempered (117)

5% inclusions, very poorly sorted, oxidised, soft fired.

Few black voids linear and curvilinear possibly pieces of grass burnt out leaving voids, between 2mm -6mm long and 1mm-2mm wide. Rare limonite FE red pellets, well-rounded between 1mm-4mm in size. Very rare white siltstone, micaceous, well-rounded 9mm in size. Matrix is dominated by muscovite mica fine quartz sandy grains, FE pellets and white siltstone.

Comment, this is a poor-quality siltstone clay from a waterlogged source as indicated by the FE iron rich limonite pellets. The voids caused by burnt organic/grass, could be temper or equally incorporated accidentally and not removed. A riverine valley clay source on siltstone geology is possible.

Coarse Red Sandstone fabrics (117), (214) and (220)

This fabric is comparable with Rock tempered fabrics from Steart Point Peninsula near Bridgwater (Wood 2017, 92). The derived suite of rocks and minerals is consistent with the Quantock Hills area, most likely the alluvium in river valleys leading off this geology. This is consistent with Fabric 2 identified by Roger Taylor (2008) from medieval pottery found at Brent Knoll Village. He suggests that the Devonian sandstones and siltstones are the nearest source of sand for use as a tempering material (Taylor 2008, 119). The larger coarse Red Sandstone inclusions identified in some of the pottery is not always distinctively red in macroscopic analysis due to the leaching of iron oxides but derived from the same source.

-DOR BB1 (406) See National Roman Pottery Database for further information on this fabric.

- Sandy Grey Ware (213) SANCRC see (Evans 2001) for fabric description.

Results

There are ten upper body sherds from (117) fill of enclosure ditch [115] with incised linear and curvilinear decoration forming infilled areas with crosshatching, in a reduced fine quartz sand fabric and smooth interior and exterior surfaces with a sherd thickness of 7mm. The form suggests a small globular cooking jar (Figure 38) . The decoration is typical of South West Decorated Ware SWDW dating to the Middle Iron Age period. The fabric is micaceous which is a common sandy fabric comparable to Peacock's 'Glastonbury Ware' Fabric 2 which was produced in the Shepton Mallet area (1969, 46-7).

The partially oxidised and reduced base sherd from (117) in a coarse Red Sandstone fabric is abraded possibly through use, but the oxidised interior surface is more likely due to being burnt at a high temperature in the post depositional environment. The sherd thickness of 6mm suggests a fine jar. Another small body sherd is reduced in the same Red Sandstone fabric. The surfaces are abraded so no trace of surface treatment can be seen.

The oxidised upper body sherd from (117) has very abraded surfaces due to the soft micaceous mudstone fabric with burnt out organic matter possibly grass. (Figure 39) There is part of the neck suggesting an everted rim, the form is difficult to distinguish but could belong to a large jar which has been coil made as seen in cross-section with a sherd thickness of 11mm on the body and 6mm on the neck.

There is also one burnt piece of fine sandstone rock initially considered to be pottery. This is an interesting confirmation of the geology local to the Site and the presence of Red Sandstone which is seen as inclusions in the vessels discussed above.

Two reduced upper body sherds from (121) fill of ditch [115] are most likely Middle to Late Iron Age in date (Figure 40). They have partially burnished exterior surfaces in a Siltstone Grog fabric, as described above, with a sherd thickness of 10-11mm.

Figure 38. Middle Iron Age decorated pottery sherds from small globular cooking jar (South West Decorated Ware)

Figure 39. Middle/ Late Iron Age pottery sherd (coarse Red Sandstone fabric)

Figure 40. Middle Iron Age pottery sherd from small globular cooking jar (Siltstone Grog fabric)

Figure 41. Romano-British sherd with lattice motif (locally made)

Figure 42. Middle to Late Iron Age pottery sherd (calcareous temper)

Figure 43. Later Romano-British pottery sherd of Dorset Black Burnished Ware, possibly a beaker or upright jar

0 50mm

The single oxidised body sherd from (227) fill of [228] is very abraded but the coarse Siltstone Grog fabric would suggest it is a similar date to the sherd in (121).

The conjoining upper body sherds from (214) fill of pit/ post-hole [212] are decorated with a horizontal incised line with diagonal lines coming down to meet it (Figure 41). The sherd has been burnt post-firing which has abraded the original burnished surfaces of this well-made high fired vessel. The reduced fabric contains Red Sandstone rock fragments. The decoration could be imitating BB1 lattice motif which would suggest a Romano-British date possibly locally produced.

An abraded sherd from (220) base fill of post-pipe [221] <8> has the same reduced Red Sandstone tempered fabric. There is some internal charring, but the small size of the sherd limits comment on the form. A body sherd from (211) associated with [221] is highly abraded in a reduced vesicular fabric with no decoration and some internal charring (Figure 42).

The six sherds from (406) fill of rectilinear enclosure ditch [405] are Dorset Black Burnished Ware DOR BB1 and are part of the same vessel, possibly a beaker form or upright jar (Figure 43). The slipped and wiped surface treatment suggests later Roman *c.* late 2nd-4th CE..

There is a Sandy Grey Ware SANCRC basal angle sherd from (213) upper fill of pit [212] <5> which is very abraded making it difficult to assign it to a form, but this pottery is in general circulation with DOR BB1 date to a similar later period as the BB1 sherds (Evans 2001). The two other pieces of ceramic from this context are amorphous pieces of burnt clay, and it is not clear if they are ceramic building material.

Identification of the group of very small, abraded burnt clay pieces recovered from environmental processing has not been possible. Pieces from (302) are in a fine fabric which has no inclusions, the piece from (113) <14> is so small it can only be assigned to being ceramic and (222) <4> is a stone.

Conclusion

The results of the fabric analysis and characterization of this small assemblage has enabled some provisional dating for the features.

The diagnostic Coarse Red Sandstone fabrics have been identified at Steart Point, Somerset dating to the Middle/ Late Iron Age 400 BCE-CE 43. Other fabrics in the Steart Point assemblage included, grog tempered, Calcareous limestone temper and Organic tempered pottery (Wood 2017). This could suggest that the fabrics are all contemporary and within the range of Mid/ Late Iron Age ceramic production.

The diagnostic pottery from (117) South Western Decorated Ware and (121) from ditch [115] strongly suggest a Middle Iron Age date. The post-hole [206] containing sherds from (211) and (220) and post-hole [228] sherds from (227) are likely to be Middle to Late Iron Age. The rectilinear enclosure ditch [405] containing DOR BB1 (406) is later Romano-British possibly around the late 2nd -4th century CE. It is possible that the large post-hole [212] with sherds from (213) Grey ware and (214) is also Romano-British in date.

Glossary

Abrasion (Sorensen 1996)

Level 1, Fresh colour of core slightly patinated but unaltered surfaces with sharp corners and edges

Level 2, Moderate abrasion, Core colour patinated some definition in the sharpness of the corners lost.

Level 3, colour patinated, rounding of corners and sherd outline, surfaces somewhat eroded.

Worked stone, by Dr Cheryl Green

A total of nine stone objects were recovered during the excavations (Table 2).

An upper fill (117) = (105) of ring-ditch F1 produced a fragment of slate roof tile with a peg hole. Also from this context were three fragments of stone with at least one flat surface. One of these fragments is a coarse-grained Red sandstone and retains one flat surface with curved striations often associated with quern stones (for grinding grain). The two other fragments are of a grey sandstone fabric each with one smooth slightly concave surface. These might belong to saddle querns although this is very uncertain given the small specimen size. Alternatively, as these fabrics have a local provenance it might simply be that the flat sides relate to the upper surfaces of rock strata.

Half a water-worn stone pebble was also found in the same context (117) = (120) and has one abraded end possibly caused by repeated concussion. The stone is fist-sized and has distinctly smooth areas where it may have been gripped (Figure 44). These features might suggest it is a hammerstone or pounding stone.

Three fragments of worked stone were recovered from fill (120) = (109) of ditch F1, which possibly represents collapse of the inner bank. These include two large pieces from different querns and a whetstone. The most convincing quern fragment is a fine-grained Red sandstone with one smooth edge and two smooth flat surfaces, one pecked to aid the grinding process (Figure 45). The other possible quern object is a fine-grained Red sandstone with one flat, worn surface and a very smooth concave opposing surface. The sides are intact and provide a width of 12cm, suggesting this may be a small rectangular saddle quern. The whetstone was one of two objects of this type recovered from the excavation, the other being unstratified (Figure 46). Both measure 7cm and 8cm long respectively (although the ends have been broken off in antiquity) but are identical in terms of depth and width (2cm and 3cm respectively). Both are a very fine-grained sandstone (one red and one grey) and have been worn smooth; two edges of the object from the ditch have been worn away to a chamfer.

Figure 44. Hammerstone or pounding stone

Figure 45. Possible quern fragment with pecked surface

Figure 46. Whetstone

0 50mm

Conclusion

The single roof slate was probably derived from Victorian farm buildings that were situated nearby. The prehistoric stone objects seem to have utilised sources that are present on the Site, as opposed to being introduced from further afield. Petrographic analysis would be necessary to establish provenance and would be worthwhile for the most diagnostic objects should further work take place on the Site.

Context no.	Material	Type	Qty	Weight (grams)
117	Slate	Roof tile	1	96
117	Red sandstone	?quern	1	159
117	Grey sandstone	?quern	1	106
117	Grey sandstone	?quern	1	48
117	Fine-grained slightly micaceous sandstone pebble	Hammer stone	1	326
120	Red sandstone	Quern	1	470
120	Fine-grained red sandstone	?quern	1	1181
120	Fine-grained red sandstone	Whetstone	1	93
U/S	Fine-grained grey sandstone	Whetstone	1	97
216	Fe	Nail	1	10
213	Cu slag	?Metal working residue	3	41
117	Fe slag	?Metal working residue	3	1896
213	Fired clay	Polisher	1	13.4
215	Baked/ fired clay	Debris	5	3.1

Table 2. Stone objects & other finds by context

Other artefacts, by Dr Cheryl Green

(See Table 2). A single FE nail was recovered from post-pit F6 fill (216). The nail has a square sectioned body, the end of which has been broken off, and a roughly shaped square head (broken at one corner). The nail is broadly dateable to the Iron Age. The head is slightly bent to one side suggesting it has been used.

Six fragments of possible metal working residues weighing a total of 1938g were recovered from two contexts. The three fragments from post-pit F6 fill (213) weigh a total of 41g. The structure is porous with numerous bubbles and cavities in a hard but brittle reddish-brown matrix (Figure 47). This was interspersed with veins of copper suggestive of waste material associated with bronze working. The three larger fragments from ditch F1 fill (117) weigh a total of 1896g. The unbroken surfaces are rounded and nodular, while the exposed rounded cavities have either a matt or glassy appearance, the reddish colour indicating a high iron content (Figure 48). The fragments may represent undiagnostic copper and iron slag although it may be derived from clay exposed to high temperature. Specialist analysis would be necessary to provide a definitive interpretation of the material.

A single fired clay object was recovered from post-pit F6 fill (213) (Figure 49). This oval shaped object measured 32mm long by 20mm wide and has a flattened edge to one side with three parallel widely-spaced diagonal lines. These may be impressions relating to use or deliberate incisions. One side is notably smooth and blackened, with the rest of the object being less blackened. This might suggest the object was used as a a fine polisher.

Five fragments of baked/ fired clay measuring between 5mm and 12mm were recovered from a soil sample residue from post-pit F6 fill (216).

Figure 47. Metal working residue (copper)

Figure 48. Metal working residue (iron) (Not to Scale)

Figure 49. Fired clay object

0 50mm

The bone, by Dr Clare Randall

A small quantity of bone was submitted for analysis, most of which derived from five bulk soil samples (with one hand-collected bag), from five contexts (Table 3). Most of the material was very small (under 10mm greatest dimension), heavily comminuted, and could not be identified to species; it could not be positively identified as human, but neither could any animal species be positively identified.

The fragments of bone were very small, and even where numerous, each sample weighed 1g or less. The bone was all heavily burnt, being uniformly calcined white. In two cases, it is likely that the material represents part of a long bone, and some cracking could be observed. The majority of the material was abraded.

The small samples and condition of the bone precludes much comment. Even if this material were of human origin, the bone weights of the deposits are far below those which would be likely to be seen in a cremation burial. It is likely that the material is derived from incidentally burnt animal remains.

Context no.	Sample no.	No. specimens	Species	Element	Colour	Cracking	Weight (grams)	Comment
211	7	21	Un-Id	-	White		<1	Appears abraded - all under 10mm
213	5	12	Un-Id	-	White		<1	Appears abraded - all under 10mm
214	2	15	Un-Id	-	White		<1	Appears abraded - all under 10mm
216		2	Un-Id	?Long bone	White	Transverse and longitudinal	1	
216	3	5	Un-Id	-	White		<1	Appears abraded - all under 10mm
220	8	1	Un-Id	?Long bone	White	Transverse	1	
220	8	28	Un-Id	-	White		1	Appears abraded - all under 10mm

Table 3. Calcined bone

Other ecofacts, by Dr Cheryl Green

Fourteen soil samples were submitted to GeoFlo for processing by flotation method, using a flot mesh of 0.25mm and a residue mesh of 0.50mm. The finds extracted from the residues have been added to the relevant finds category (pottery, stone, baked/ fired clay, slag, burnt bone, and carbonised plant remains (CPR)). The CPR was submitted for specialist analysis (see below).

Assessment of the charred plant remains (CPR), by Dr Wendy J Carruthers

During the excavation bulk soil samples were taken from a range of features and deposits in order recover environmental and economic information. The samples were processed by GeoFlo Southwest using standard methods of floatation. A 0.25mm mesh sieve was used to recover the flots and 1mm and 4mm meshes were used to retain the residues. The dried residues were sorted for finds and environmental remains. Fourteen samples from three of the trenches were sent to the author for assessment.

Results

Trench 1: One flot from Trench 1 was assessed, sample 14, context 113. A 17 litre soil sample from the lower fill of ring ditch F1 produced a small flot, most of which consisted of modern roots. Although some large and small charcoal was recovered (less than 5ml) the only identifiable plant macrofossil was a small fragment of hazelnut shell (*Corylus avellana*). Three other charred fragments were too poorly preserved to be identified. This sample has no further potential, though it is possible that one of the larger fragments of charcoal might be suitable for radiocarbon dating if required. The species would need to be checked by a charcoal specialist to see whether they were suitable.

Trench 2: The majority of the samples assessed (ten samples) came from post-holes, and a single large post-pit, in Trench 2. This trench was excavated in order to investigate activities taking place in the central area within the enclosure ditch F1. As the samples mainly came from post-holes the soil volumes were often quite low, ranging from 2 (post-hole F3) to 26 litres (post-pit F6). Despite this, some of the features produced quite a few charred plant remains.

Samples 1 and 9 produced very few charred plant remains (three items and one item respectively) providing little information with which to either suggest a date for the feature, or indicate what the source of the charred remains might have been. Sample 1 contained an indeterminate cereal fragment, a fragment of possible onion couch tuber (*Arrhenatherum elatius* var. *bulbosum*) and a possible fragment of brome grass (cf. *Bromus* sp.). Onion couch tubers are often associated with cremations though the plant can also grow as an arable weed and can be found in grasslands that were once cultivated for cereals. Sample 9 contained just one poorly preserved emmer/spelt spikelet fork (*Triticum dicoccum/spelta*), a very small item that could have been washed down the soil profile, or perhaps a trace of burnt crop processing waste dating to the prehistoric and Roman periods.

The six most productive samples came from two features; post-pit F6 [212] and post-hole F3 [206]. Post-hole F3 was the most productive feature on the site, containing 8.56 charred items per litre compared with 1.87 items per litre of soil processed from post-pit F6. The characters of the assemblages in both of these features were similar in that burnt waste from processing both emmer (*Triticum dicoccum*) and spelt wheat (*T. spelta*) were the main components. The total numbers of items were too low for these figures to be reliable, but in both features emmer glume bases were four times more frequent than spelt glume bases (using the conversion figure of one spikelet fork = two glume bases). However, there were also a few small

differences between the two features. Cereal grains were a little more frequent than chaff fragments in post-pit F6 whilst they were much less frequent than chaff in post-hole F3. Of the weed species in post-hole F3 members of the dock family (Polygonaceae) were quite common whilst in post-pit F6 Polygonaceae were scarce but brome grasses were much more common. One member of the Polygonaceae, sheep's sorrel *(Rumex acetosella*) is an indicator of acidic soils, suggesting that emmer and spelt was probably being grown on the local, acidic soils of the Quantocks. This was only present in post-pit F3.

The differences between the assemblages in the two features could be due to small differences in the types of burnt waste being deposited in each feature, for example post-pit F6 may contain a few burnt semi-processed spikelets or some burnt processed grain as well as chaff. Alternatively they could indicate that the features date to slightly different periods of activity, or they derive from crops grown on different soils. Several members of the Polygonaceae grow on nutrient-rich soils. The finds evidence suggests that feature F6 dates to the Late Iron Age to Early Romano-British period (Cheryl Green, Assessment Report 2024). This date would fit in with the composition of the cereal assemblages, particularly as rye brome (*Bromus secalinus*) was present in this feature and this species is not likely to be much earlier in date.

Hazelnut shell fragments were quite common in the samples from this trench, being present in five of the eight samples, albeit in small fragments and low numbers (28 fragments in total). This could be residual but is just as likely to be contemporary as hazelnuts continued to be valued as a snack food through the prehistoric and Roman periods, particularly in areas where cereal yields were not always reliable.

Trench 3: Three samples from Trench 3 were assessed; occupation horizon 303 (sample 11), cobbled surface 304 (sample 12), and occupation horizon 306 (sample 13). Despite a total of 25 litres of soil being processed from these deposits very little charcoal was recovered and no charred plant macrofossils were present. There was also evidence of modern contamination as uncharred straw and modern roots were common. None of these samples have any further potential.

Comparisons with Other Sites & Further Potential

Soils in the Quantocks are nutrient-poor, fairly acidic and free-draining. To the north-west of Broomfield the upland areas support dry heathland and upland pastures today on the acidic soils. Some distance to the south of the site, beyond the Quantocks, richer loamy/clayey soils are of moderate to high fertility (www.landis.org/soilscapes/).

Two sites around 30 miles to the south east of the Quantocks have produced features ranging from the Middle Bronze Age to the Iron Age that contained fairly equal numbers of emmer and spelt grains and chaff fragments. The sites are Somerton Door, Somerton (Carruthers 2016, 12) and Ham Hill Quarry, Hamdon Hill, Montacute (Stevens 2006, 56). The radiocarbon date on a spelt-type grain (spelt glume bases were also identified in the feature) from a charcoal-rich post-hole at Somerton Dor is one of the earliest records for the arrival of spelt in the south-west; 1415-1260 cal BC (SUERC-59134). Even though this 'new' cereal crop was present in the south-west at a similar time to most of the south-east and central southern England it did not spread into much of the south-west and south Wales until the Iron Age. Emmer continued to be an important crop for much longer in this area in comparison with central southern England, perhaps because the calcareous soils in southern England produced better yields than the soils in the south-west and parts of the south-east.

Comparing the three sites, there were also some similarities in the weed taxa present, particularly with Ham Hill, suggesting that similar soils were being cultivated. However, sheep's sorrel was not mentioned in the Ham Hill report, reflecting the more acidic soils found in the Quantocks. Much larger numbers of samples were taken and larger volumes of soil were processed at Ham Hill Quarry so close comparisons are not valid.

Further potential – The only samples with further potential came from features in Trench 2. Because the flots from all of the samples were reasonably small they were sorted during the assessment rather than scanned, so there is no further work to be done on the flots. Should further work take place in the future, a species list can be provided and additional sites will be found with which to compare the samples. Any sites in the Quantocks that have produced charred plant remains would be particularly important. Apart from this small amount of work no further work on the flots themselves is required.

Artefact/ Ecofact Archive Recommendations

All the artefacts and ecofacts have future research potential and will be retained for long-term curation with the exception of the following, which will be disposed of:

- 19th century roof slate from context (117);
- very small, abraded burnt clay pieces from (302), (113), (222);
- baked/ fired clay from (216);
- soil sample residues (no organic, burnt or mineralised inclusions are present following flotation and sieving).

Also, only the best exemplar stone objects will form part of the physical archive.

DISCUSSION

The aim of the community excavation at Broomfield was to give volunteers from QLPS an opportunity to investigate the 93m diameter circular cropmark, previously only known from aerial photographs (Figure 50). The geophysical survey established that the cropmark was a substantial ring-ditch and the excavation characterised the feature in more detail. Two trenches targeted some of the possible features inside the ring-ditch in the hope of discovering whether the ring-ditch originated as a monument or perhaps enclosed an area of occupation. A further trench investigated the relationship between one of several external ditches and the ring-ditch.

The section in Tr1 across the large ring-ditch (F1) exposed a consistent profile along the 6m wide excavation trench, the steeply sloping sides terminating quite sharply to a flat base. It was found to measure 3m wide and 1m deep with a wide flat base, probably with an internal bank. However, the width between the two sides was variable owing to differential weathering of the natural undulating shale beds through which the ditch was cut. The fissile character of the geology accounts for the earliest ditch fills which are dominated by shale, although a small deposit of fine soil (113) against the south-east side probably represents a wind/ waterborne deposit that may have derived from an inner bank. Further evidence of an inner bank comes from a very thick shale fill which appears to have entered the top of the ditch from the south-east side (110), followed by a further episode of slumping (109) from the same direction. These deposits may relate to the partial collapse of the postulated bank. No physical evidence of the bank remained however the surface of the natural on either side of the ditch had been scoured by historic ploughing. The remaining shallower fills ((105), (106), (107) and (108)) relate to more gradual processes of silting and erosion, and the last two fills ((103) and (104)) were likely tertiary fills introduced by the spread of material during historic ploughing.

In terms of dating, only one of the lower fills ((110) = (121)) produced dateable material along with one of the secondary fills (106); this comprised

Figure 50. Aerial shot of Trs 1, 2 & 3 looking south towards Blackdown Hills

Middle to Late Iron Age pottery. Should further funds become available, there is potential for radiocarbon dating a single hazelnut shell fragment from the earliest erosion fill (113). However, this was not a primary fill and therefore not overly helpful for indicating when the ditch was first dug.

The archaeology in Tr2 relates to activity in the central area of the circular ring-ditch. The large post-pit F6 demonstrates evidence of two phases of activity, the two lowest fills (216) and (217) perhaps relating to backfilling of a large post in the Middle to Late Iron Age. A collapsed column of stone packing (215) above these fills probably relates to the extraction of a subsequent post in the Romano-British period. The two smaller posts represented by post-pipes [219] and [229] on the edge of this feature were still in place when the pit was backfilled. Perhaps these posts provided additional support while the main uprights were in use or represents a third phase. Exactly equidistant from the centre of the post-pit were the two other deep post-holes, one to the north-west F3, dated Middle to Late Iron Age, and one to the south–east F10, dated Middle Iron Age. These were quite different in form, with one containing a post-pipe and the other retaining stone packing, albeit collapsed and probably caused by extraction.

The spacing of these features may be significant, possibly representing supports for a structure with a large post/s represented by F6. The undated double post-setting F9 to the south-east may relate to an entrance. This would give a structure measuring 6m diameter which is within the parameters of an Iron Age round-house. However, the features appear to reflect upright posts of different types and sizes across at least two phases. Variations in the proportions of processed burnt emmer and spelt wheat in post-hole F3 and post-pit F6, suggests that they belong to separate phases of activity, or derive from crops grown on different soils. Importantly, rye brome in post-pit F6 is unlikely to pre-date the Late Iron Age by very much, which fits with a Late Iron Age to Early Romano-British date for final back-filling. On balance, it seems more likely that the features in Tr2 represent one or more rectilinear structures or an outside gathering place marked by upright posts or totems. The centre of the Site was certainly a *foci* for food preparation and consumption. In addition to the burnt cereal waste in the post features, all of the burnt bone from the Site came from post-hole F3 and the backfills of pit F6. This is likely to be animal bone rather than human, the quantities probably being insufficient for human cremation burials despite the recovery of a single onion couch tuber (which are often associated with cremations). Similarly, most of the hazelnut shell fragments were found in Tr2 along with sherds of cooking pots and jars.

Tr3 exposed evidence of a structure comprising two phases of surfaces and an arc-shaped gully F11. Although the filtered geophysics plot showed no features in the location of Trench 3, the unfiltered plot had suggested a curvilinear which corresponds with the position of the gully. Patches of charcoal and mortar-like patches (probably burnt limestone) on these surfaces suggest they might derive from a nearby hearth. On the limited evidence, it is tentatively suggested that the gully might be the remains of a wall-trench for a circular structure with a diameter of at least 10m. There

was no dating evidence and the soil samples produced very little charcoal and no charred plant macrofossils, This indicates a non-domestic function for the structure. A period of abandonment is suggested by layer (303), with evidence of trample in the form of charcoal patches. However, it was notably less compact than the underlying surfaces and sealed the arc-shaped gully, perhaps representing run-off or spread once the building had gone.

Tr4 explored one of two linear ditches on the eastern side of the ring-ditch, visible on aerial photographs and the geophysics. Time constraints meant that deep excavation of this feature was confined within a narrow sondage. However, the investigation established that the linear ditch F13 had been cut though the outer edge of the ring-ditch and produced later Romano-British pottery. The base of ditch F13 may not have been reached but a small area of horizontally laid slates might relate to slumping. The overlying backfills suggest deliberate backfilling, with the lower two fills formed by tips.

The Middle to Late Iron Age pottery, recovered from ring-ditch F1 and the post-holes in the centre of the enclosure, was locally produced. Fabrics reflect the rocks and minerals found in the Quantock Hills, and are comparable with Coarse Red Sandstone fabrics from Steart Point Peninsula near Bridgwater, and South West Decorated Ware (SWDW) produced in the Shepton Mallet area. Several sherds are from jars and cooking pots, with burning on the outer surfaces indicating exposure to fire sources during use. Similarly, one sherd had internal charring, probably a result of over-heating the contents. The probable burnt bone recovered from post-hole F3 and post-pit F6 provides another indicator of cooking activities. The recovery of quern fragments provide direct evidence of grain processing on or near the Site. Burnt waste from cereal processing was dominated by emmer and spelt wheat, with weed species including sheep's sorrel which reflects the acidic soils of the Quantock Hills. Hazelnuts were a valued snack throughout the prehistoric period, particularly in areas where cereal yields were not always reliable. Indeed, the soils of the Quantock Hills are nutrient-poor and the recovery of shell fragments from Tr2 adds to the picture of eating taking place at the centre of the Site. Evidence for more specialised activities might be suggested by two whetstones and a possible hammerstone along with a few pieces of copper and iron slag. This may point towards metal-working, although both stone object types would be equally at home in a prehistoric tool-kit. The small number of pottery sherds dating to the Romano-British period includes locally produced possible imitation BB1 ware along with Dorset Black Burnished Ware DOR BB1. They were probably derived from a nearby settlement and introduced to the Site by agricultural activity, as represented by the field system on the east side of and cutting the ring-ditch.

CONCLUSION

The volunteer excavation confirmed that the Broomfield cropmark is a substantial ring-ditch that was backfilled in the Middle to Late Iron Age and therefore likely earlier in origin. Within the enclosure, evidence of small-scale Middle to Late Iron Age occupation was revealed with post-structures and part of an undated probably circular structure. Another trench positioned on the outer edge of the ring-ditch established that a Romano-British field system cut through one side of the ring-ditch. The excavations produced a small assemblage of finds, mostly pottery spanning the Middle Iron Age to Romano-British periods.

Given the richness of the surrounding archaeological landscape on the southern slopes of the Quantock Hills, the ring-ditch lends itself to varying interpretations. There is no dating evidence to support the idea of a Later Neolithic to Early Bronze Age henge, although by the end of the 3rd millennium BCE small forest clearings had been made in the high places of the Quantock Hills (Riley 2006, 19). The great barrow cemeteries of Wills Neck and Black Hill were connected by networks of paths and tracks, while small fields of wheat and barley and isolated farmsteads occupied the lowest slopes (Riley 2006, 19). Timber circles and henge monuments were well-established across Britain by this time, with a possible henge outer circle measuring 60m diameter excavated at Norton Fitzwarren between 1968 and 1971 (Riley 2006, 25; after Ellis 1986). The only objects recovered from the Broomfield excavations that may feasibly be earlier prehistoric in date are the possible hammerstone and the three possible saddle quern fragments. However, hammerstones were not only used for working flint and chert but were used as implements for crushing metal ores during the later prehistoric period. Saddle querns on the other hand were superseded by rotary querns around the start of the Iron Age but may have been curated for longer.

Another possible reading of the Site is that it originated as a Late Bronze Age or Early Iron Age ring-work. Again, there is no dating evidence to support this hypothesis but evidence for metal working activity (albeit very modest) may add weight to this theory; local mineral resources of copper, iron, lead and silver are thought to have served as a magnet for the enclosed or defended farms which were filling up the southern slopes of the Quantock Hills in the Bronze Age and Iron Age. Recent recognition of Late Bronze Age to Early Iron Age ringworks in western Britain may be of relevance here. These sites emulate henges in terms of their size and shape, and in some cases may have been inspired by any local Neolithic monuments (Parker Pearson et al 2018, 137). In eastern England the ditches vary in size with the smallest examples (such as South Hornchurch) less than 40m in diameter and the largest examples (like Thwing) over 120m in diameter, mostly with a single ditch and entrance or two opposed entrances. Most date to the 10th and 9th centuries BCE and several have produced evidence for metallurgy, craft-working and feasting, assumed to be controlled by a leader perhaps living in a central round-house (Parker Pearson et al 2018, 137). A Late Bronze Age ringwork at Bayvil Farm, Pembrokeshire, was the first to be discovered in Wales (Parker Pearson et al 2018, 113-141). The single ditch was precisely circular and measured 70m in diameter, and dates to the 11th-10th centuries BCE. Of more relevance to Broomfield in both a geographical and archaeological sense, is a Late Bronze Age to Early Iron Age ringwork excavated at Hill Barton, East Devon (Mudd 2019). Although smaller, at 37m diameter, the ditch is precisely circular and 2m deep; only residual artefacts were recovered from the ditch and from pits and post-holes relating to a relatively large central round-house (14m diameter), but radiocarbon dates revealed the earliest dates fell around 1100 cal BCE (Mudd 2019, 14-15). As with other sites of this type, the enclosure was of relatively short duration, and at Hill Barton Middle Iron Age settlement persisted but was difficult to define on the basis of penannular gullies and other shallow features (Mudd 2019, 16).

Both these theories assume that the ring-ditch was re-used as a convenient enclosure for later prehistoric (Middle to Late Iron Age) settlement. However, in light of the very limited extent of the excavations, we should also consider that the ring-ditch and dateable activity may simply be contemporary. There are a series of enclosures on the south side of the hills, around Broomfield and Kingston St Mary, several with their origins in this period (Riley 2006, 71-72). Some of these enclosure may have been defensive in nature, and the mineral resources of the area probably explain the concentration of high-status sites here in the later part of the 1st millennium BCE (Riley 2006, 71-72). The need to enclose or defend farms and larger settlements would have become increasingly important as the landscape became more populated. Access to both mineral resources and to the resources of heath, pasture and wood on the higher hills would have been factors in the siting of hillforts and some of the larger hill-slope enclosures (Riley 2006, 71-72).

The hard work and enthusiasm of the volunteers has provided the very first archaeological data for the Broomfield ring-ditch. The significance is that this may represent another example in the growing corpus of Late Bronze Age to Early Iron Age ring-works being recognised outside of eastern England. At the very least, the excavations have shown that there is more to the Site than meets the eye, with evidence for repeated activity right through into the Romano-British periods, and for that the volunteers should be applauded. Further excavation would be necessary to explore the theories discussed here to a greater extent. This might target two circular geophysical responses within the enclosure that may be round-houses, two possible entranceways in the ring-ditch, and investigate two ditches which appear to flank the possible north-east entrance.

ARCHIVE

The NPPF requires that an archaeological archive arising from development works is made publicly accessible (para. 211). The archive may comprise two parts: the paper/digital archive and the artefact/ecofact assemblage; these are created, compiled, transferred and curated in accordance with current guidance on the treatment of archaeological archives (Brown 2011; Historic England 2022).

Paper/ digital archive

Where archaeological features/structures/deposits are recorded, the archive generated from this usually comprises site records, drawings and photographs either in paper format or born-digital data. Within three months of the conclusion of a project this is normally transferred into the care of a Trusted Digital Repository such as the Archaeology Data Service (ADS) as scanned paper records or native born-digital data.

In this case, all relevant data has been incorporated into this assessment report.

Physical archive

The artefact/ecofact assemblage is the legal property of the landowner (excluding human remains and any items that fall under The Treasure Act 1996 and The Treasure (Designation) Order 2002). In this case, the landowner is ADD.

The landowner has agreed (via a Transfer of Title) to donate the artefacts/ ecofacts to South West Heritage Trust. The contents of this archive are summarised in The Finds section of this report.

Dissemination

Copies of the report will be submitted to the following:

- Quantock Landscape Partnership Scheme
- Somerset Historic Environment Team (HET) in PDF/A format and accompanying GIS shapefiles (ESRI) so that it can be included as part of the county Historic Environment Record (HER)
- the ADS, via OASIS (On-line Access to the Index of Archaeological Investigations - http://oasis.ac.uk/england/) (OASIS reference contexto1-529701).

By default, a short entry will be prepared for publication in the summary section of the next county archaeological journal or equivalent periodical.

REFERENCES

Bibliography

ArchHeritage. 2021. *Quantock Hills Lidar. Report on processing & field-checking of Lidar DTM & DSM data.* Report 2021.21 v2.

Barclay, A., Knight, D., Booth, P., Evans, J., Brown, D.H., & Wood, I. 2016. A Standard for Pottery Studies in Archaeology, Prehistoric Ceramics Research Group, Study Group for Roman Pottery and Medieval Pottery Research Group.

Brown, D. 2011. *Archaeological Archives: A guide to best practice in creation, compilation, transfer and curation*. Second Edition. Available at: *https://archaeologydataservice.ac.uk/archives/view/aaf_papers/downloads.cfm.*

Campbell, G., Moffett, L., and Straker, V. 2011. Environmental Archaeology - A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation (second edition). Historic England.

British Geological Survey. 2021. Available at: http://www.bgs.ac.uk, accessed on 5 January 2024.

Carruthers, W. 2016. Plant macrofossils. In Hughes, S. and Rainbird, P. Late Prehistoric and Romano-British activity at Somerton Door, Somerton, Somerset. SANHS. 160, 12.

Caudwell, L. 2023. Field East of Lodes Lane, Broomfield, Somerset. Gradiometry Survey, September 2023. Unpublished GeoFlo client report no. G F1085.

Chartered Institute of Field Archaeologists (CIfA). 2014 (rev. 2021). *Code of Conduct: professional ethics in archaeology*. Reading: CifA.

Chartered Institute for Archaeologists (CIfA). 2019 (rev. 2021). *Regulations for professional conduct.* Reading: CifA.

Chartered Institute for Archaeologists (CIfA). December 2023. *Universal guidance for archaeological excavation.* Reading: CifA.

Chartered Institute for Archaeologists (CIfA). 2023. *Selection Toolkit.* Available at: *https://www.archaeologists.net/selection-toolkit/toolkit-overview*. Reading: CifA.

Chartered Institute for Archaeologists (CIfA). 2023. *Data management plans.* Available at: *https://www.archaeologists.net/digdigital/planning*. Reading: CifA.

Cranfield Soil and Agrifood Institute Soilscapes (CSAIS). 2023. Available at: *http://www.landis.org.uk/soilscapes/Cranfield University*, accessed on 5 January 2024.

Department for Levelling Up, Housing & Communities (DLUHC). 2023. *National Planning Policy Framework*, London: His Majesty's Stationery Office.

English Heritage. 1991. *Management of Archaeological Projects*. English Heritage.

English Heritage. 2011 (2nd edition). *Environmental Archaeology: A guide to the theory and practice of methods, from sampling and recovery to post-excavation.* Available at: *https://historicengland.org.uk/images-books/publications/environmental-archaeology-2nd/.*

Evans, J. 2001. The finds, in (ed) Leach, P. *Excavations of a Romano-British roadside settlement in Somerset; Fosse Lane Shepton Mallet 1990*. Britannia Monograph Series NO.18, 107-170.

Historic England. 2011. *Environmental Archaeology*. Available at: *https://historicengland.org.uk/images-books/publications/archaeometallurgy-guidelines-best-practice/.*

Historic England. 2015. *Management of Research Projects in the Historic Environment: The MoRPHE Project Managers' Guide*. Historic England.

Historic England. 2022. Toolkit for selecting Archaeological Archives. Available at: https://www.archaeologists.net/sites/default/files/downloads/selection-toolkit/SelectionToolkit_Full_v2.pdf. Historic England.

Mudd, A. 2019. 'The discovery of a Late Bronze Age ringwork in east Devon', *in Past. The newsletter of the Prehistoric Society*. 93 (Autumn 2019), 14-16.

Museum and Galleries Commission. 1992. *Standards in the Museum Care of Archaeological Collections*. Museum and Galleries Commission (MGC).

Parker-Pearson, M., Casswell, C., and Welham, K. 2018. A Late Bronze Age ring-fort at Bayvil Farm, Pembrokeshire', in *Archaeologia Cambriensis* 167, (2018), 113-141.

Peacock, D. P. S. 1969. 'A Contribution to the Study of Glastonbury Ware from South-Western Britain', Antiquaries Journal. 49, 41-61.

Riley, H. 2006. *The Historic Landscape of the Quantock Hills* Swindon: English Heritage (E-book version 2012).

Sorensen, M. L. 1996. 'Sherds and pot groups as keys to site formation process', in S. Needham and T. Spence (eds.) *Refuse and disposal at area 16 East, Runnymead. Runnymead Bridge.* Research Excavations 2, London, 61-74.

South West Heritage Trust. 2012. *South West Archaeological Research Framework. Research Strategy 2012-2017.*

South West Heritage Trust. 2017 (updated 2021). *Somerset Archaeological Handbook*. Somerset Historic Environment Service.

Stevens, C. 2006. Charred plant remains. In Leivers. M., Chisham, C., Knight, S. and Stevens, C. Excavations at Ham Hill Quarry, Hamdon Hill, Montacute, 2002. SANHS 149, 55-58.

Taylor, R. 2008. 'Thin section analyses', in D.E. Young 'Excavation of an early medieval site at Brent Knoll, Somerset', Proc. Somerset Archaeol. Natur. Hist. Soc. 152, 118-9.

Watkinson, D. & Neal, V. 2001. *First Aid for Finds*.

Wood, I. 2017. Petrographic Report of Thin-Section Analysis. In (eds) Higbee, L. and L. Mepham. *Living on the edge, Archaeological investigations at Steart Point, Somerset.* Wessex Archaeology occasional paper 2017. 92-94.

APPENDIX I: Trench 1 Context Summary

Context/ Feature no.	Type	Description	Above	Below	Length	Width/ Diameter	Thickness/ Depth
Tr1 7m x 6m. All measurements in metres.							
100	layer	Topsoil. A soft dark reddish brown (2.5YR 3/4) silt loam with small slate & feldspar fragments. Soil also has a slightly sandy/gritty component (3% - Sparse).	103	-	-	-	0.20
101/ F1	cut	Circular enclosure ditch (NE facing section). Straight sides with moderate gradient & flat base. Possible bank on the interior or SE side. No re-cut evident however does show at least two distinct phases with the top part of the ditch being more soil-rich whereas the bottom is considerably more slatey.	102	114		c. 3.20	c. 1.00
102	layer	Natural. Slate natural that fragments easily & may therefore may have eroded reasonably quickly.	-	101	-	-	-
103/ F1	fill	Upper fill of ditch [101]. A friable red (2.5YR 4/6) loamy sand with small fragments of slate (10% - Moderate). Tertiary fill probably deposited due to historic ploughing.	104	100	-	1.45	0.15
104/ F1	fill	Fill of ditch [101]. A friable reddish brown (2.5YR 5/4) sandy silt loam with small fragments of slate (15% - Moderate). Tertiary fill probably deposited due to historic ploughing. Fills depression above (105) & (106) before the deposition of (103).	105	103	-	0.90	0.07
105/ F1	fill	Fill of ditch [101]. A friable reddish brown (2.5YR 4/4) sandy silt loam with small fragments of slate & larger angular fragments of feldspar (15% - Moderate). Similar to (104) but contains larger fragments of feldspar.	106	104	-	0.50	0.06
106/ F1	fill	Fill of ditch [101]. A friable red (2.5YR 5/6) sandy loam with small fragments of slate (25% - Common). Probably represents the final secondary fill & is certainly less stoney than the secondary fills below. A combination of silting & erosion gradually deposited over time & perhaps illustrating a degree of stabilisation.	107	105	-	2.30	0.14
107/ F1	fill	Fill of ditch [101]. A friable reddish brown (2.5YR 5/4) sandy silt loam with small fragments of slate & angular fragments of feldspar (40% - Abundant). Similar to (106) but more inclusions noted including fragments of feldspar. Probably a combination of silting and erosion gradually deposited over time with a higher degree of material derived from feature sides.	108	106	-	1.60	0.10
108/ F1	fill	Fill of ditch [101]. A friable reddish brown (2.5YR 5/4) sandy silt loam with small fragments of slate. Some slate fragments are larger than in contexts above, up to 0.05m (40% - Abundant). Similar to (106) & (107) above representing a combination of silting and erosion gradually deposited over time with a higher degree of material derived from feature sides.	109	107	-	1.40	0.12
109/ F1	fill	Fill of ditch [101]. A friable reddish brown (2.5YR 4/4) sandy silt loam with very slatey deposit with slates up to 0.05m within a moderately loose matrix (50% - Abundant). A relatively thick deposit which seems to originate from the south-east side. Possibly represents collapse from an inner bank?	110	108	-	2.20	0.11
110/ F1	fill	Fill of ditch [101]. A friable red (2.5YR 4/6) sandy silt loam. Very slatey deposit with slates up to 0.08m within a moderately loose matrix (40% - Abundant). A relatively thick deposit which seems to originate from the south-east side. Possibly represents collapse from an inner bank? Similar to (109) above although contains slightly less slates than albeit larger in size.	111, 112	109	-	3.00	0.25
111/ F1	fill	Secondary fill of ditch [101]. A friable reddish brown (2.5YR 4/4) sandy silt loam, a very slatey deposit with slates up to 0.05m within a moderately loose matrix. More slatey then (110) above (50% - Abundant). Similar to (112) & (110) above.	114	110	-	0.76	0.06
112/ F1	fill	Fill of ditch [101]. A friable reddish brown (2.5YR 4/4) sandy silt loam. Very slatey deposit with slates up to 0.05m within a moderately loose matrix. More slatey then (110) above (50% - Abundant). Similar to (111) & (110) above. Possibly high energy bank collapse?	113	110	-	1.28	0.08
113/ F1	fill	Secondary fill of ditch [101]. A friable red (2.5YR 4/6) sandy silt loam with sparse small slate fragments & very rare small feldspar fragments (5% - Sparse). An isolated deposit consisting of a fine sandy silt loam & very rare inclusions. Soil-rich deposit formed on the more stable side of the feature edge.	114	112	-	0.85	0.05
114/ F1	fill	Primary fill of ditch [101]. Friable reddish brown (2.5YR 4/4) sandy silt loam. Almost exclusively consisting of slates, some large at <0.10m & all within a loose matrix (50% - Abundant). Relatively thick deposit probably representing initial stabilisation of the feature edges or early bank collapse.	102	111, 113	-	1.64	0.12

Context/ Feature no.	Type	Description	Above	Below	Length	Width/ Diameter	Thickness /Depth
Tr1 7m x 6m. All measurements in metres.							
115/ F1	cut	Circular enclosure ditch. Same as [101]. This SW facing section shares many similarities with the opposite section. There was thought to be a re-cut showing in this section but further analysis does not support this. No re-cut is apparent either.	102	125	-	C. 3.20	0.65
116/ F1	fill	Fill of ditch [115]. Same as (103).	117	100	-	-	0.14
117/ F1	fill	Fill of ditch [115]. Same as (106).	118	116	-	-	0.12
118/ F1	fill	Fill of ditch [115]. Same as (107).	119	117	-	-	0.08
119/ F1	fill	Fill of ditch [115]. Same as (108).	120	118	-	-	0.10
120/ F1	fill	Fill of ditch [115]. Same as (109).	121	119	-	-	0.12
121/ F1	fill	Fill of ditch [115]. Same as (110).	122, 123	120	-	-	0.16
122/ F1	fill	Fill of ditch [115]. Same as (111).	125	121	-	-	0.04
123/ F1	fill	Fill of ditch [115]. Same as (112).	124	121	-	-	0.05
124/ F1	fill	Fill of ditch [115]. Same as (113).	125	123	-	-	0.04
125/ F1	fill	Fill of ditch [115]. Same as (114).	115	122, 124	-	-	0.18

Level no.	Value (aOD)
1	204.806m
2	204.428m
3	204.448m
4	204.449m
5	203.899m
6	203.864m
7	204.717m
8	204.723m
9	204.701m
10	204.797m

Table 4. Tr1 aOD heights

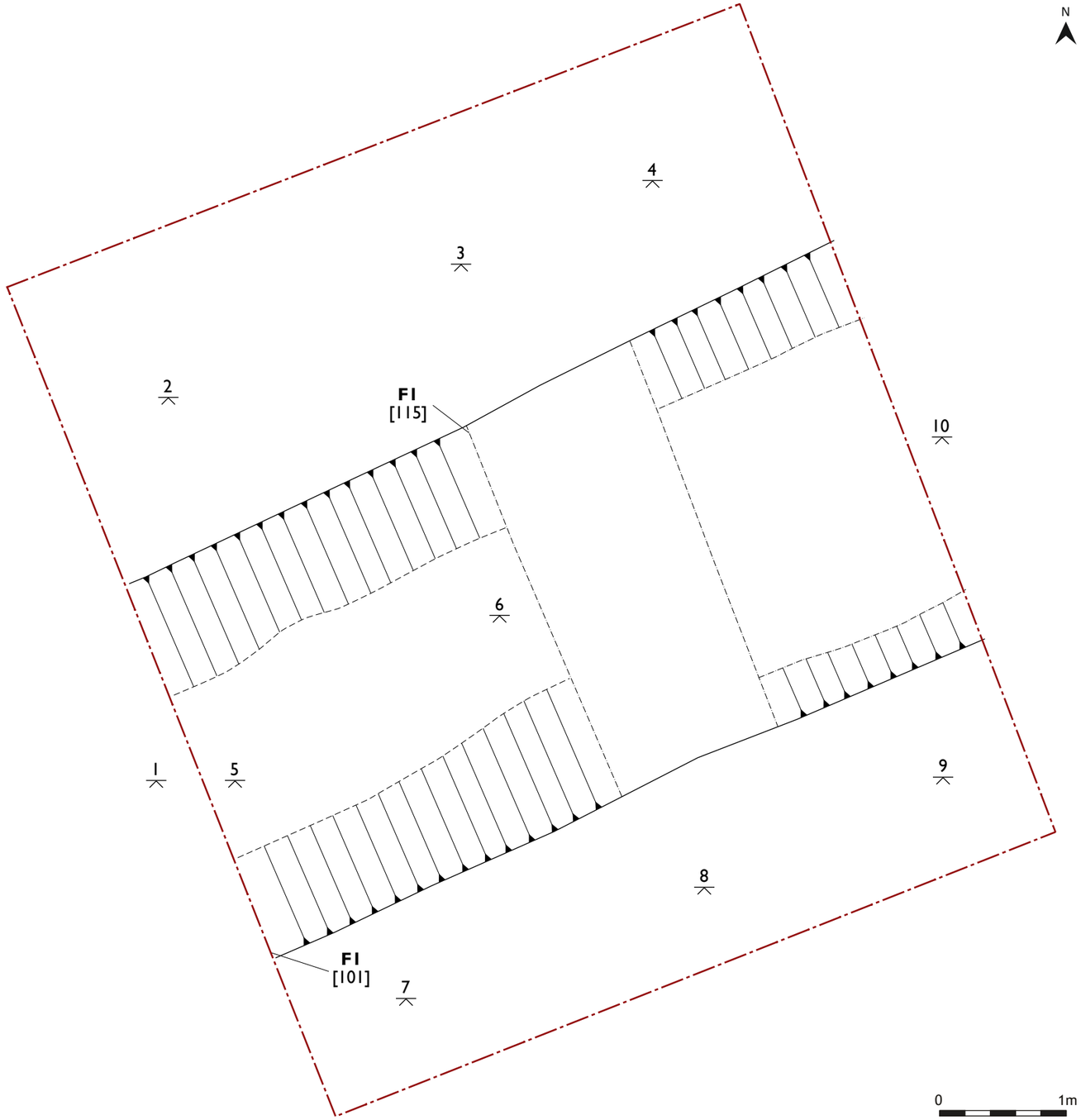
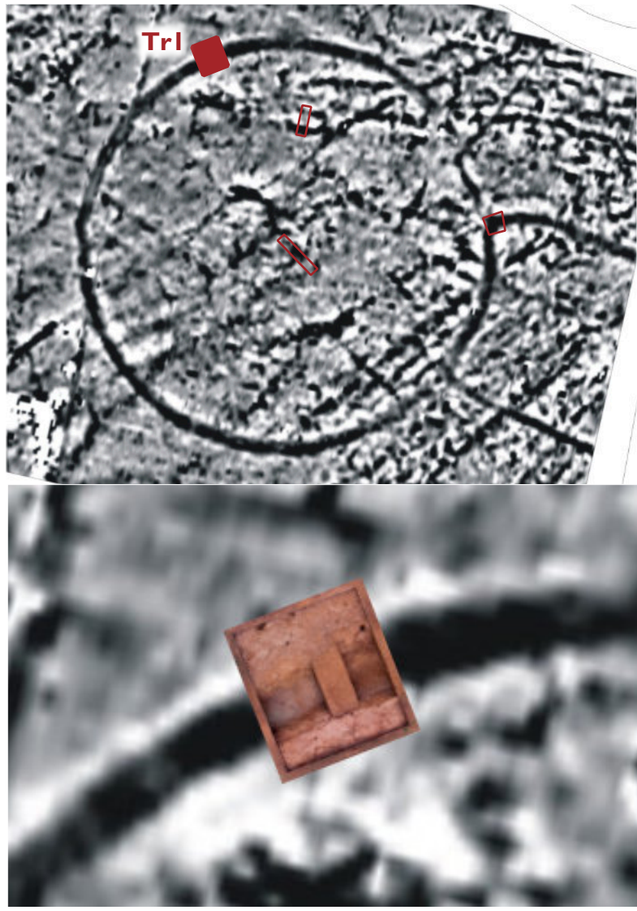


Figure 51. Tr1 Digitised plan



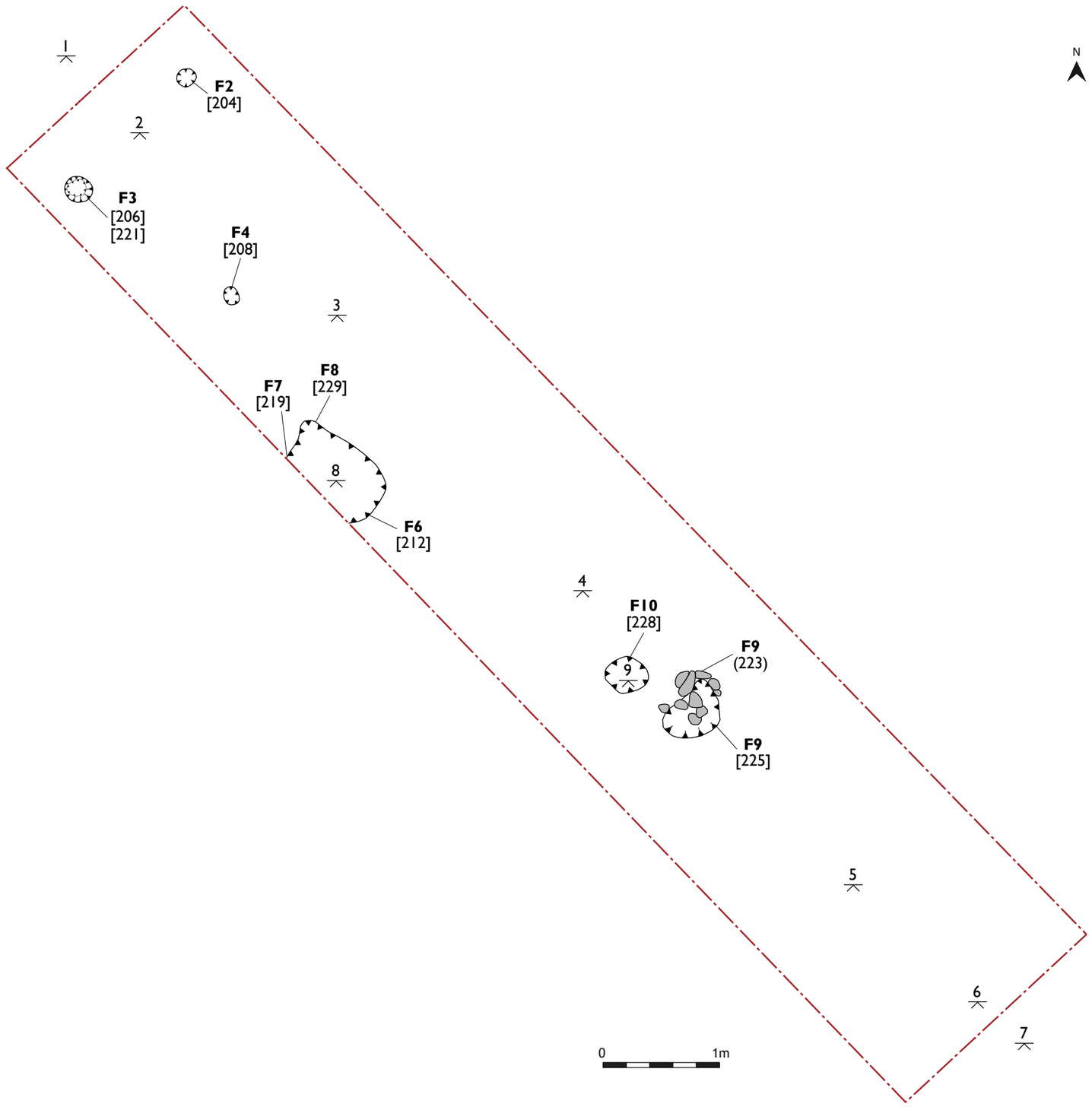
Trench 2 Context Summary

Context/ Feature no.	Type	Description	Above	Below	Length	Width/ Diameter	Thickness /Depth
Tr2 11m x 2m. All measurements in metres.							
200	layer	Topsoil. A soft reddish brown (2.5YR 4/4) silt loam with small slates (3% - Sparse).	-	-	-	-	0.25
201	deposit	Soil trample above natural (202). Compacted dark reddish brown (2.5YR 3/4) sandy silt loam with tiny crushed slate (3% - Sparse). Removed through two episodes of trowelling.	202	200	-	-	0.05
202	layer	Natural. Comprising interleaving beds of Mort slate & red shillit also with small patches of red clay.	-	-	-	-	-
203/ F2	fill	Fill of small post-hole [204]. Friable dark reddish brown (2.5YR 2.5/4) sandy loam with flecks of charcoal (5% - Sparse).	204	200	0.16	0.14	0.08
204/ F2	cut	Small post-hole or post setting. Circular in plan with steeply sloping concave sides & concave base.	202	203	0.16	0.14	0.08
205/ F3	fill	Upper fill of post-hole [206] above fill (211) of post-pipe [221]. Friable dark reddish brown (2.5YR 3|4) sandy loam with flecks of charcoal & small stones < 0.05m (5% - Sparse).	211	200	0.27	0.23	0.20
206/ F3	cut	Small post-hole with post-pipe [221] excavated from sloping shelf at depth of 0.16 - 0.20m from ground surface. Sub-circular in plan with vertical straight sides & a flat base. Post-pipe element smaller at 0.16m x 0.16m with vertical edge measuring 0.13m deep. Squarish shape indicates it held an oak post.	202	221	0.27	0.23	0.38
207/ F4	fill	Fill of small post-hole [208]. Friable dark reddish brown (2.5YR 3/4) sandy loam with charcoal flecks & chunks <0.05m (3% - Sparse).	208	200	0.13	0.15	0.10
208/ F4	cut	Small post-hole or post setting. Sub-circular in plan with vertical straight edges & a flat base.	202	207	0.13	0.15	0.10
209/ F5	fill	Fill of possible shallow gully [210]. Friable dark reddish brown (2.5YR 2.5/3) sandy loam with small fractured slate & stone mostly under 0.02m but some larger fragments (25% - Common).	210	200	0.71	0.30	0.05
210/ F5	cut	Possible shallow gully. Slightly curvilinear in plan with gently loping concave sides & a flat base. Either very truncated or a divot in the natural.	202	209	0.71	0.30	0.05
211/ F3	fill	Main fill of post-pipe element [221] of post-hole [206]. Friable dark reddish brown (2.5YR 2.5/4) sandy loam with flecks of charcoal, burnt slate & burnt bone (5% - Sparse). Above primary fill (220).	220	205	0.16	0.16	0.10
212/ F6	cut	Large pit. Sub-circular in plan with steeply sloping straight sides & a flat base. Base probably at 0.50m but overdug in soft Mort slate to 0.6m. Base appeared flat which might suggest it housed a large post but again possibly carved out of soft Mort slate. The NW side of the pit contained two post-pipes [219] & [229] with bases at slightly higher level and delineated by slate placed horizontally in base.	202	217	0.90	>0.60	0.55
213/ F6	fill	Upper fill of pit [212]. Friable dark reddish brown (2.5YR 3/3) silt loam with flecks of charcoal & small stones (15% - Moderate).	214	200	0.70	>0.60	0.10
214/ F6	fill	Middle fill of pit [212]. Friable dark red (2.5YR) silt loam with flecks of charcoal & small stones (5% - Sparse).	215	213	0.40	>0.60	0.20
215/ F6	fill	Fill of pit [212]. Friable dark reddish brown (2.5YR 3/3) silt loam with medium size Mort slate fragments (50% - Abundant). Best described as pitched stone layer sloping towards centre of pit [212]. Possibly derived from post packing material if the pit housed a large post, or simply backfill.	216	214	0.30	>0.60	0.40
216/ F6	fill	Lower fill of large pit [212]. Friable dark reddish brown (2.5YR 3/3) silt loam with flecks of charcoal & small stones (15% - Moderate).	217	215	0.85	>0.60	0.15
217/ F6	fill	Stone fill of pit [212]. Friable dark red (2.5YR) silt loam. Flecks of charcoal & small stones (10% - Moderate).	215	216	0.85	>0.60	0.10

Context/ Feature no.	Type	Description	Above	Below	Length	Width/ Diameter	Thickness /Depth
Tr2 11m x 2m. All measurements in metres.							
218/ F7	fill	Fill of post-pipe [219] in north-west side of pit [212]. Friable dark reddish brown (2.5YR 3/3) silt loam with flecks of charcoal & small stones (5% - Sparse).	219	200	0.15	0.15	0.60
219/ F7	cut	Post-pipe in north-west side of pit [212]. Circular in plan with steeply sloping straight sides & a flat base. Not possible to reliably establish relationship of post-pipe to main pit as backfill in section almost at edge of feature & no discernible differences noted between it and main pit backfill during excavation. Flat Mort slate pieces in base of post-pipe and at slightly higher level than base of pit.	217	218	0.15	0.15	0.60
220/ F3	fill	Primary fill of post-pipe element [221] of post-hole [206]. Friable dark reddish brown (2.5YR 2.5/3) sandy loam. Flecks of charcoal & small stones plus burnt bone fragments < 0.05m (5% - Sparse). Below upper fill (211).	221	211	0.16	0.16	0.03
221/ F3	cut	Post-pipe in base of post-hole [206]. Sub-circular with steeply sloping straight sides & a flat base. Squarish shape indicates it held an oak post.	206	220	0.16	0.16	0.13
222/ F9	fill	Upper fill of post-pit [225]. Friable dark red (2.5YR 3/6) silt loam with flecks of charcoal, small burnt slate, small stones, & large fragments of Mort slate (5% - Sparse). Sealing two post settings formed by packing stones (223).	223	200	0.84	0.60	0.08
223/ F9	fill	Fill of [225]. Stones forming two post settings within post-pit [225]. Medium sized stones (50% - Abundant). The eastern side is well-defined delineating a 0.15m squarish recess presumably for a post. The other side has been partially robbed so that only the stones bordering the east side are in-situ.	224	222	0.40	0.35	0.20
224/ F9	fill	Fill of pit [225]. Friable dark red (2.5YR 3/6) silt loam with flecks of charcoal, small burnt slate, small stones, large fragments Mort slate (5% - Sparse). Soil around packing stones [223] for post settings within post-pit [225] & filling remainder of feature.	225	223	0.84	0.60	0.08
225/ F9	cut	Post-pit containing stone settings for two posts. Sub-rectangular in plan & aligned SW-NE, steeply sloping concave sides & an irregular base.	202	222	0.67	0.47	0.25
226/ F10	fill	Fill of large post-hole [228]. Friable dark red (2.5YR 3/6) silt loam with small slate stones <0.05m (20% - Common).	227	200	0.35	0.31	0.59
227/ F10	fill	Packing stones around upper edge of post-hole [228]. Friable red (2.5YR 4/4) silt loam with medium sized stones (50% - Abundant). Sherd of Iron Age pot on outer edge of packing stones.	228	226	0.35	0.31	0.10
228/ F10	cut	Large post-hole. Sub-circular in plan with vertical straight sides & a flat base. Contained abundant stone packing (227) which had mostly collapsed with voids between stones.	202	227	0.35	0.31	0.59
229/ F8	cut	Post-pipe in side of pit [212] filled by (230). Circular in plan with steeply sloping straight sides & flat base. Flat Mort slate pieces in base of post-pipe and at slightly higher level than base of pit.	217	230	0.22	0.15	0.60
230/ F8	fill	Fill of post-pipe [229] within NW side of pit [212]. Friable dark reddish brown (2.5YR 3/4) silt loam with flecks of charcoal & small stones (10% - Moderate).	229	200	0.22	0.15	0.60

Level no.	Value (aOD)
1	205.322m
2	204.979m
3	204.973m
4	204.964m
5	204.890m
6	204.894m
7	205.109m
8	204.342m
9	204.349m

Table 5. Tr2 aOD heights



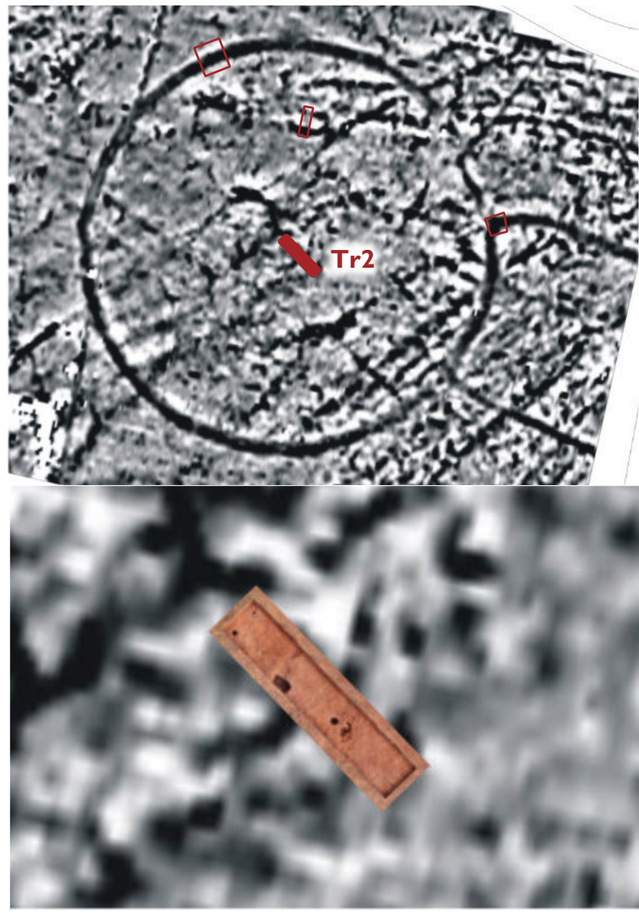


Figure 52. Tr2 Digitised plan

Trench 3 Context Summary

Context/ Feature no.	Type	Description	Above	Below	Length	Width/ Diameter	Thickness /Depth
TR3 7m x 2m. All measurements in metres.							
300	layer	Topsoil. Soft reddish brown (2.5YR 4/4) silt loam with small slate stones (3% - Sparse).	301	-	-	-	0.12
301	layer	Subsoil. Friable dark reddish brown (2.5YR 3/4) sandy silt loam with tiny crushed slate (3% - Sparse).	302	300	-	-	0.13
302	layer	Layer. Friable reddish brown (2.5YR 4/4) sandy silt loam with small fragments of slate, burnt slate & degraded limestone (3% - Sparse). Earth layer across entire trench - excavated by Young Archaeologists.	303	301	-	-	0.10
303	deposit	Surface. Friable dark red (2.5YR 3/6) sandy silt loam with burnt crushed slate & charcoal (20% - Common). At S end of trench, and extending over and concealing gully fill (306). Charcoal patches & concentrations on east side of trench but not at south end. Gave way to surface (304) & appeared to be contemporary with (303), possibly lapping over the southern tail edge of (304).	306	302	>2.10m	>2.00	>0.10
304	deposit	Surface. Compacted red (2.5YR 4/6) sandy silt loam with burnt crushed slate & slate fragments 0.02-0.15m (20% - Common). Cobbly surface in northern half of trench, perhaps taking over from (303) as this tails off. Mortar and charcoal trample in upper surface.	305	302	4.70	0.80	0.05
305	deposit	Surface. Compacted red (2.5YR 5/6) sandy silt loam with burnt crushed slate & slate fragments 0.02-0.15m (15% - Moderate). Extending underneath cobbly surface (304). The northern 0.60m of the trench is different - this layer is discoloured to a pale yellow with some burnt stone. The whole surface seems slightly heat-effected so perhaps a hearth was situated nearby. Depth not ascertained as excavations drew to a close, but certainly not exposed in southern side of gully [307] which reveals it was contained within the arc-shaped gully.	Unexcavated	304	5.73	2.00	0.05
306/ F11	fill	Backfill of gully [307] found beneath layer (303) on last day of excavation. Friable dark red (2.5YR 3/6) sandy silt loam with burnt crushed slate, slate & stone fragments <0.05m (20% - Common).	307	303	-	0.73	0.17
307/ F11	cut	Gully found beneath layer (303) on last day of excavation. Curvilinear with moderately sloping concave sides & a flat base. Corresponds with circular feature indicated on geophysics survey. Character of deposits to N of the gully suggests they relate to interior which would be in keeping with a structure interpretation, with layer (303) spreading over the gully once it was redundant. The south side of the cut exposed (303) over natural (308) whereas the north side exposed (303) above (305), the surface only present inside the arc-shaped gully.	308	306	-	0.73	0.17
308	layer	Natural. Interleaving beds of Mort slate & red shillit also with small patches of red clay.	-	307	-	-	-

Level no.	Value (aOD)
1	205.171m
2	204.724m
3	204.737m
4	205.100m
5	204.768m
6	204.847m
7	204.825m
8	205.262m

Table 6. Tr3 aOD heights

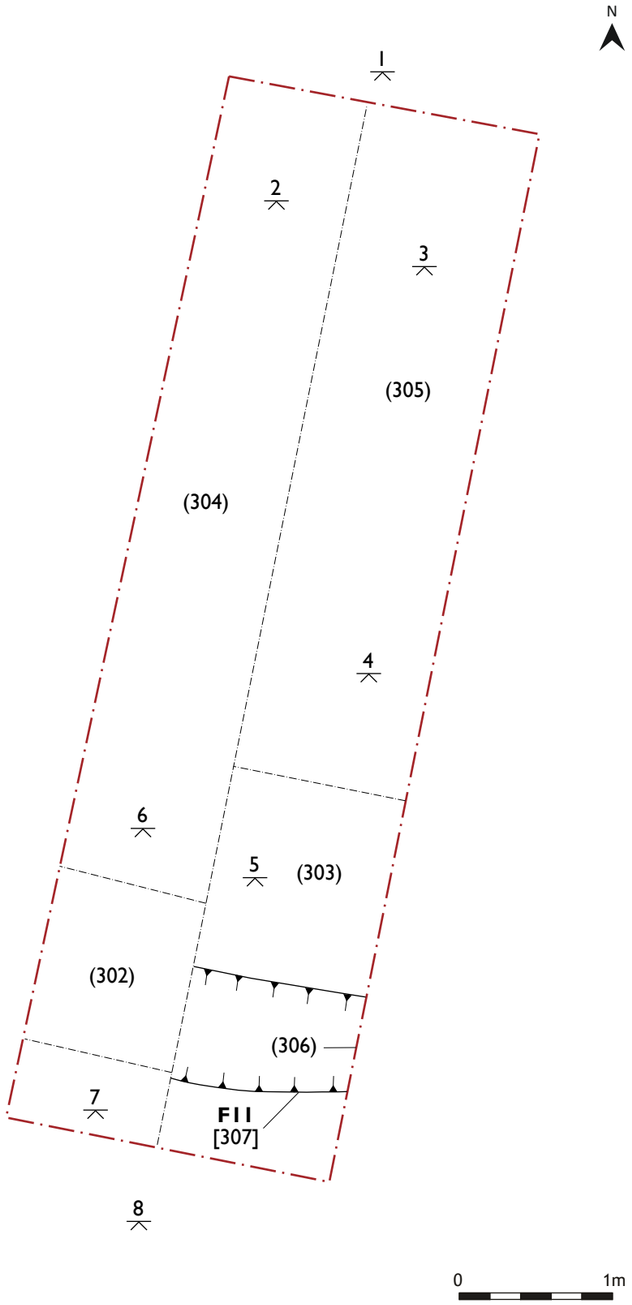
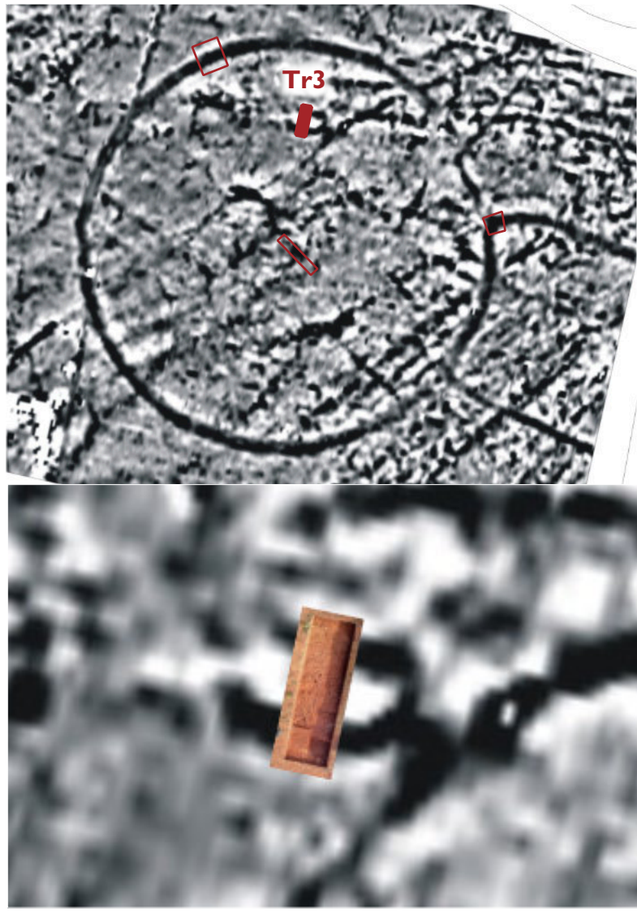


Figure 53. Tr3 Digitised plan



Trench 4 Context Summary

Context/ Feature no.	Type	Description	Above	Below	Length	Width/ Diameter	Thickness /Depth
TR4 4.60m x 4.3m. All measurements in metres.							
400	layer	Topsoil.. Soft reddish brown (2.5YR 4/4) silt loam with small slate stones (3% - Sparse).	409	-	-	-	0.26
401	layer	Natural.	-	402	-	-	-
402/ F12	cut	Circular enclosure ditch. Moderately sloping straight sides & flat base. Cut by rectilinear enclosure ditch [405].	401	403	-	-	>0.70
403/ F12	fill	Fill of circular enclosure ditch [402]. Friable dark red (2.5YR 3/6) sandy silt loam with small slate stones and gravels <0.05m (20% - Common).	402	404	-	-	0.30
404/ F12	fill	Fill of circular enclosure ditch [402]. Friable dark red (2.5YR 3/6) sandy silt loam with small slate stones and gravels <0.05m (25% - Common).	403	405	-	-	0.40
405/ F13	cut	Rectilinear enclosure ditch. Moderately sloping straight sides with a flat base. Cuts circular enclosure ditch [402].	404	410	-	-	>0.75
406/ F13	fill	Fill of rectilinear enclosure ditch [405]. Friable dark red (2.5YR 3/6) sandy silt loam with crushed slate & a few larger slates pitched on edge (5% - Sparse).	410	407	-	-	0.10
407/ F13	fill	Fill of rectilinear enclosure ditch [405]. Friable dark reddish brown (2.5YR 3/4) sandy silt loam with slate & stoney tip line, larger stones <0.12m.	406	408	-	-	0.15
408/ F13	fill	Fill of rectilinear enclosure ditch [405]. Friable red (2.5YR 4/6) sandy silt loam with small slates <0.05m & charcoal (3% - Sparse).	407	409	-	-	0.20
409/ F13	fill	Fill of rectilinear enclosure ditch [405]. Friable dark reddish brown (2.5YR 3/4) sandy silt loam with crushed & fragments of slate.	408	400	-	-	0.30
410/ F13	fill	Fill of rectilinear enclosure ditch [405]. Friable dark reddish brown (2.5YR 3/4) sandy silt loam with large flat slate stones. Appears to be a horizontal deposit of large flat slates within a dark reddish brown matrix. Only a small area c. 0.35m x 0.30m exposed at the bottom of Tr4 due to time constraints.	405	406	-	-	-

Level no.	Value (aOD)
1	204.475m
2	204.143m
3	204.396m

Table 7. Tr4 aOD heights

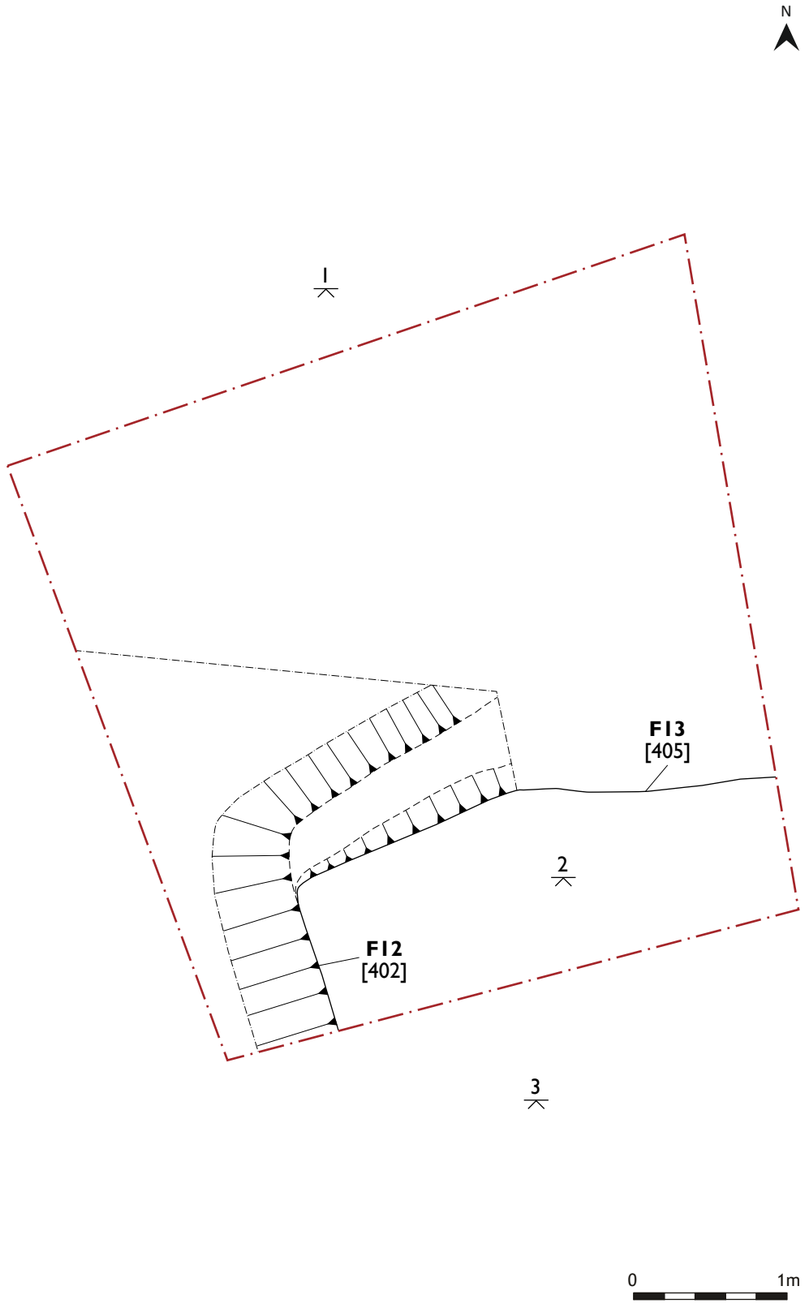
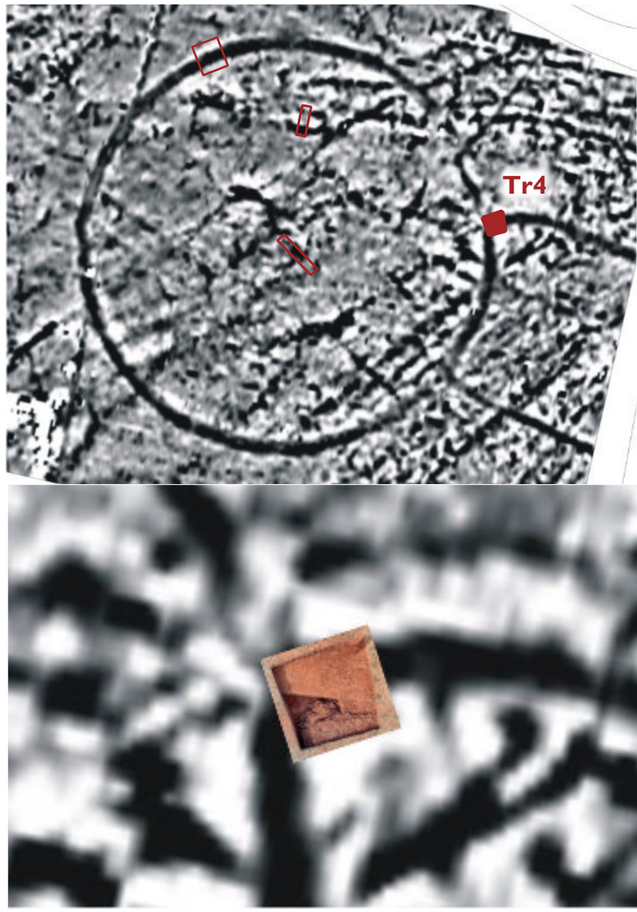
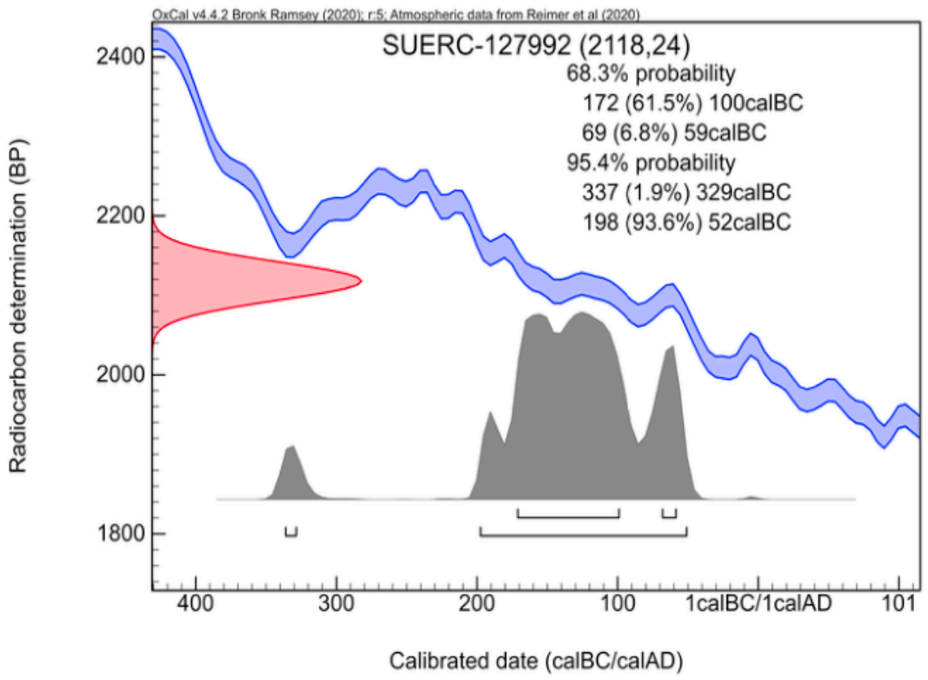


Figure 54. Tr4 Digitised plan



APPENDIX II: Radiocarbon dating certificates

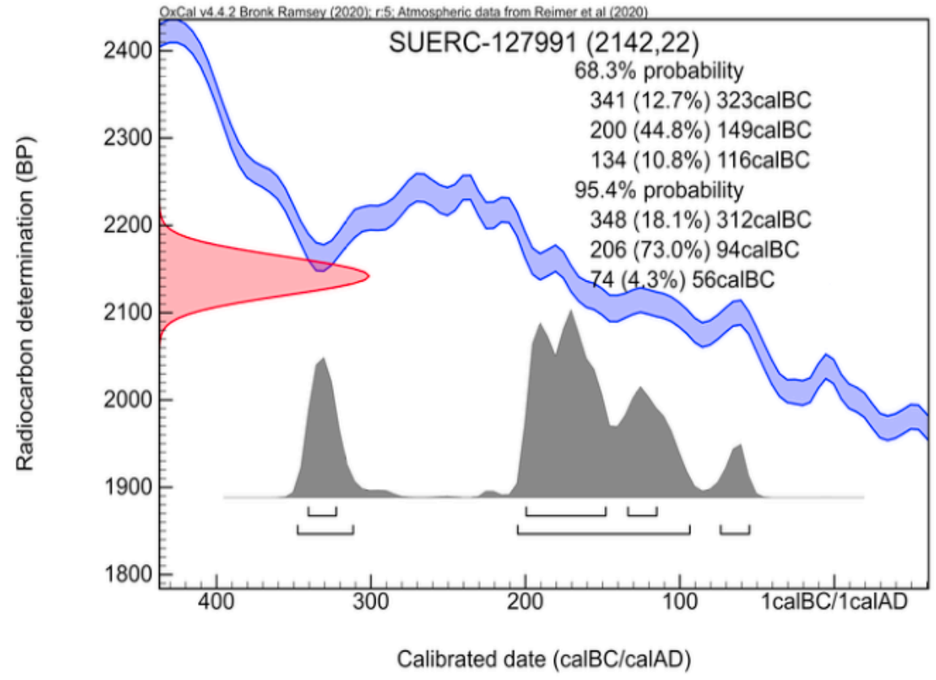


The radiocarbon age given overleaf is calibrated to the calendar timescale using the Oxford Radiocarbon Accelerator Unit calibration program OxCal 4.*

The above date ranges have been calibrated using the IntCal20 atmospheric calibration curve†

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

Radiocarbon Dating Certificate for context (220)



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 IntCal20 atmospheric calibration curve†

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

Radiocarbon Dating Certificate for context (216)