

SUFFOLK ARCHAEOLOGY

• A HISTORY OF EXPERTISE •



Marham Park Bury St Edmunds, Suffolk

Client:
Terence O' Rourke on behalf of Countryside PLC

Date:
May 2018

FAS 055 and FAS 056
Post-Excavation Assessment Report
SACIC Report No. 2018/040
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Marham Park, Bury St Edmunds, Suffolk

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Executive Summary

This post-excavation report presents an assessment of the evidence recovered during 16.9ha of archaeological investigation in advance of the residential development of Marham Park. A combination of Strip, Map and Excavate (SME) and open area excavation identified a multi-period landscape dating from the Late Neolithic to modern periods which included two Bronze Age burnt mound complexes of national significance, with areas of Later Prehistoric and Roman activity. The work was undertaken by Suffolk Archaeology CIC, overseen by John Trehy of Terence O Rouke and Abby Antrobus of Suffolk County Council Archaeological Service, and paid for by the developer Countryside PLC.

The land which was formerly arable fields lies on the north-west edge of Bury St Edmunds within the parish of Fornham All Saints on a north-facing slope which overlooks the Lark Valley. An extensive prehistoric monument complex based on the Fornham Neolithic Cursus, Scheduled Monument SF 114, HER: FAS 004 runs along the south side of the Lark Valley flood plain between Fornham All Saints and Hengrave, the eastern end of which lies within 50m of the edge of the development area.

The archaeological works were initiated in March 2016, following a series of preliminary investigations that included desk-based assessment, geophysical, fieldwalking and metal detecting survey and extensive trial trench evaluation. This preliminary work identified two main areas that were investigated under two separate site codes, FAS 055 and FAS 056, the former on low ground towards the river and the latter on high ground at the top of the river valley.

Whilst a scatter of early prehistoric finds was present across both sites (see sections 4.2.3, 4.3.2) the earliest confirmed occupation dated to the Late Neolithic and Early Bronze Age periods with a small number of pits, including cremation burials, particularly in the northern FAS 056 site containing decorated Beaker pottery (see sections 4.3.3 and 5.3.2). Much of the Beaker ceramic ware was found in conjunction with Deverel-Rimbury pottery of a similar fabric but dated typologically and stylistically to the slightly later Early to Middle Bronze Age. Further analysis is required to establish whether this material is residual in later features or represents the start of continuous Bronze Age occupation in a transitional period in the Early Bronze Age. The assemblage provides

an opportunity to study these two ceramic traditions in Suffolk, the links between which are currently underexplored (see section 6.3.2).

Of the highest significance are the two Middle Bronze Age burnt mound complexes on the higher ground to the south-west of the site. They were found 102m apart, one 18.3 x 21.3m across and the other 13.5m x 11.7m, and represented a recognised, if enigmatic, form of activity consisting of large mounded deposits of heat-altered flint and charcoal and associated pits usually found in river valleys. In both cases here the eponymous 'mound' had been lost by a combination of the original deposition of some of the heat-altered flint and charcoal in open pits, its deliberate redeposition back into the working hollows at abandonment and later plough truncation. However, otherwise both exhibited some remarkable evidence for the function, construction, repair and alteration of these complexes (see sections 4.3.4.1, 4.3.4.2, 4.3.4.3 and 4.3.4.4). Both complexes were dug into natural hollows, which were probably deliberately selected for their natural geology of a heavier silty-clay than elsewhere. At the centre of each was a large well dug no doubt to hold water, but which unlike the river valley examples could not have filled from natural ground water and must have either been artificially filled, or gradually filled by rain and surface run off. At the larger Burnt Mound 1 there was evidence of a (probably unsuccessful) replacement well. The surface around the wells had been metalled and both complexes had smaller pits associated with them. At Burnt Mound 1 this was covered with redeposited debris of charcoal and heat-altered flints which also filled many of the small pits, whereas at Burnt Mound 2, more of this debris was found in a secondary hollow some 10m south-west of the working area.

Lipid analysis has shown that high animal fat contents are present within the fire-cracked flint and some pit fills associated with the complexes. This suggests that cooking and perhaps the preparation of hides was taking place within the feature (see section 5.8.5). Extraordinarily 305 flint tools, utilised blades and utilised flakes were recovered from the fills of Burnt Mound 1. There is a high possibility that use-ware analysis of the tools (see section 6.4.5) found within the complexes in conjunction with the environmental and geoarchaeological evidence will establish with some confidence what the complexes were being used for. All flint tools and utilised flakes were plotted three-dimensionally and each mound was excavated stratigraphically in 2-metre squares in order to define finds concentrations, plotting of which will contribute to a

greater understanding of how the features were used. The worked flint and Early-Middle Bronze Age decorated Beaker pottery found in many deposits associated with Burnt Mound complex 1 place this feature as one of the finds-richest of its type in the country. Radiocarbon dating to which Bayesian analysis will be applied should date the sequence of events quite tightly (see section 7.4), and further radiocarbon dates across other Bronze Age features at FAS 056 will establish whether the other Bronze Age activity, including a drove way that runs north-south up the entire slope is contemporary with the use of the Burnt Mounds.

The worked flint assemblage from FAS 056 was so large that whilst the whole assemblage has been assessed only a sample has been fully catalogued (see section 5.6.5). Even so it is clear that in conjunction with the dating evidence that will be obtained study of the flint will make a significant contribution to understanding its manufacture and use, and the nature of the activities which occurred at the site. This is a topic that has been highlighted as a particular regional research priority (Medlycott 2011, 21 and 31; Brudenell 2017) (see section 6.4.5).

At the northern end of the development area, site FAS 055 contained 128 circular storage pits dated by pottery to the Middle Iron Age as well as associated structures including a possible four-post possible granary (see section 3.1.1). A low density of earlier and later features was dispersed across the site. The pits seen in this area can be sub-divided into groups. It was notable that within each group there were pits with single, relatively clean fills, perhaps naturally accumulated, and those with multiple fills including deposits of charcoal rich sand and heat-altered flints. Occasional pits also had articulated animal bone remains whilst large assemblages of pottery and flint tools indicated deliberately placed deposits in some cases and secondary rubbish disposal. Further analysis of these features will allow comparative work to be undertaken on the pits and individual groupings of pits, to consider them in relation to the structural evidence and also to gain radiocarbon dates to support artefact studies. The arrangement of the pits in groups poses questions about seasonal use, social organisation and the motives behind the regular return to a single area. The results of the environmental assessment have showed limited potential to help determine the primary function of the pits (see section 5.3.3), but comparison with other similar local and regional sites will advance the overall discussion about the use and re-use of these

features (see section 7.2). The pottery recovered from the pits represents one of the largest assemblages of Middle to Late Iron Age pottery found in Suffolk and offers an unparalleled opportunity to study regional ceramic production and the evolution of fabrics and ceramic styles.

Iron Age occupation in the form of a half D-shaped enclosure, ditch systems, further pit groups and two structures (one another probable four-post granary) was found dispersed across the southern FAS 056 site, occupying the top and upper reaches of the topography. The pottery recovered from these features is comparable with that from the FAS 055 site, and the possibility that the activity at the top of the hill is related to that at the bottom will be investigated. The volume of pottery suggests that these are habitation sites but no convincing round-houses were identified, and the hill-top activity is more comfortably interpreted as agricultural activity or animal husbandry. More detailed examination may confirm this.

Two sub-square enclosures, encompassing just under 1ha and 1.42ha (see sections 4.3.7.2 and 4.3.7.3) and dating to the Roman period were seen, again at the top of the hill, from which three related ditches extended forming part of a possible 'ladder' field system. The eastern edge of the smaller enclosure had been subsequently quarried, also apparently in the Roman period. Whilst no structures were found, there is likely to have been loss of archaeological information within the centre of the smaller Enclosure 1 as a result of modern quarrying activities. The evidence of an entrance into this enclosure and the presence of a deep well within it suggests that this may have been where, if anyone had lived here the habitation would have been focused. This enclosure occupied a dramatic position at the top of the hill overlooking the Lark Valley to the north which seems unlikely to be a co-incidence; it appears to represent an isolated farmstead in a defended location (more probably protecting livestock and settlement against wild animals than other people). Some investigation of the significant sites nearby will help put this site into context (see section 7.3) and establish the degree of its isolation. Whilst a considerable quantity of pottery (see section 5.6.2) was recovered from specific areas of ditch fill, this was largely of mixed date and the material probably represents a dumped deposit, perhaps clearance when the settlement was abandoned. Whilst further analysis of the pottery will help define the period of use and economic standing of the people living here, it is unlikely to contribute more detailed information

about the site (see section 6.4.2). Some lead fragments which may indicate metal working on the site also need further examination (see section 6.5.1).

Evidence of quarrying of the site which started in the Roman period, was also found in the medieval, post-medieval and modern periods (see sections 4.3.9, 4.3.10, 4.3.11). In addition, FAS 056 contained modern features relating to a WWII firing range with twenty-one postholes and six concrete pads seen (see section 4.4.11). Metal detecting throughout the project has allowed some plough soil archaeology to be recorded and this has identified a part of the site where night-soiling (manuring) was probably carried out (see sections 4.3.12 and 5.7.1).










An outreach program was conducted throughout the project, it included four open days, a volunteer community excavation, talks, blogs and a home-owners welcome pack (see sections 1.3 and 4.1.4).

This report describes the archaeological results in detail, quantifies the archive and provides an assessment of the potential amongst the results for further analysis that will contribute to identified research priorities for the region. Results of lesser significance with low potential for further analysis are highlighted and completely covered in this report, or in the archive. These include the plough soil archaeology, medieval, post-medieval and modern phases.



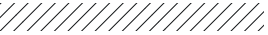





Once the analysis is complete it is proposed that two publication papers (see section 8) are produced, one concentrating on the Burnt Mounds and Bronze Age landscape and reflecting their national importance within the national peer-reviewed journal, the Proceedings of the Prehistoric Society. A second presentation of all the results but synthesising some of the detail is proposed for publication in the Proceedings of the Suffolk Institute of Archaeology and History.

Drawing Conventions

Plans

- Limit of Excavation 
- Features 
- Break of Slope 
- Features - Conjectured 
- Natural Features 
- Sondages/Machine Strip 
- Intrusion/Truncation 
- Illustrated Section  S.14
- Cut Number **0008**
- Archaeological Feature 

Sections

- Limit of Excavation 
- Cut 
- Modern Cut 
- Cut - Uncertain 
- Deposit Horizon 
- Deposit Horizon - Uncertain 
- Intrusion/Truncation 
- Break in Section 
- Cut Number **0088**
- Deposit Number 0089
- Ordnance Datum

S	N
55.27	
⋈	⋈

1. Introduction

1.1 Site location

A programme of archaeological work was undertaken in advance of housing and associated infrastructure development on the north-west edge of Bury St Edmunds, Suffolk. The development area covered c.68 ha centred on TL 838 666. It adjoins the A1101 at its northernmost edge and bounds Tut Hill (B1106) to the west, encompassing four large former arable fields and their boundaries. Two main areas of archaeological activity were excavated, FAS 055 at the northern edge of the site abutting the A 1101 and FAS 056 which was located at the south end of the development area with its western edge abutting Tut Hill (B1106) (Figs.1 and 3).

1.2 The scope of the project

Suffolk Archaeology Community Interest Company (hereafter SACIC) were commissioned by John Trehy (Terence O'Rourke, hereafter TOR) on behalf of the client (Countryside PLC) to undertake archaeological work associated with the development, later to be named Marham Park.

This archaeological assessment covers the archaeological deposits revealed in all phases of work across the site and includes both FAS 055 and FAS 056 site codes.

The principal aims of the assessment are to:

1. Summarise the results of the archaeological fieldwork.
2. Quantify the site archive and review the post-excavation work that has already been undertaken.
3. Assess the potential of the site archive to answer the original research aims as defined in the Brief and Written Scheme of Investigation.
4. Assess the significance of the data-set in relation to the relevant Regional Research Framework (Glazebrook 1997; Brown and Glazebrook 2000) and the revised Research Framework (Medlycott (ed). 2011).
5. Present recommendations for further analysis, publication, dissemination and archiving.

6. Define and quantify analysis, publication and archiving tasks to calculate resources and costs to complete the project to the level required by local planning authority (LPA).
7. Present detailed results and discussions for the plough soil archaeology and all Post-Roman features and finds from site. These aspects will be completely covered in this document to a point that no further work is required (other than finds stabilisation, if required, and archiving).
8. Present a more detailed results section and scientific sampling suite for the Bronze Age activity on site (including the burnt mound complexes) to highlight the national importance of this phase seen on site.
9. Present a UPD that includes a timetable, with review stages, for the completion of the project.

1.3 Circumstances and dates of fieldwork

The archaeological excavation works were required by a condition placed on planning application DC/13/0932 covering all aspects of the new development of Marham Park. Outline Planning Application DC/13/0932/HYB covered these three main points - (i) residential development within Use Classes C2 and C3; (ii) local centre (iii) reservation of land for primary education (Class D1) (iv) public open space (sports & leisure facilities, allotments, play facilities and informal open space).

The excavation fieldwork was initiated in March 2016 and continued in phases through to October 2017, effectively working from north to south across the site. The work was broken up into specific sections representing either different spatial areas or methodological approaches, with areas requiring full open area excavation or Strip, Map and Excavate. These are preceded by EX or SME as appropriate on Figure 3.

The entire area was covered by a Brief prepared by Suffolk County Council Archaeological Service, (hereafter SCCAS) Officer Dr Abby Antrobus dated 19th of March 2015 (Appendix 1). The excavation methodology was based on this document and was also detailed in a series of Written Schemes of Investigation (Caruth 2015 and Caruth 2016) prepared by Joanna Caruth (SACIC) covering each phase of work and was based on discoveries from previous phases of work listed in section 2.2.

The entire project was designed to answer an overarching research question; to conduct the work into the archaeological landscape proportionate to the scale of the impact of the development project, while considering the evaluation results. The excavation was conducted in three phases under the two separate site codes (FAS 055 and FAS 056). The first phase of works included five areas of excavation (EX) and Strip, Map and Excavate (SME) located in FAS 055 and four areas of excavation and SME in FAS 056. EX1 located in FAS 055 was divided into two areas (EX1 West and EX1 East) with an access track running between them. The archaeological densities differed each side of the track and a sub-division of the area was also required for on-site sign off purposes. The latter two phases of work (Phase 1 extra and Phase 2) were both located in FAS 056.

An integral part of the Brief and subsequent WSI's was the requirement to inform and include the local community as much as possible in the works and as a result a specific volunteer fieldwork project was devised and a series of Open Days and talks delivered throughout the project. The volunteer project was conducted on EX1 West and the results have been combined with the site data and are presented within this report. The outreach projects and Open Days are discussed further in section 4.1.4.

The archaeological fieldwork was carried out by members of SACIC led by Project Officer Michael Green under the overall management of Jo Caruth. The archaeological work was facilitated and overseen by John Trehy of Terence O Rourke.

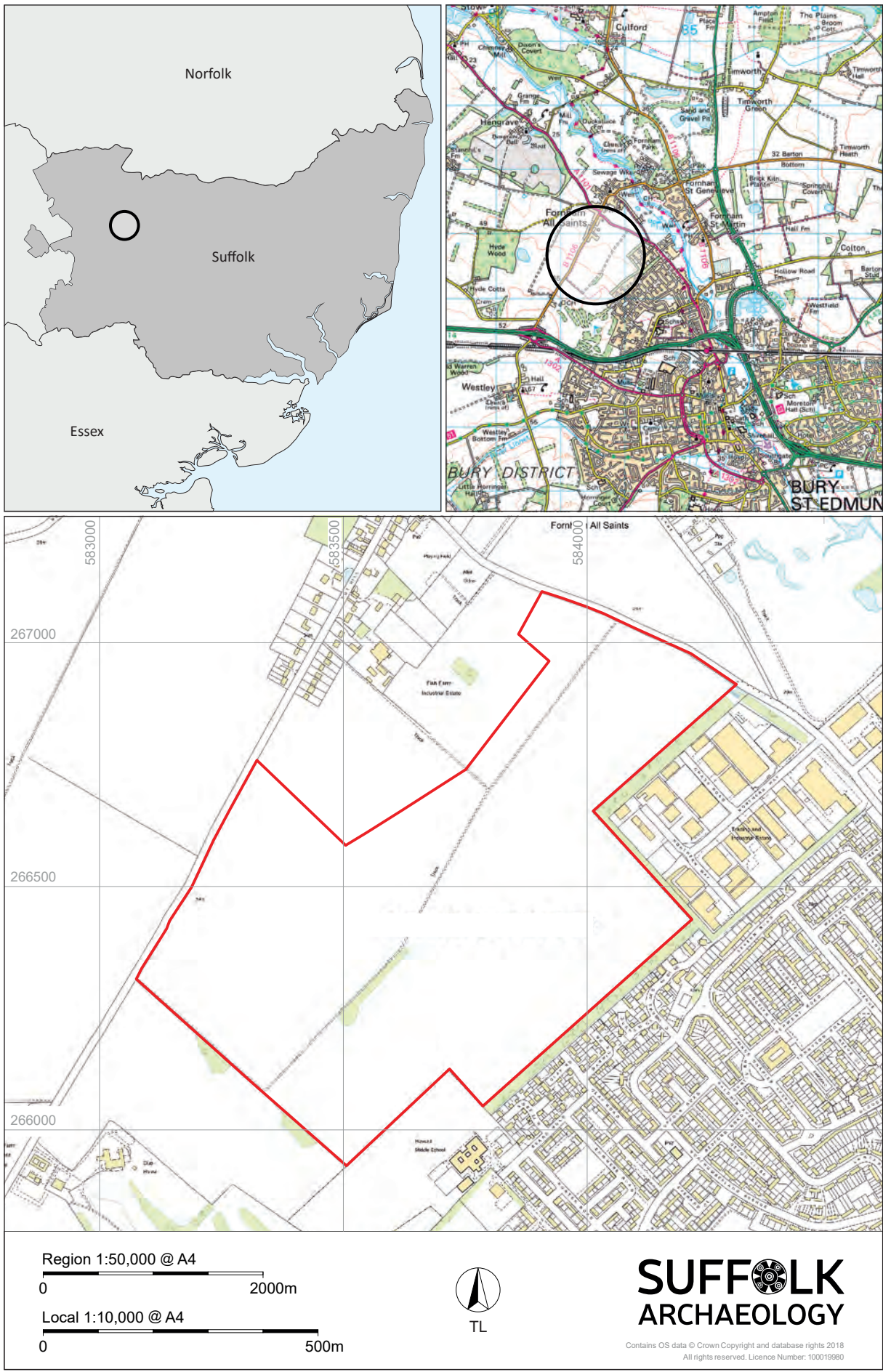


Figure 1. Location Map (red)

2 Geological, topographic and archaeological background

2.1 Geology, topography and recent land use

Prior to the recent development the area was open agricultural fields whose lowest point lies along the northern boundary (A1101) at a height of 30.19m AOD. From this point the ground level gently rose to approximately 52m AOD towards the central-southern portion of the development area before declining southwards forming a very gentle slope with a minimum height of 50.68m (AOD). Modern activity relating to the current use as arable land has removed any significant micro-topography.

Fieldwork identified a varied geology characterised by deep chalk bedrock consisting of solid Holywell nodular and new pit formation chalks. Mixed superficial deposits of fine silts, gravels and clays were frequently observed directly below the plough soil although occasional areas contained remnants of fluvial subsoils. Patches of the chalk bedrock were frequently recorded directly below the topsoil in various degrees of degradation, likely to have been caused through water erosion. Less degraded chalk was prominent in a band running east-west across the central portions of the development area.

2.2 Archaeology

The development is situated in an area with high potential for previously unrecorded heritage assets. Cropmarks identified through aerial photography indicate the presence of below ground features on the northern side of the A1101 (Figs.1 and 2) which include a large north-west to south-east aligned Neolithic cursus (Scheduled Monument SF 114, HER: FAS 004) that runs approximately 1.87km along a north-west to south-east alignment parallel to the River Lark. The cursus is the dominant feature of a larger overall complex, the extent of which has been established through aerial photography and is thought to represent evidence ranging from the Neolithic through to the Roman period (Beverton (a) and (b) 2013).

A breakdown of specific features within the cursus complex is detailed in the project's desk based assessment (Trehy, 2012). Notable aspects of the complex include: Neolithic causewayed enclosures (FAS 002); areas of smaller earthworks emanating

from the cursus (FAS 028 and 029, HNV 001 and 002); earthworks interpreted as a possible Late Neolithic henge (FAS 005); two possible Iron Age or Roman rectangular enclosures (HNV 001 and FAS 003) and six Bronze Age ring ditches (HNV 002, FAS 008 and FAS 004). Further earthworks, likely to be related to the complex, have been identified at FSM 020 and towards the south side of the central cursus area (FAS 018) (Fig.2). To the south lie two more potential Bronze Age burial mounds (FAS023 and BSE002). Aerial photography of the site produced one of the best recent views of the eastern end of the cursus complex (Pl.1).

The archaeological potential was further increased by the location on the southern side of the Lark valley providing preferred conditions for early occupation. The Suffolk County Historic Environment lists over 20 sites within a 750m radius of the PDA indicating local activity from the Neolithic through to the post-medieval.

2.2.1 Desk based assessment (DBA)

A DBA conducted in 2012 in advance of any fieldwork by Terence O'Rourke (Trehy, 2012) concluded that there was no evidence that the cursus monument and associated activity extended into the development area; no crop marks were visible. It concluded that 'the archaeological resource within the site option is likely to be of low potential and at most locally significant' (Trehy, 2012).

2.2.2 Field walking and metal detecting survey

A programme of fieldwalking and metal detecting was carried out across the development area in September 2012 by Pre-Construct Archaeology. The fieldwalking recovered a small assemblage of finds predominantly consisting of struck flints that ranged in date from the Mesolithic to Early Bronze Age (Stump 2012). The remaining finds included a single Roman coin dated to the 4th century, a medieval (13th – 14th century) strap end and half-penny and a small collection of early post-medieval and post-medieval metal objects. The fieldwalking results did not identify specific areas of archaeological evidence, however a noticeable concentration of then undated heat-altered flint in the south-west corner of the site can now be interpreted as relating to the burnt mound complexes.

2.2.3 Geophysical survey

A geophysical survey was carried out with a magnetic gradiometer across the development area by Stratascan (Smalley 2012). The results of the survey identified anomalies towards the northern and southern ends of the site which included a large pair of north-west to south-east aligned parallel linear features, a large rectilinear feature and a number of discrete anomalies (Beverton (a) and (b) 2013).

2.2.4 Evaluation

Archaeological evaluation undertaken by Suffolk County Council Archaeological Service Field Team, in two phases in February-March and October 2013 identified multi-period archaeological activity in the northern and southern areas of the proposed development area (Beverton (a) and (b) 2013). Trenches in the north-west corner of the site contained twenty-four pits dated to the Iron Age and similarly dated ditches. An area east of this contained another small group of Iron Age pits and a large pit with multiple fills, containing Bronze Age pottery and a transverse arrowhead. At the southern, higher end of the site, the evaluation identified one Bronze Age and one Iron Age cremation, two large Iron Age ditches and an area of Roman occupation characterised by pottery filled ditches. A dispersed landscape of small, possibly non-continuous ditches was identified across the southern half of the development area. These were largely undated but where finds were recovered they were mostly of Iron Age date. A lower density of similar, largely non-continuous, ditches was identified in the northern part of the site. Much of the central portion of the site was devoid of archaeological features, consistent with the results of the geophysical survey (Beverton (a) and (b) 2013).

2.2.5 Geotechnical survey monitoring

A geotechnical survey was undertaken and monitored in December 2014 and April 2015. Two possible ditches and a pit were found during the excavations of the trial holes; these possible archaeological features were noted on the trial hole location, a brief description was written and the exposed surface was examined for dating evidence. The trial hole location was then moved to avoid disturbing the archaeological remains and the trial hole was carefully re-instated. The full results are shown in Appendix 3.

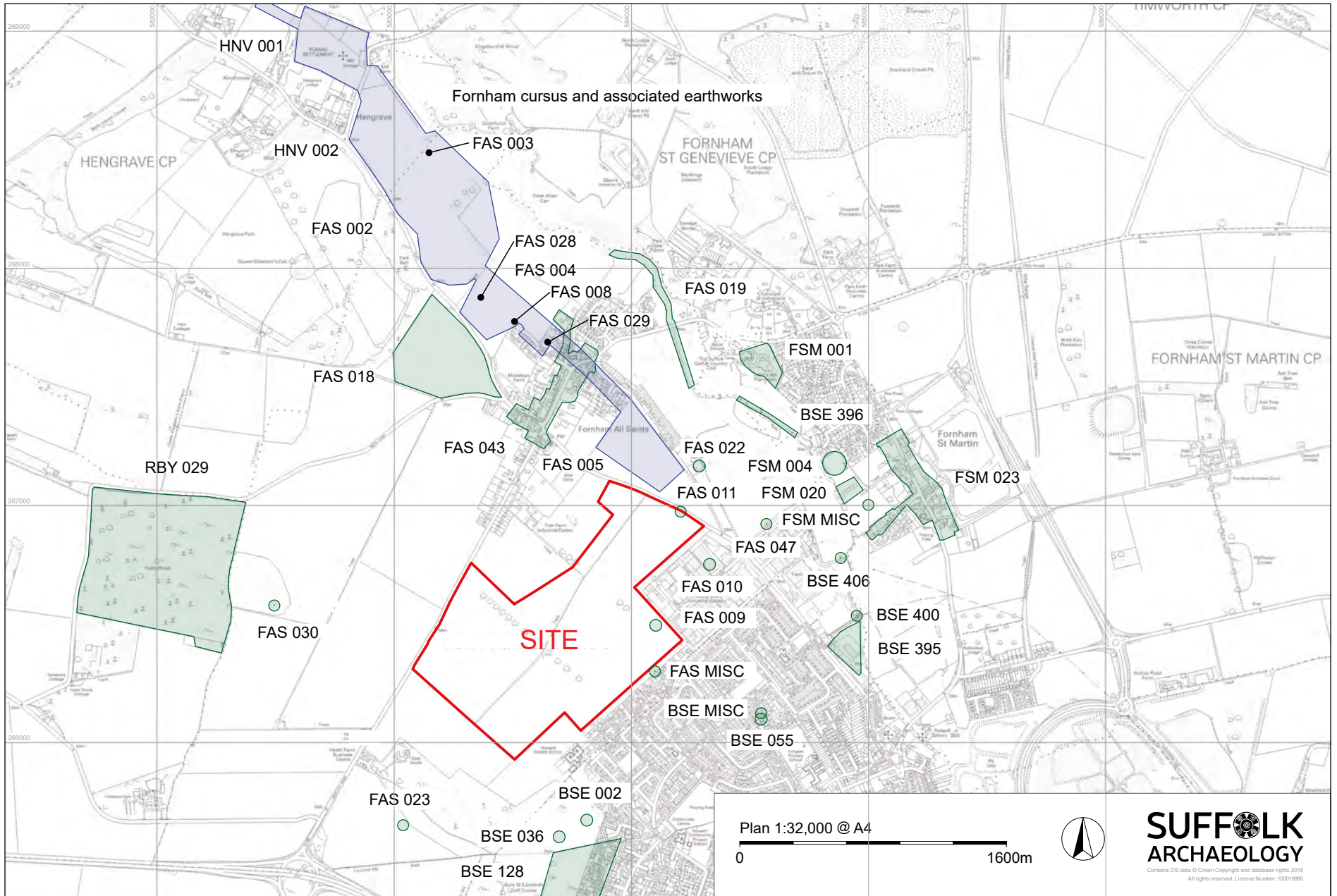


Figure 2. HER Data



Plate 1. Aerial shot of the site showing cursus monument crop marks (Commissionair)

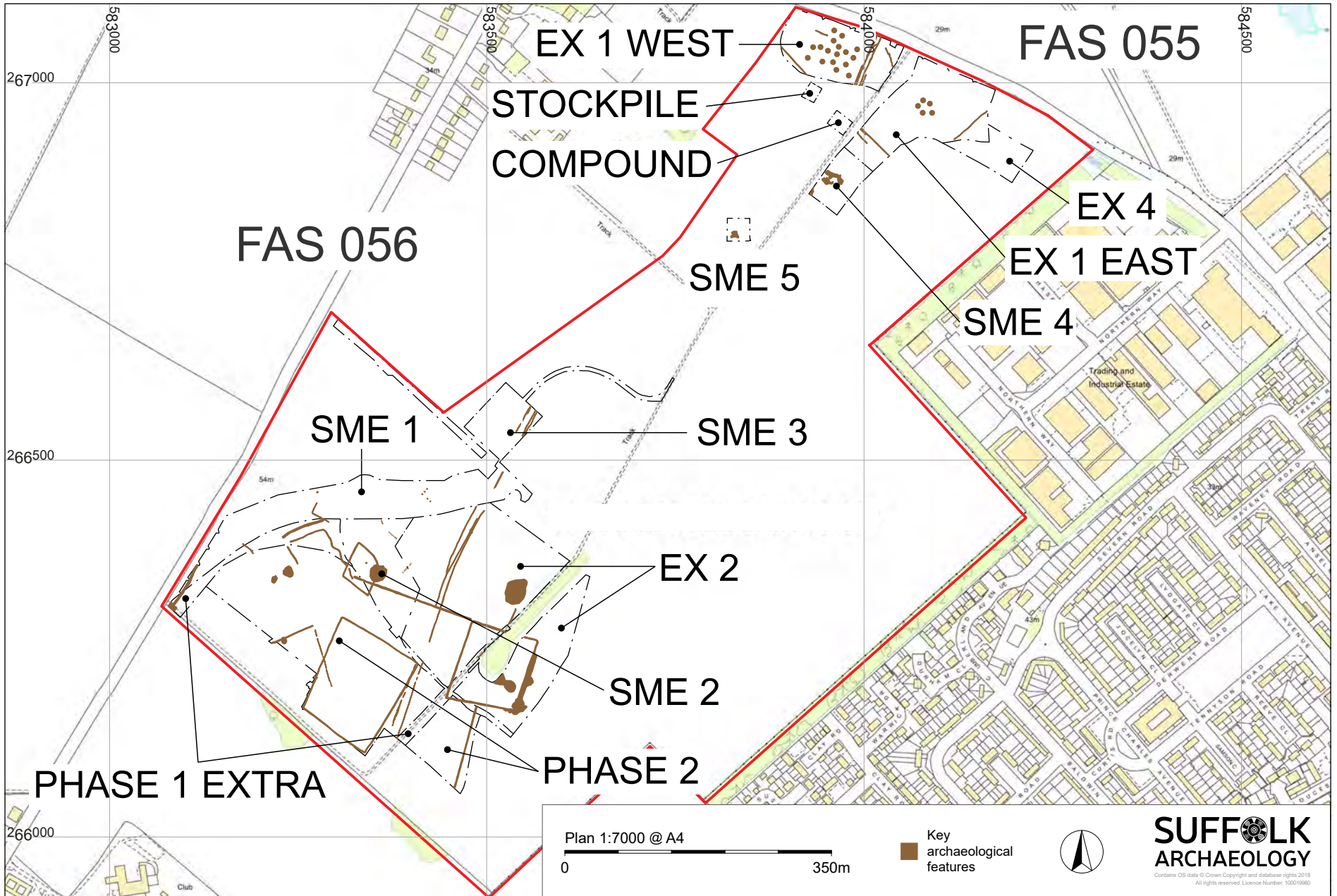


Figure 3. Basic site plan showing areas of investigation and key archaeological features

3 Original research aims

The overarching aims of the project were to make an adequate record of the archaeological evidence threatened by the development, to assess its potential against regionally and nationally agreed research priorities, to disseminate the results to both a local interested and specialist archaeological audience and to prepare an archive of the work to be deposited with the County Council Archaeological archive store.

Throughout the works the suitability of the archaeological strategy would be assessed and modified as appropriate to ensure satisfactory mitigation of the entire development area. In particular, those areas examined during the Phase 1 works would be used to reassess the proposed strategy for Phase 2.

3.1 FAS 055, Phase 1 works

The main objectives and research aims for the areas that were excavated under the FAS 055 site code are detailed below (Fig. 3).

3.1.1 EX1

The main objectives for the work in EX1 were:

- To excavate the pits, recording fills and profiles and recovering finds data to try to establish the form and function of both the individual pits and the activity as a whole. Was there a uniformity of function? Was the function integral to the hole or the filling?
- To establish the period of use of the pits and consider evidence for intercutting of features. Was it a single period of activity and if so lasting how long? Or was it an area revisited at specific times? And if so why and when?
- To look at the relationship between the pits and the ditches to the south-east and south-west. Were they contemporary? If so do the ditches represent a formal boundary to the activity, or a routeway to or past it?
- To recover finds and environmental evidence from the pits to contribute to regional pottery chronologies for the Iron Age, and study of the Iron Age agrarian economy.

- To examine whether there is evidence of activity that relates in any way to the nearby cursus complex and if so, whether it indicates the final period of the long-term use of this ritual landscape.

3.1.2 EX4

- To investigate a single large pit from which Bronze Age pottery and flint artefacts were recovered and four closely spaced pits, which may form part of a larger cluster of pits.

3.1.3 SME4

- To examine the potential for evidence of prehistoric field systems and trackways either associated with the Iron Age activity seen in EX1 or the nearby Bronze Age activity.

3.1.4 SME5

- To further investigate a single medieval feature seen in the evaluation and to examine the potential for other medieval activity.

3.1.5 Volunteer project (EX1)

- To 100% excavate and sieve selected pits from EX1 East for finds retrieval. This volunteer-based project will help look at finds retrieval biases within standard archaeological excavation.
- To provide opportunities for training and to experience excavation first hand for members of the local community (also see section 4.1.4).

3.2 FAS 056, Phase 1 works

The main objectives and research aims for the areas that were excavated under the FAS 056 site code are detailed below (Fig.3).

3.2.1 SME1

- To investigate the scattered discontinuous ditches that may have indicated small prehistoric field systems.
- To examine the area of an apparently isolated Iron Age cremation and establish whether it was part of a group or not.

3.2.2 SME2

- To contribute to discussion of the margins of the Roman activity and provide a sample through the potential prehistoric field system, to the east of SME 1.

3.2.3 SME3

- To investigate an area that had not been evaluated and allow an appropriate mitigation strategy to be devised.

3.2.4 EX2

- To characterise the potential Roman settlement, identifying and recording enclosures, boundaries and tracks and the layout of the settlement. Are there any identifiable structures?
- To establish the layout, function and date of the non-Roman activity in this area. How does it relate to the ditch systems identified across the site? Is there evidence of craft and manufacturing processes?
- What do the scattered finds assemblages from the evaluation represent? Are they redeposited middens perhaps relating to a prolonged period of activity, or indicative of a single discrete occupation episode?
- To examine the evidence for the agrarian economy, consumption and production in both the prehistoric and Roman periods.

3.2.5 Phase 2 works

- To record the plan of the archaeological features within an area of c.4.8ha lying immediately south of the known Bronze Age, Iron Age and Roman archaeology.
- To integrate the Phase 2 plan with that from Phase 1 and to assess the significance of the archaeological features exposed.
- To identify areas of high significance and potential and to undertake open area excavation in these areas.
- To record evidence of the landscape context for the burnt mound excavated in Phase 1.

4 Site sequence: results of the fieldwork

4.1 Fieldwork methodology

4.1.1 Introduction

Each excavation and SME area were assigned specific number blocks within all registers (apart from small finds which were contextually or GPS located) prior to excavation to enable differentiation of the areas for recording purposes.

4.1.2 Fieldwork

Fieldwork was carried out according to the Project brief (Appendix 1) and the detailed methodology is outlined in the relevant Written Schemes of Investigation (Caruth 2015 and Caruth 2016). Standards for the fieldwork were guided by the SCCAS Requirements for Archaeological Excavation, 2012, '*Standards for Field Archaeology in the East of England*' (Gurney 2003), the CIFA paper '*Standard and Guidance for archaeological excavation*' (CIFA, 2014). Throughout the project the archaeological programme was adapted and amended with agreement of John Trehy (TOR) and Abby Antrobus (SCCAS) to reflect client needs and the archaeological results.

The archaeological areas were stripped using up to four 360° machines fitted with toothless ditching buckets (measuring at least 1.8m wide), under the direction of a SACIC archaeologist. This involved the removal of 0.3m-0.4m of plough-soil over most areas and, mostly in FAS 055, 0.1m-0.4m of subsoil, until the first visible archaeological horizon was seen. Site work progressed from north to south, and in three phases to reflect client needs.

All features were excavated by hand unless otherwise agreed with SCCAS. The proportions excavated varied with the type and date of the feature and the overall significance of area. Typically, 50% of discrete features such as pits and 10% of linear features (in 1m slots) were sampled by hand excavation, with section locations being selected to answer specific site questions. Ditch terminal ends and corners were excavated by 2m+ long slots and many of the pits were 100% excavated by SACIC appropriate to their fills or finds assemblages, with excavation strategies informed by the characters of the pits. In SME areas lesser proportions of some of

the ditch lengths were sampled, and the later quarry pits were sufficiently sampled to establish their date and character. Sample fills were sieved through a 10mm grid to collect a sample of smaller finds; where this occurred, it was recorded on the context sheets. Specific methodologies were adopted for the two burnt mounds and these are outlined within those sections.

The volunteer project adopted a specific methodology for the Iron Age pits at FAS 055, whereby pits within EX1 West which had already been 50% excavated and fully recorded were excavated completely (100% excavation) by volunteers under supervision by SACIC staff, following accepted archaeological practice. A separate number block was issued to the fills removed by volunteers, which were linked to the original contexts used. All fills were sieved using a 10mm mesh swing sieve and additional environmental samples were taken and processed separately to assess the differing finds retrieval strategies.

Environmental samples were taken and assessed for the presence of palaeoenvironmental remains following appropriate guidance (English Heritage 2011). The bulk samples consisted of either 100% or 40L of the deposited material (whichever was greater) in order to recover sufficient evidence for accurate assessment.

Metal detector investigation of the site took place throughout the excavation by an experienced SACIC metal-detectorist. The topsoil of all areas was scanned before removal and the subsoil (where present) was detected when exposed, before removal. Exposed features and excavated material was also scanned during the excavations. All pre-modern finds were issued with a unique small finds number and were geo-located using an RTK GPS system.

Pre- and post-excavation digital plans were recorded with the GPS and a 10m grid applied to selective excavation areas.

A Ministry of Justice licence was obtained for the removal of the human remains from the cremations.

4.1.3 Recording

Overall site plans showing feature positions, sections and levels were recorded using an RTK GPS and, depending on feature density and complexity, by hand at 1:20 or 1:50 in selected areas. Individual feature and segment plans were recorded by hand at a scale of 1:10, 1:20 or 1:50 and all excavated sections at a scale of 1:10 or 1:20 as appropriate to complexity in pencil on A3 pro forma gridded permatrace sheets. Section and plan drawing registers were maintained and checked throughout the excavations.

All archaeological features and deposits were recorded using standard pro forma SACIC registers and recording sheets and numbering systems. Record keeping was consistent with the requirements of the Suffolk HER and is compatible with its archive.

A photographic record, consisting of high resolution digital images (using 8-12 megapixel cameras recording images at 3072 x 2304 pixels) was made throughout the project. A number board displaying site code, context number and section number, and a metric scale were clearly visible in all photographs. Photographs included general shots of the site and its progress as well as technical shots. A photographic register was maintained throughout the excavations.

Aerial photography was conducted throughout the project by Commission Air. Specific features and areas were also photographed using various aerial photographic techniques including drone photography (Flypod), mast photography and kite photography. Time-lapse photography was also used for Open Day films on phase 2 works.

Once completed, areas of the site were formally signed off by Abby Antrobus (SCCAS) for return to the client.

4.1.4 Outreach projects and Open Days

An integral part of the project was to boost public interest about the archaeological works conducted on site. To ensure that this element of the project was successful a series of outreach events were organised using some new and interesting

techniques, as well as more conventional events. The Open Days proved to be very successful with over 1000 visitors attending the four events. The outreach events were organised by in-house Outreach Officer Alex Fisher who played an integral part in the success of these projects.

Open Day 1 (30th April 2016)

This Open Day was conducted at the start of the project on FAS055 and included a rare opportunity to view commercial archaeology in progress. A guided on-site tour of the Iron Age pits was included with specific stops and talks about the site and features. The Open Day also included finds displays, information boards and talks.

Open Day 2 (16th July 2016)

This more conventional Open Day was held in a community hall in the nearby Mildenhall estate. Site staff gave talks about the discoveries on site and information boards and finds displays were also provided.

Open Day 3 (18th September 2016)

This Open Day took place at the south end of the site on FAS056 and included guided tours of the Roman archaeology and burnt mound complex 1. Updated display boards, finds displays and talks were also conducted and visitor numbers increased to over 300.

Open Day 4 (26th November 2017)

This less conventional Open Day took place in the community centre in Fornham All Saints. Due to site restrictions and construction works an on-site open day was not possible, and instead a virtual Open Day was conducted. Various techniques were employed to give members of the public a chance to view phase 2 works conducted on site. The Open Day included two time-lapse films of the site being stripped and excavation of burnt mound complex 2, a dig diary created by members of staff showing interesting finds and features on site and a professional film showing the excavation of burnt mound complex 2. The various films were shown on screens within the community centre along with finds displays and updated display boards. Again over 300 visitors attended the open day and we received great feedback.

Volunteer Project

This project ran for four weeks in May and June 2016. The volunteers took part in the supervised 100% excavation of the already 50% excavated Iron Age storage pits in FAS055. This involved taking soil samples, learning the recording process and sieving. At the same time, we invited other volunteers to take part in the post-excavation process at our warehouse. The volunteers learnt to wash and mark finds correctly and to wet sieve soil samples and process them. In all, 169 buckets containing 1690 litres of soil from the volunteers' samples were processed. Three of the volunteers also began inputting the results into a database. Through this project 28 local volunteers participated and gave excellent feedback about their experiences. Also, regular updates on the project via Facebook and our website has helped generate further local interest.

Talks

Various talks to schools and local amateur archaeological groups have been undertaken by Alex Fisher throughout the project. These talks included some of the information on the Marham Park project as well as more general archaeological information.

Information booklet

Once the fieldwork stage of the project was complete an information booklet was produced for the new home owners at the Marham Park development, forming part of the welcome package for every new home occupied in the development. The booklet provided information on the key findings of the project together with a reconstruction illustration produced by Terence O'Rourke of burnt mound complex 1 and the surrounding Bronze Age activity on site (see front cover).

4.2 FAS 055

Preceding the work on the excavation and SME areas in FAS055 a temporary compound and subsoil stockpile was set up; the results are shown below.

4.2.1 Compound and stockpile strip

The area of the temporary compound and subsoil stockpile was set out using an RTK GPS system and mechanically stripped (Pl.2). Topsoil (0.35m) was metal detected and field walked for finds before removal, following which the exposed subsoil was metal detected. Sample digging showed that c.0.4m of subsoil was present in the area and as this material was not removed or impacted during these works, no archaeological features were exposed (Fig.3).

Finds

The metal detecting recovered mixed material from the topsoil and subsoil layers as shown below.

Area	Context number	Small finds
Temp Compound strip	Topsoil 0001	3055- Buckle, P-med 3056- Lead weight, P-med
Temp Compound strip	Subsoil 0002	1025- Nuremberg jetton, P-med 1027- Cast pot foot, P-med 1028- Bar mount, Med
Stockpile strip	Topsoil 0007	None
Stockpile strip	Subsoil 0008	3060- Boy Bishop token, P-med 3061- Button and lead, P-med-Mod

Table 1. FAS 055 compound and stock pile context numbers and finds

The topsoil and subsoil finds showed a typical spread of chance loss items found on land associated with medieval to modern arable use, with some items possibly originating from night soiling in the area (see section 4.2.13).



Plate 2. Temporary compound strip, looking south-east, 1x2m and 1x1m scale

4.2.2 FAS055 Introduction

The archaeology at FAS 055 was dominated by middle to late Iron Age pit groups with seven of these groups located in EX1 West. Two additional pit groups were present in other areas but there was a distinct difference in levels of activity seen on the east and west of the excavated area. More dispersed multi-period features were recorded on the eastern side and the concentrated Iron Age activity was mostly seen at the west.

The sections below discuss the features by phase; each phase is sub-divided into on-site area sub divisions for ease of illustration and location. Table 1 shows the sub divided areas with number blocks that are included within FAS 055. Features are summarised in the following sections; detailed description can be found in Appendix 2.

Area name	Size (Ha)	Context numbers	Topsoil	Subsoil	Section Number Block	Plan Number Block	Sample number block	Small find numbers
EX1 East	1.46	0005-0006 0009-0160 0654-0656 (157)	0005	0006	1-60 (61)	1-60 (61)	1-15 (16)	1001-1004 1007-1008 1014 3033-3035 3038-3039 (12)
EX1 West	1.06	0003-0004 0161-0421 0424-0455 0458-0653 (491)	0003	0004	61-238 (178)	61-141 (81)	17-47 (31)	1005-1006 1009-1013 1015-1017 1019 1026 1029 1033-1034 1036-1045 1047-1051 1053-1061 3000-3009 3052-3053 (56)
EX1 West Vol	-	8000-8102 (103)	0003	0004	-	-	150-209 (60)	See ex1 west
EX4	0.37	1500-1546 (47)	0456	0457	350-370 (21)	250-270 (21)	25-29 (5)	1030-1032 1035 3057-3059 (7)
SME4	0.36	0422-0423 1000-1022 (25)	0422	0423	300-309 (10)	200-207 (8)	-	1024 3031-3032 (3)
SME5	0.09	9000-9005 (6)	9001	9002	1000 (1)	900-901 (2)	400 (1)	3049-3051 (3)
Temp Comp	0.05	0001-0002 (2)	0001	0002	-	-	-	1025 1027-1028 3055-3056 (5)
Stock pile	0.04	0007-0008 (2)	0007	0008	-	-	-	3060-3061 (2)
Totals	3.43	833	7	7	271	173	113	88

Table 2. FAS 055 on-site number blocks

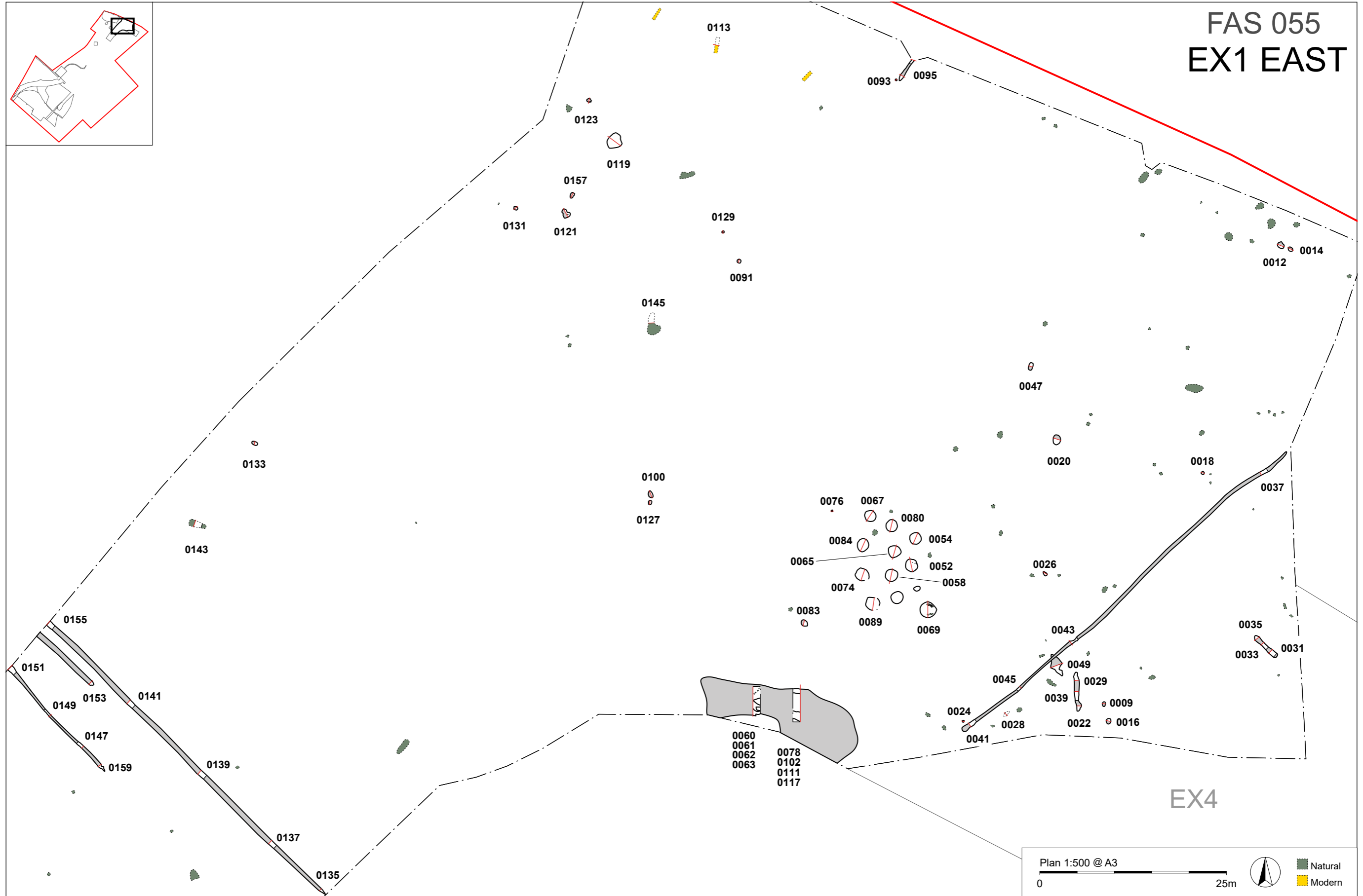


Figure 4. FAS 055 EX1 East plan (for phase plan see Fig.7)

FAS 055 EX1 WEST

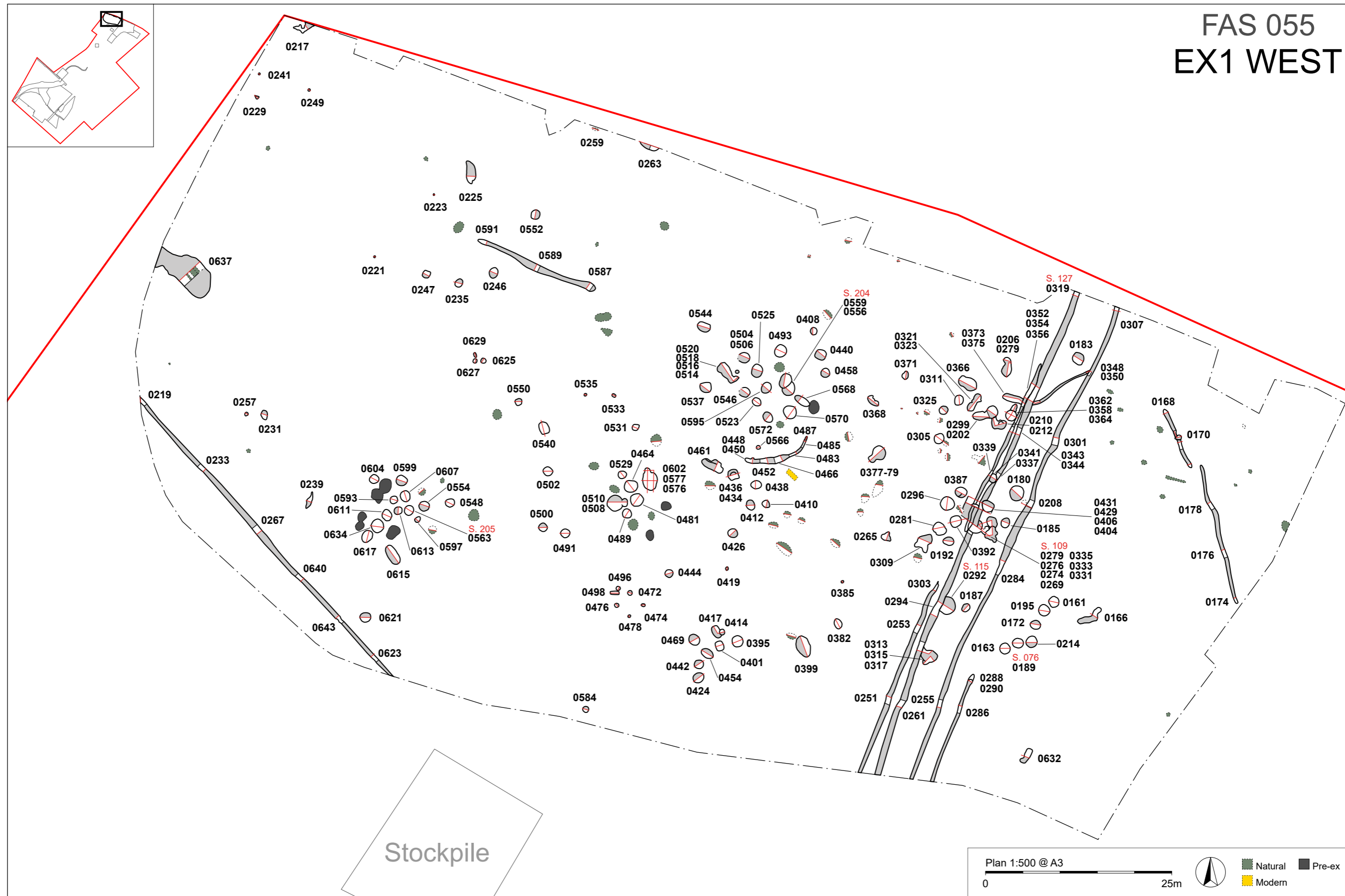


Figure 5. FAS 055 EX1 West plan (for phase plan see Fig.7)

4.2.3 Late Neolithic

4.2.3.1 EX1 East

Cut 0022 (also excavated as 0029 and 0039) contained a single sherd of Late Neolithic to Early Bronze Age pottery. This has an irregular profile and is most likely to be a glacial scar. (Pl. 3). Undated feature 0031 may also have been glacial (Fig. 4).



Plate 3. Feature 0022, looking south, 1x0.5m scale

4.2.4 Early Bronze Age

4.2.4.1 EX1 East

A single pit (0131) containing six sherds of Early Bronze Age pottery was located on the western side of the area. It was sub-circular in plan and measured 0.6m in diameter and 0.16m deep (Pl. 4) (Fig. 4).



Plate 4. Pit 0131, looking north-west, 1x0.3m scale

4.2.4.2 EX1 West

A single large pit 0183 contained fragmented pottery (1 sherd and 16 fragments) dated to the Late Neolithic to Early Bronze Age periods. This was oval in plan and measured 1.52m x 0.75m x 0.32m deep (Fig.5).

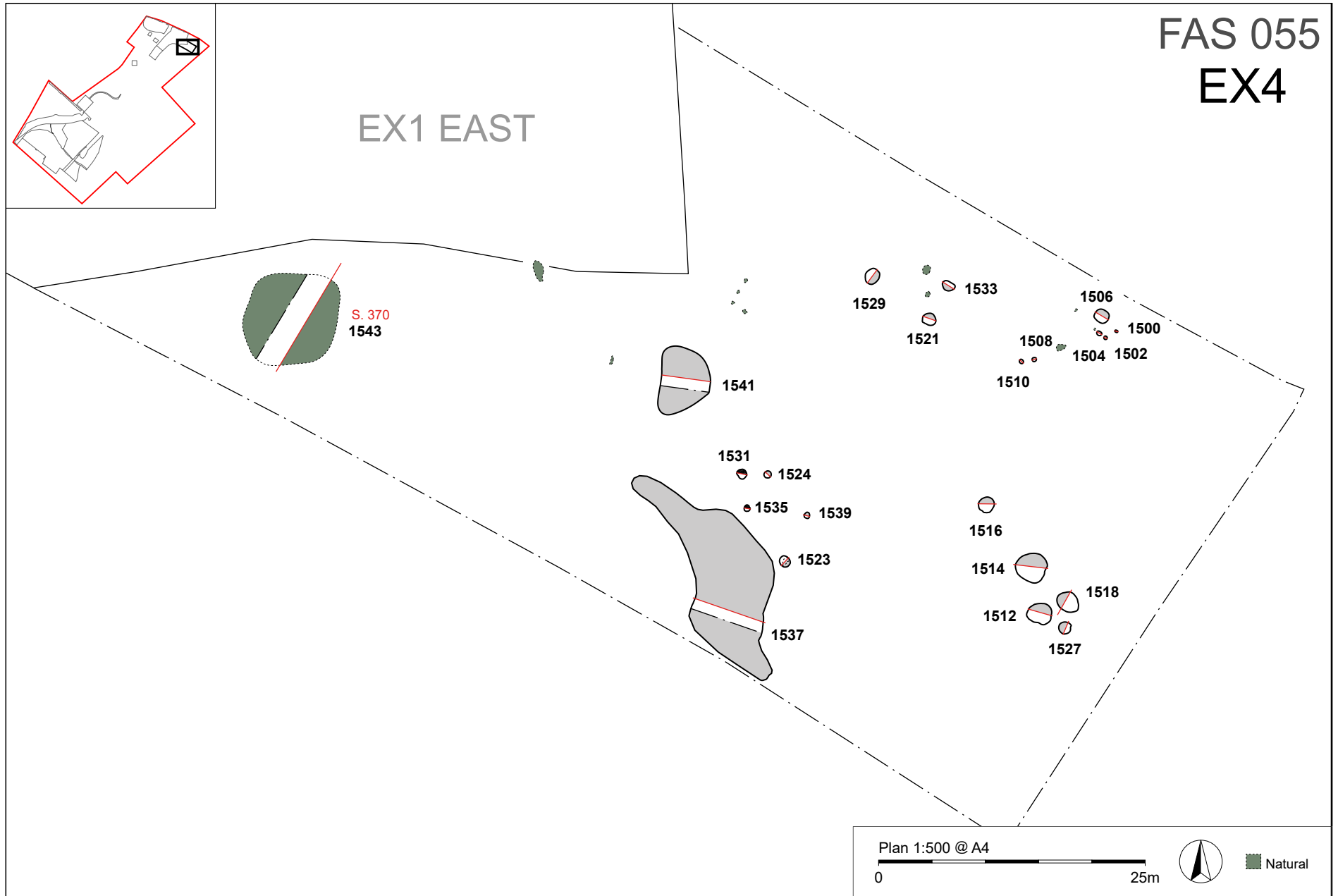


Figure 6. FAS 055 EX4 plan (for phase plan see Fig.7)

4.2.4.3 EX4

A large feature (1543) was initially excavated in the evaluation stage as pit 0169. During this phase of work Bronze Age pottery and a transverse arrowhead (evaluation S.F 1001) was recovered from the upper and middle fills. In the excavation phase, an additional hand-excavated slot and a further machine-excavated slot were cut into this feature, which showed it to be a large natural sink-hole; a small amount of additional struck flint but no additional pottery was recovered (Fig. 8. Section 370). The machine excavation of this feature was also monitored by James Rolfe (SCCAS) and the interpretation agreed before the feature was recorded and backfilled (Fig. 6).

4.2.5 Middle to late Bronze Age

4.2.5.1 EX1 East

A single circular pit (0012) and a spread (0028) in EX1 east were dated to this phase. Pit 0012 was located at the north-east of the area and contained sixteen sherds of pottery dated to the Late Bronze Age. A further undated pit (0014) was located next to 0012 and although it did not contain datable material, may be linked to this phase of activity (Pl. 5) (Fig. 4).



Plate 5. Pit 0012, looking north-west, 1x0.5m scale

Spread 0028 was located at the south-east corner of this area. It contained a single sherd of Late Bronze Age pottery and measured 0.2m deep. This spread is either relic soil surviving in a hollow or more likely the remnant of a tree throw.

4.2.5.2 EX1 West

No Bronze Age features were seen in EX1 West. Some residual finds dating to the Late Bronze Age period were however found within the Iron Age features. Most finds were flint scraper tools and knapping debitage, only a few fragments of residual pottery were found.

4.2.5.3 EX4

The natural features in EX4, such as the tree throws and hollows, also contained some Late Bronze Age material. These finds were mixed and many features also contained Iron Age material along with the Bronze Age finds.

4.2.6 Late Bronze Age to Early Iron Age

4.3.6.1 EX1 West

Four features were seen that contained Late Bronze Age and possibly earlier Iron Age material; these were all located in EX1 West.

Feature 0225 was seen at the west end of the area. It was irregular in plan, 3m x 1.25m x 0.8m deep with three fills (0226, 0227 and 0228) of a pale to dark grey brown silty sand with moderate flint inclusions. Only the top fill (0228) contained finds of struck flint and two pot sherds dating to the Late Bronze Age to Early Iron Age. This is likely to be a tree throw with accumulated finds (Fig. 5).

Possible posthole 0419, isolated in the central area of EX1 West, was sub-circular with near vertical straight sides, 0.44m in diameter and 0.33m deep. It had a single fill (0420) of mid to dark grey orange brown soft silty sand with occasional small flint inclusions. The fill contained a single small pottery sherd dated to the Late Bronze Age to Early Iron Age (Fig. 5).

Circular pit 0491 was located at the southern end of EX1 West (Pl. 6). It measured 1.2m in diameter by 0.3m deep and a single fill (0492) of mid-grey brown loose sandy silt which contained mixed pottery dating from the Neolithic and Late Bronze Age to the Early Iron Age. This feature was similar to the later Iron Age pits in the area but had a more diffuse lighter fill; it may belong to the later phase, having cut into and mixed an earlier feature into its fill, but this is unclear (Fig. 5).



Plate 6. Pit 0491, looking south, 1x1m scale

Feature 0632 was located at southern end of EX1 West. It was oval to lozenge shaped in plan and measured 2.1m x 0.68m x 0.12m deep and was probably a tree throw or truncated pit. It had a single fill (0633) of pale grey brown loose silt with occasional small flint inclusions and charcoal flecks, which contained 20 sherds of pottery and struck flint dated to the Late Bronze Age or more likely, the Early Iron Age period (Fig. 5).

4.2.7 Middle to Late Iron Age

The most intensive use of the area seen in FAS 055 was associated with the Middle to Late Iron Age periods. The most common features found were pits, which were probably for storage, but linear features and structures were also identified. Metal detecting of the topsoil deposits in EX1 East recovered a complete silver Iron Age

coin SF 1006, possibly from the Iceni tribe dating to AD 10-61 (see section 5.4 for further details).

The environmental assessment showed little evidence of seeds or pollen surviving within the fills of the pits. Although only a small proportion of the samples were assessed the potential of the environmental remains to provide information on the Iron Age pits function and use is low. All samples however should be looked at to clarify the results from the small selection of assessed samples. Feature plans are shown on Figures 4 to 6 and annotated pit groups have been shown on the phase plan (Fig. 7). Full feature and fill descriptions are in Appendix 2a.

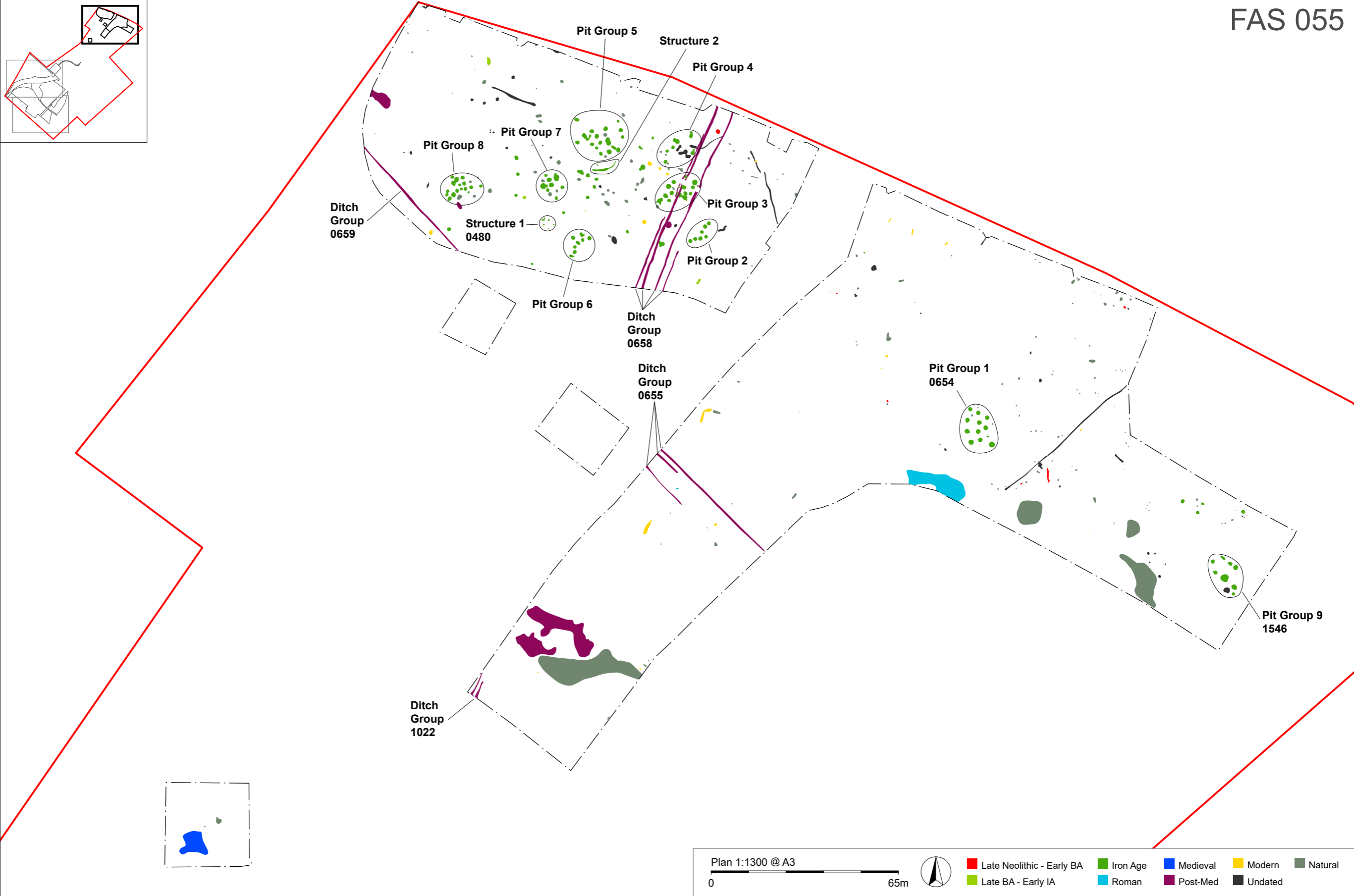


Figure 7. FAS 055 Phase plan showing annotated pit and ditch groups

4.2.7.1 EX1 East

Twelve pits including two excavated in the evaluation phase (60140 and 60142) were seen in EX1 East. (Pl. 7). They were all located in a single pit group (Pit Group 1) in the central area of the excavation (Figs. 4 and 9).

Pit Group 1

All the pits seen in this group were discrete and no cut relationships were present. They ranged in size from 1.5m to 2.1m in diameter and were circular in plan. All were truncated by modern land use as the depths are relatively shallow, from 0.18m to 0.46m. They displayed similar profiles with steep near-vertical sides and were cut into the natural geology of sand and clays in this area (Fig. 9). Only two pits contained more than a single fill which was generally a loose light to mid-grey brown silty sand with occasional flint inclusions. The pits that contained more than a single fill had a basal fill of either re-deposited natural or a charcoal stained dump deposit. Finds from these pits were generally sparse with most pit fills containing only a few pottery sherds (Table 3).

Cut number(s)	Fill number(s)	Fill notes	Length (m)	Width (m)	Depth (m)	Finds notes
0052	0053	Pale yellow brown natural silting	1.76	1.6	0.4	Small amounts of pottery (9 sherds), animal bone and flint
0054	0055, 0056, 0057	Charcoal stained basal dump fill 0057	1.64	1.6	0.46	Small amounts of pottery (1-5 sherds) and flint from basal dump and middle fill.
0058	0059	Pale yellow brown natural silting	1.7	1.6	0.2	51 pot sherds, small amounts of animal bone and flint
0065	0066	Brown friable silty sand	1.74	1.7	0.34	Small amounts of pottery (12 sherds) and animal bone
0067	0068	Mid brown silty sand	1.6	1.5	0.18	Small amounts of pottery (17 sherds) and animal bone
0069	0070, 0071	Possible basal dump fill 0071	2.21	2.21	0.3	Small amounts of pottery (1-5 sherds) and animal bone
0072	0073	Re-cut of 0069. Charcoal rich dump fill	-	1.81	0.21	99 sherds of pottery, 220 animal bone fragments
0074	0075	Mid orange brown natural silting	1.78	1.62	0.22	Small amounts of pottery (1-5 sherds) and flint
0080	0081	Mid orange brown natural silting	1.5	1.5	0.2	45 pot sherds, 40 animal bone fragments
0089	0090	Pale yellow brown natural silting	1.82	1.7	0.42	Small amounts of pottery (1-5 sherds) and animal bone

Table 3. FAS 055 Pit group 1 fill notes



Plate 7. Pit group 1 in EX1 East, looking north, 2x2m scale

4.2.7.2 EX4

EX4 contained twelve pits dated to this phase of activity including those excavated in the evaluation. Cut numbers are 1506, 1514, 1516, 1518, 1521, 1527, 1529, 1533 and evaluation cut numbers 0089, 0094, 0108 and 0132 (Figs. 6 and 7).

Pit group 9

Most of the pits were located at the east of the excavated area within a small pit group of eight (three excavated in the evaluation stage). The pits in this area are less defined than others seen in FAS 055. The cuts are amorphous in plan and vary from sub-circular to oval and the profiles also differ from the pits seen elsewhere (Fig. 7). The pits had variable sides, some concave and steep, some straight and shallow and the bases varied from concave to irregular. The pits vary in size from 1.2m to 2.8m in diameter and have depths from 0.12m to 0.6m. In general, a single fill was observed which was a light to mid-orange brown loose sandy silt with occasional charcoal flecks and small flint inclusions. Very sparse finds were recovered including struck flint and pottery sherds dating to the Middle to Late Iron Age (Table 4). SF 1035 (a fire-cracked hammer stone) was found in top fill 1520 in pit 1518. Pit 1518 (Pl. 8) of this group was assessed for environmental remains.

Cut number(s)	Fill number(s)	Fill notes	Length (m)	Width (m)	Depth (m)	Finds notes
1512	1513	Loose mid brown sand natural silting	2.2	2.0	0.6	No finds
1514	1515	Loose mid brown sand natural silting	3.0	2.5	0.6	No finds
1516	1517	Increased charcoal flecks at the base, maybe very thin separate dump deposit	1.5	1.4	0.4	1 pottery sherd at the base of the feature
1518	1519	Loose mid brown sand natural silting	2.2	1.7	0.6	3 pottery sherds, 1 animal bone fragment
1527	1528	Loose light brown sand natural silting	1.14	1.14	0.46	4 pottery sherds

Table 4. FAS 055 Pit group 9 fill notes



Plate 8. Pit 1518, EX4, pit group 9, looking north-west, 1x1m scale

4.2.7.3 EX1 West

One hundred and six pits dated to this phase of activity were seen in EX1 West, 86 of which can be sub-divided into seven separate pit groups, shown in Table 5 (Figs. 5 and 7). There were also two possible structures; one a four-post structure with two associated features and the other a curvi-linear feature with two possible associated postholes. Some of the pits had intercutting relationships with other features on the site, including other pits. There was some evidence of placed deposits within the pits;

three of them contained pot dumps whilst three pits contained partially articulated animal remains which are discussed in section 5.5.2 and will be integrated into the discussion at the analysis stage.

Group type and number	Associated group number	Cut numbers	Evaluation cut numbers	Date and notes
Pit Group 2	-	0161, 0163, 0172, 0189 0195 0214	0043	Linear pit alignment.
Pit Group 3	-	0180, 0185, 0192, 0281, 0296,0309, 0333, 0335 (tree throw), 0341, 0387, 0392, 0406 (ex in evaluation) 0431, 0271, 0276/0331	0036, 0038, 0078	Pit group focused around a tree.
Pit Group 4	-	0202, 0210 (tree throw), 0212 (tree throw), 0299 (tree throw), 0206, 0279 (tree throw), 0305, 0311, 0325, 0321 (tree throw) 0323, 0358, 0362 (tree throw), 0366 (natural feature?)	-	Pit group in a cleared area.
Pit Group 5	-	0408 (tree throw?), 0440 (Tree throw?), 0458, 0493, 0504, 0506, 0514, 0516, 0518, 0520, 0523, 0525, 0537, 0544, 0546, 0556, 0559, 0568, 0570, 0572, 0595	0049, 0051, 0053, 0095, 0114	Pit group north of structure 2.
Pit Group 6	-	0395, 0401, 0414, 0417, 0424, 0442, 0454, 0469	0022	Located east of posthole structure 0480 (structure 1). Pit alignment.
Pit Group 7	-	0464, 0481, 0489, 0508, 0510, 0529, 0576, 0577, 0602	-	Larger pits south-west of structure 2 and north of structure 1.
Pit Group 8	-	0548, 0554, 0563, 0593, 0597, 0599, 0604, 0607, 0611, 0613, 0617, 0634	0006, 0009, 0024, 0026, 0087	Discrete pits located apart from the other pit groups.
Structure 1	Structure 0480	0472, 0474, 0476, 0478 Associated 0496, 0498		Four post structure and associated features.
Structure 2	Ditch 0447	Ditch slots 0448, 0452, 0466, 0483, 0485, 0487 Postholes 0450, 0566		Possible wind break with curvi-linear ditch 0447 and postholes.

Table 5. FAS 055 EX1 cut numbers associated with pit groups and structures

In addition to these pit groups, there were twenty pits that were not found associated with groups and which were mostly located between Structure 1 and Structure 2.

Pit group 2

This consisted of seven pits, one of which was excavated in the evaluation. The layout of this group was more linear than the other groups, spread out running north-east to south-west (Fig. 7). The pits were discrete with none intercutting and were generally circular in plan with some pits slightly more oval with steep or concave sides and flat bases. They measured from 1.4m to 1.5m in diameter with depths

varying from 0.25m to 0.48m. One to five fills were present within the pits. Most pits contained an upper natural silting deposit of a loose light to mid-brown sandy silt with small flint inclusions. The basal and middle fills differed between the pits. Some pits contained dark grey brown charcoal rich silty sand dump deposits which were finds rich and some pits contained slumps and natural basal fills of light to mid-orange brown silty sands (Table 6). The two pits of note in this group were pit 0172 and 0195 which contained possible articulated animal bone. Pit 0172 basal fill 0173 contained animal bone at the very base of the feature within a pale natural redeposited silty sand and clay fill. Pit 0195 (Pl. 10) contained animal bone 0199 within middle fill 0201. This fill was also a more naturally derived slump fill of mid orange brown silt. Finds from these pits include animal bone, struck flint and pottery. The section of pit 0189 of this pit group has been illustrated (Fig. 8. Section 76). Pit 0195 of this group was assessed for environmental remains.

Cut number(s)	Fill number(s)	Fill notes	Length (m)	Width (m)	Depth (m)	Finds notes
0161	0162	Light brown loose sandy silt natural silting	1.4	1.3	0.3	6 fragments of animal bone
0163	0164, 0165	Charcoal stained basal dump fill (0164). Plate 9	1.35	1.35	0.42	3 sherds of pottery in total
0172	0173, 0182	Basal slump fill with animal bone (0173)	1.32	1.1	0.32	Articulated animal bone (106 fragments) in 0173. 1 pot sherd in 0182.
0189	0190, 0191, 0204	Basal slump (0204), Charcoal stained middle dump fill (0191)	1.38	1.2	0.36	15 pot sherds from 0191, 2 pot sherds from 0204.
0195	0196,0197, 0198,0200, 0201	Possible charcoal flecked dump fill (0200). Mostly natural silting.	1.51	1.5	0.48	Articulated animal bone (0199, 151 fragments) in fill 0201. 34 pot sherds from 0196.
0214	0215, 0216	Charcoal stained basal dump fill (0216).	1.25	1.25	0.4	8 pot sherds in total.

Table 6. FAS 055 Pit group 2 fill notes



Plate 9. Pit 0163, Pit group 2, looking north, 1x1m scale



Plate 10. Pit 0195 showing animal bone, pit group 2, vertical, 1x0.3m scale

Pit group 3

This pit group consisted of sixteen pits, three of which were excavated in the evaluation. This included a single complex of intercutting pits associated with tree throw 0335 and some pits were cut by the later post-medieval linear features running north-east to south-west (Fig. 5 and Fig. 7). A pit recorded in the evaluation as 0078 was fully excavated in the excavation as 0406. In general, the pits were similar in form to those seen in other pit groups, circular in plan with steep flat to concave sides and flat to slightly concave bases. They measured 1.09m to 1.9m in diameter and had depths of 0.23m to 0.9m. The fills varied from a single deposit of dark brown sandy silt with charcoal flecks to a series of five fills with dark brown charcoal rich silt layers, dumps and re-deposited natural slumps (Table 7). The main pits that displayed multiple fills including charcoal-rich dump deposits were pit 0296 which contained five fills and two charcoal layers, pit 0392 (Pl. 11) which contained two fills with the basal fill being a charcoal rich dump deposit and pit 0387 which contained four fills and a single middle dark charcoal-rich deposit. Finds were retrieved from most features fills and include pottery, animal bone and struck flint.

Pit 0392 of this group was assessed for environmental remains and showed the most potential out of all of the Iron Age pits assessed. The sample only had very low seed counts but did contain small mammal and possible amphibian bones which will be looked at in more detail during the analysis stage.

Cut number(s)	Fill number(s)	Fill notes	Length (m)	Width (m)	Depth (m)	Finds notes
0180	0181	Dark brown natural silting.	1.4	1.4	0.3	14 fragments of animal bone
0185	0186	Dark brown natural silting.	1.3	1.2	0.35	Worked flint only.
0192	0193, 0194	Dark brown natural silting top fill (0193), natural slump basal fill (0194)	1.5	1.44	0.48	Articulated animal bone (37 fragments) at base of fill 0193.
0271	0272, 0273, 0278	Natural silting fills	0.94	0.7	0.44	Small amounts of animal bone and worked flint
0276/0331	0277/0332	Single natural silting fill	-	0.54	0.43	1 sherd of pottery
0281	0282, 0283	Basal slump (0283), top dark possible dump fill (0282)	1.56	1.56	0.47	4 sherds of pottery and 6 animal bone fragments (0282 only)
0296	0297, 0298, 0327, 0328, 0329	Middle charcoal dump deposit (0298), basal charcoal dump deposit (0328).	1.9	1.85	0.9	Fills 0297 and 0298 contained 17 and 20 pottery sherds. Animal bone from all fills.
0309	0310	Mid brown natural silting fill	1.44	1.3	0.08	Struck flint only
0333	0334	Dark grey natural silting	-	0.78	0.39	Small amounts of pottery, animal bone and struck flint
0341	0342, 0347	Basal natural slump 0342	1.09	0.88	0.26	2 pottery sherds and 2 flints (0347 only)
0387	0388, 0389, 0390, 0391	Basal natural slump (0388), middle charcoal rich dump (0390).	1.53	1.4	0.41	7 pot sherds from 0389 only

Cut number(s)	Fill number(s)	Fill notes	Length (m)	Width (m)	Depth (m)	Finds notes
0392	0393, 0394	Basal charcoal rich dump (0394).	1.66	1.66	0.71	6 and 2 pottery sherds, 33 and 37 animal bone fragments from fills
0406	0407	Dark brown natural silting. Possible dump deposit.		1.43	0.45	15 sherds of pottery and 84 animal bone fragments.
0431	0432	Light brown natural silting.	0.85	0.85	0.33	No finds

Table 7. FAS 055 Pit group 3 fill notes



Plate 11. Pit 0392, pit group 3, looking north, 1x2m scale

The intercutting relationships seen between pits 0271, 0276 (same as 0331), 0333 and tree throw 0335 (Fig. 8. Section 109) is worthy of note and seems to suggest that the group is focused around this tree throw; it is possible that it was used as a marker to locate the pits. The sequence seems to suggest that most of the pits were excavated around the upstanding tree but that at some stage the tree fell, creating tree throw 0335 and an additional pit 0276 was then excavated into the tree throw showing continued use of this pit group. The cut sequence is as follows; Pit 0333 and 0271/0331 excavated close to the upstanding tree, tree falls creating tree throw 0335 cutting and disturbing pits 0333 and 0271/0331, pit 0276 is then excavated into the filled tree throw. Later post-medieval ditches 0274 and 0269 then cut all the features in this area.

Pit 0192 which contained possible articulated animal remain in redeposited basal fill 0194 (Pl. 12).



Plate 12. Pit 0192 showing animal bone, pit group 3, looking north, 1x1m scale

Pit group 4

This pit group contained seven pits, six tree throws and a natural glacial feature (Fig. 5 and Fig. 7). The pits in this group are more amorphous than those in other pit groups with oval, sub-oval and sub-circular shapes and the fills are also less variable with only three pits (0202, 0323 and 0358) containing more than one fill. Most single fills were similar to the other pits seen and were composed of a mid to dark grey brown or brown sandy silt with occasional flint inclusions as shown by pit 0305 (Pl. 13). Finds were also less frequent within this pit group but pottery, animal bone and struck flint was still recovered from most features but in lower proportions (Table 8).

Cut number(s)	Fill number(s)	Fill notes	Length (m)	Width (m)	Depth (m)	Finds notes
0202	0203, 0205	Basal fill 0203 dark organic dump fill.	1.7	1.6	0.32	1 pot sherd and 26 animal bone fragments (0203 only)
0206	0207	Mid brown natural silting.	0.98	0.45	0.16	No finds
0305	0306	Dark brown natural silting.	1.3	1.3	0.25	1 pottery sherd and 1 flint
0311	0312	Charcoal stained possible dump deposit	1.1	0.5	0.3	No finds
0323	0324, 0330	Mid to dark grey brown natural silting	1.3	1.3	0.25	No finds
0325	0326	Pale yellow brown natural silting	1.1	1.1	0.4	No finds
0358	0359,0360, 0361	Middle charcoal dump deposit (0360)	1.5	1.36	0.4	5 sherds of pottery (0360 only), animal bone from other two fills

Table 8. FAS 055 Pit group 4 fill notes



Plate 13. Pit 0305, pit group 4, looking north-east, 1x1m scale

The number of tree throws in this group is notable and two pits could be seen cutting them. Pit 0358 cut tree throw 0362 and pit 0323 cut tree throw 0321, but the relationship between pits 0206 and 0202 with tree throws 0279, 0210, 0299 and 0212 respectively was unclear. This again may suggest that this group of pits is focused around upstanding trees or placed in an area cleared of trees although this is less clear than Pit Group 2.

Of particular note is pit 0358 which contained three fills including a middle dump fill of dark charcoal-rich silt (0360). This feature also contained the largest assemblage of finds from this group and is similar to those seen in other pit groups with charcoal-rich dump deposits.

Pit group 5

This contained twenty-two pits and two possible tree throws (Fig. 5 and Fig. 7); five of the pits were excavated in the evaluation of which three were excavated in both the evaluation and excavation phases. Pits 0114, 0053 and 0049 in the evaluation were excavated as 0556, 0506 and 0514 respectively in the excavation. This is the largest pit group and covers the largest area. Most pits are discrete with only two intercutting relationships seen and all are either oval, sub-oval or circular in plan with relatively consistent steep sides. They measured 0.9m to 1.9m in diameter with depths from 0.3m to 0.76m. The elongated pits generally measured twice as long as they were wide. Most contained one to three fills with the exception of pit 0525 which contained five fills. The fills in general had either a single or upper fill of dark brown or grey brown loose sandy silt with charcoal flecks and small flint inclusions. The basal fills were generally of re-deposited natural of a lighter orange brown silt and sand with some mixing present (Table 9). This area also contained two possible tree throws 0408 and 0440 which were more irregular in plan and section and contained lighter fills with no finds. Pottery, animal bone and struck flint was recovered, but this group contained less pottery (only recovered from seven pits) and more animal bone (found in ten pits) than other groups.

Cut number(s)	Fill number(s)	Fill notes	Length (m)	Width (m)	Depth (m)	Find notes
0458	0459, 0460	Natural basal slump (0459), possible charcoal rich dump top fill (0460)	1.24	1.24	0.4	No finds
0493	0494, 0495	Charcoal rich dump top fill 0495	1.54	1.54	0.52	Large amount of animal bone in fill 0495 (115 fragments).
0504	0505	Charcoal rich dark fill.	1.4	1.4	0.8	Animal bone only (30 fragments)
0506	0507	Excavated in evaluation. Same as 0505	1.4	1.4	0.8	-
0514	0515	Dark brown natural silting	1.2	1.2	0.4	2 pottery sherds
0516	0517	Dark grey natural silting	1.1	0.92	0.2	No finds
0518	0519, 0522	Dark brown natural silting	1.13	1.1	0.4	No finds
0520	0521	Pale brown natural silting (probably natural feature)	0.8	0.8	0.15	No finds
0523	0524	Charcoal rich possible dump deposit	1.1	1.1	0.3	14 pottery sherds and 10 animal bone fragments
0525	0526,0527, 0528,0647, 0648	Two middle charcoal rich dump deposits (0526 and 0648). Basal natural slump 0647	1.55	1.55	0.52	Small amounts of animal bone from 0528, 0647 and 0648
0537	0538, 0539	Pale brown natural silting	1.63	1.52	0.22	No finds
0544	0545	Mid brown natural silting	1.35	1.35	0.16	No finds
0546	0547	Orange brown natural silting	1.2	1.09	0.26	No finds
0556	0557, 0558	Natural basal slump (0557)	1.6	1.4	0.58	Pottery and animal bone mostly from upper fill 0558
0559	0560,0561, 0562	Basal dump of natural clay (0560)	2.0	1.5	0.76	Small amounts of pottery and animal bone
0568	0569	Mid brown natural silting	2.0	1.0	0.44	Small amounts of pottery and animal bone
0570	0571	Silty clay fill. Natural silting	1.6	1.9	0.68	3 pottery sherds, Large amount of animal bone (78 fragments)
0572	0573,0574, 0575	Basal dump of natural clay (0573)	1.4	1.14	0.74	Large amount of animal bone from fill 0573 (47 fragments).
0595	0596	Mid brown natural silting	1.57	1.14	0.25	Small amounts of pottery and animal bone

Table 9. FAS 055 Pit group 5 fill notes

Pit 0559 cut pit 0556 (Fig. 8. Section 204) and pits 0514 and 0518 cut pit 0516; pit 0518 also cut pit 0520 which may be a tree throw.

Two features of note in this group include pit 0493 (Pl. 14), which contained a large amount of animal bone in the two fills (0494 and 0495) and pit 0525 which contained five fills (0526, 0527, 0528 0637 and 0648). The fills seen in pit 0525 contained two charcoal-rich dump deposits.

This pit group was located just north of possible Structure 2, and may be associated with it.



Plate 14. Pit 0493, pit group 5, looking south, 1x1m scale

Pit group 6

This contained nine pits, one of which was excavated in the evaluation. It is set out in a roughly linear pattern running north-east to south-west similarly to Pit Group 2 but here the alignment is less well defined (Fig. 5 and Fig. 7). Most of the pits are discrete with only one intercutting relationship seen, where pit 0414 cut pit 0417. This pit group is located just to the east of post hole Structure 1 which may indicate that the two were contemporary. The pits in this group are oval to circular in plan and are well defined, with steep concave or steep flat sides and flat to slightly concave bases. The pits measured 0.7m to 1.5m in diameter with depths from 0.18m to 0.5m. The pits contained one to three fills with mid to dark grey brown silty sand fills being present in all pits but varying in location within the fill sequences. Pits with two or three fills generally had an upper or lower fill of a paler yellow brown natural silting, such as pit 0401 (Pl. 15). Pottery and struck flint was recovered from most pits but animal bone was less common within this group (Table 10).

Cut number(s)	Fill number(s)	Fill notes	Length (m)	Width (m)	Depth (m)	Find notes
0395	0396,0397, 0398	Natural silting basal fill 0396, middle dump fill 0397	1.5	1.5	0.46	2 sherds of pottery (0397) 10 fragments of animal bone (0398)
0401	0402, 0403	Natural silting basal fill 0402	1.06	1.1	0.44	Small amounts of pottery and animal bone
0414	0415 ,0416	Clay lining 0415	0.7	0.7	0.18	2 sherds of pottery (0416)
0417	0418, 0421	Basal charcoal rich dump deposit 0418	1.5	0.75	0.45	Small amounts of animal bone form 0421 only
0424	0425	Charcoal rich dump deposit	1.2	1.1	0.25	1 sherd of pottery
0442	0443	Dark grey natural silting	1.2	1.2	0.25	10 pottery sherds
0454	0455	Dark grey natural silting	1.75	1.5	0.3	106 sherds of pottery including volunteer fill 8047
0469	0649,0470, 0471	Basal slump or dump 0649	1.5	1.5	0.5	Small amounts of pottery from all fills

Table 10. FAS 055 Pit group 6 fill notes



Plate 15. Pit 0401, pit group 6, looking north, 1x1m scale

Of note in this group are pits 0414 and 0454. Pit 0454 contained a single fill (0455) with the largest amount of pottery from this pit group; 106 sherds and chips of middle to late Iron Age pottery was found associated with many different vessel types. Pit

0414 cut pit 0417 and had a possible clay lining (0415) and a dark charcoal stained clay fill (0416) containing heat altered stone and pottery. This suggests that after pit 0417 went out of use, water was being heated in this area, possibly related to the activity associated with Structure 1.

Pit group 7

This pit group contained nine pits and contained the two largest pits in FAS 055, pits 0510 and 0577 (Fig. 5 and Fig. 7). Four of the pits are discrete and five intercut. The pits in this group are mostly circular or sub-circular in plan and are well defined, with steep sides. They measured 0.65m to 2.2m in diameter and from 0.35m to 1.6m deep. The discrete pits all contained a single fill of a dark brown grey moderately compact silty or sandy clay (Table 11) with pottery, animal bone and struck flint; some contained heat-altered flint.

The intercutting pits were of note, differing from the discrete ones. Pit 0510 which cut 0508, contained three fills (0511, 0512 and 0513) with middle fill 0511 a possible dump deposit. Both pits contained pottery and struck flint.

Cut number(s)	Fill number(s)	Fill notes	Length (m)	Width (m)	Depth (m)	Finds notes
0464	0465	Dark brown grey natural silting, maybe dump deposit	1.6	1.45	0.35	32 sherds of pottery and 45 fragments of animal bone
0481	0482	Dark brown grey natural silting	1.55	1.42	0.38	20 sherds of pottery and 1 fragment of animal bone
0489	0490	Dark brown grey natural silting	1.26	1.2	0.35	5 pottery sherds
0508	0509	Mid brown grey natural silting	1.1	0.8	0.35	12 sherds of pottery
0510	0511,0512, 0513	Upper possible dump deposit 0511, non-charcoal rich	2.1	1.95	0.68	Large amount of pottery (55 sherds) and animal bone (450 fragments) from fill 0511
0529	0530	Dark brown possible dump deposit	1.37	1.34	0.45	40 sherds of pottery, 1 fragment of animal bone
0576	0578,0579, 0580,0581	Charcoal rich dump deposit 0579	2.45	2.22	0.83	All fills contain large amounts of pottery, fill 0578 contained 138 sherds alone.
0577	0582, 0583	Slumps and natural silting		1.8	1.6	Fill 0583 contained 34 pottery sherds and 101 animal bone fragments
0602	0603	Pale brown natural silting	0.65	0.55	0.54	14 sherds of pottery

Table 11. FAS 055 Pit group 7 fill notes

A sequence of intercutting pits in the central area of the pit group showed pit 0576 cutting both 0577 and 0602; these are the largest and deepest pits seen in FAS 055 (Pl. 16). Pit 0576 measured 2.2m in diameter and had a depth of 0.83m; it was cut

into the top of pit 0577. It contained four fills (0578, 0579, 0580 and 0581) with fill 0579 being a charcoal-rich dump deposit. Pottery, animal bone and struck flint was found in all fills and top fill 0578 also contained fired clay, which may be the remnants of a loom weight or daub. Pit 0577 continued below pit 0576 measuring 1.8m in diameter by 1.6m deep with slightly undercutting sides; it contained two fills with the basal fill (0583) of a loose light brown grey silt containing pottery, animal bone and struck flint. Pit 0602 was located on the north-west side of 0576 and only 50% of the pit remained. It contained a single fill of pale yellow brown silty sand, which contained pottery and struck flint.

This group was located north of Structure 1 and south-west of Structure 2.



Plate 16. Intercutting pits 0576 and 0577, pit group 7, looking north, 1x2m and 1x1m scale

Pit group 8

This pit group contained sixteen pits (five of which were excavated in the evaluation). A single pit, evaluation cut 0026, was also investigated as 0617 in the excavation. All the pits in this group were discrete and were oval or circular in plan with steep sides (Fig. 5 and Fig. 7) (Pl. 17). They measured from 0.7m to 1.7m in diameter and 0.12m to 0.65m in depth but were generally more uniform in diameter than the other pit groups, with most pits falling between 1.1m and 1.5m in diameter. Six pits contained a single fill of a mid or dark orange to grey brown silty clay or sandy silt. All these single fill pits contained finds of pottery, animal bone and struck flint with the exception of the smallest pit 0597, which contained a more natural derived lighter yellow brown sandy silt fill with no finds (Table 12).

Four pits contained two fills, some with darker dump deposits or natural slumping. A single pit (0611) contained three fills. These were mostly variations of natural silting deposits but the central fill 0620 was a dark brown grey charcoal-rich silty sand dump deposit. Pit 0599 of this group was assessed for environmental remains.

Cut number(s)	Fill number(s)	Fill notes	Length (m)	Width (m)	Depth (m)	Finds notes
0548	0549	Mid brown natural silting	1.5	1.34	0.39	22 pot sherds and 10 animal bone fragments
0554	0555	Dark orange brown silty clay natural silting	1.6	1.4	0.4	14 sherds of pottery and 4 animal bone fragments
0563	0564, 0565	Dark grey brown natural silting (0564), pottery dump at base (0565)	1.5	1.22	0.44	Pottery dump 0565 with 306 chips and sherds, 52 animal bone fragments
0593	0594	Dark grey brown clayey natural silting	1.15	1.07	0.49	Flint only
0597	0598	Dark grey brown clayey natural silting	0.75	0.6	0.12	15 pottery sherds
0599	0600, 0601	Possible basal dump deposit 0601, charcoal flecked clay	1.45	1.45	0.48	72 pottery sherds from 0601
0604	0605, 0606	Basal charcoal rich dump deposit 0606	1.24	1.24	0.65	23 pottery sherds and 21 animal bone fragments (0606), 1 pot sherd (0605)
0607	0608, 0609	Natural basal slump 0608	1.55	1.3	0.23	6 pottery sherds, 6 animal bone fragments (0609 only)
0611	0612, 0620, 0631	Middle charcoal rich dump deposit (0620)	1.55	1.55	0.31	Excavated in spits. Small amounts of pottery from all fills, large amounts of animal bone from 0620 (200 fragments) and 0631 (44 fragments)
0613	0614	Pale brown natural silting	1.0	0.95	0.16	No finds
0617	0618, 0619	Basal slump fill 0618	1.7	1.3	0.44	10 sherds of pottery (0619 only)
0634	0635 (0634, 0639, 0642)	Mixed possible dump deposit	1.7	1.8	0.46	Excavated in 3 spits. Large amounts (106 sherds) from the 3 spits.

Table 12. FAS 055 Pit group 8 fill notes

Of particular note was pit 0563 which contained a single fill, 0564, with pottery dump 0565 at the base of this pit containing 306 chips and sherds associated with multiple vessels with some decorated pieces and four sherds re-fitting (Fig. 8. Section 205).

Pit 0604 contained two fills with the basal fill 0606 a charcoal rich dump deposit containing pottery and animal bone.

Pit 0611 contained a possible dump deposit 0620 of pottery, animal bone and struck flint located centrally between two more naturally derived silting deposits.

This group is located to the west of all the other pit groups and seems more isolated, with no evidence of any association with trees or other structures.



Plate 17. Pit group 8 pre-excavation, looking north, 1x2m and 1x1m scale

Pits not associated with pit groups

A further eighteen pits were seen that date to this phase of activity but that were not associated with pit groups. Most of these pits were seen around Pit Group 7 and Structure 2 as well as outlying pits around the edge of the excavation. These pits were more variable in form than the pits seen within the groups; the majority are likely to be tree throws or animal disturbance with only five to seven of them being more positively storage pits. Pit 0292 is one such pit, the section also shows post-

medieval ditch 0294 (Fig. 8. Section 115). Pit 0436 in this area was assessed for environmental remains.

Pit 0540 contained a dump of pottery (0542) at the base of the pit from which 436 sherds and chips of pottery were recovered from multiple vessels (including from within sample 30), including two joining pieces, decorated rim sherds and a large number of body sherds. This was the largest pottery assemblage from any single feature on the project and suggests that this pit was used for waste disposal or selected for a placed deposit of this material, perhaps as a primary, or more likely a secondary function (Pl. 18). This pit was also assessed for environmental remains.



Plate 18. Pit 0540 showing pot dump 0542, vertical, 1x0.3m and 1x1m scale

Structure 1

Posthole structure 0480 was located at the south edge of site, close to pit groups 6 and 7 (Figs. 5 and 7). It was square in form 3.2m by 2.8m and consisted of four circular postholes (0472 (Pl. 19), 0474, 0476 and 0478) measuring 0.32m to 0.47m in diameter with depths from 0.12m to 0.15m. All four postholes contained a single

similar fill of a mid-orange brown sandy silt with occasional charcoal flecks and small flint inclusions; 0472 and 0476 contained pottery dating to the middle to late Iron Age.

Two other features, 0496 and 0498, seen in close proximity, just west of this structure may relate to it. Posthole 0496 was circular, measuring 0.4m in diameter and 0.15m deep and had a similar fill to the postholes in structure 0480. It contained pottery dating to the middle to late Iron Age. Pit 0498 was sub-rectangular in plan which differed to most other features in this area. It measured 1.2m long and 0.5m wide and had a depth of 0.3m and contained a single fill of a mid-orange brown soft sandy silt with occasional charcoal flecks, similar to the fills of the postholes in structure 0480. It contained pottery and struck flint.

Structure 1 probably represents a four-post grain store and the additional features may relate to the activity associated with it with 0496 perhaps offering additional structural support.



Plate 19. Posthole 0472, Structure 1, looking north, 1x0.3m scale

Structure 2

Structure 2 was formed of curvi-linear gully 0447 and postholes 0450 and 0566. The curvi-linear gully was excavated in 6 slots (0448, 0452, 0466, 0483, 0485 and 0487) and then later 100% excavated for finds once recorded. It was linear in plan and curved from an east to west alignment to a north-east to south-west alignment (Figs. 5 and 7). The gully measured 8m in length and up to 0.9m wide and up to 0.36m deep. It had a bowl-shaped profile and a uniform fill of mid-grey brown soft sandy silt with occasional charcoal flecks and small flint inclusions. Finds include pottery, struck flint and fired clay.

Posthole 0450 was located within the western terminal end of the gully. The relationship between the posthole and gully was unclear; both had the same fill, and it is likely that the features are contemporary. It was circular in plan and measured 0.2m in diameter and no finds were recovered from it (Pl. 20).

Posthole 0566 was located north of gully 0447. It was circular and measured 0.5m in diameter and 0.2m deep with a single fill of a dark grey brown soft sandy silt with occasional small flint inclusions which contained struck flint.

This structure is most likely to be a windbreak with associated postholes and may form a small working area, possibly associated with the excavation of the nearby pit groups.



Plate 20. Posthole 0450 and ditch terminus 0448, structure 2, looking south-east, 1x0.3m scale

Small finds

Twenty-six small finds were found within the pits in EX1 West. Most of the small finds are likely to be earlier residual worked flint tools but loom weights and hammer stones are likely to date from this phase of activity, showing discarding of or intentional placement of occupational debris.

Cut Number	Fill Number	Pit Group	Small Find Number	Object
0214	0215	Group 2	1019	Flint scraper
0313	0314	None	1067	Hammer stone
0371	Top of feature	None	1016	Fe object
0379	0380	None	1020	Hammer stone
0379	0380	None	1021	Loom weight frag
0382	0384	None	1022	Hammer stone
0382	0384	None	1023	Hammer stone
0395	0397	Group 6	1026	Loom weight frag
0395	8064	Group 6	1071	Loom weight frag
0414	8076	Group 6	1066	Hone
0438	0439	None	1029	Hammer stone
0454	8047	Group 6	1061	Hammer stone
0454	8047	Group 6	1070	Bead (ceramic)
0461	0462	None	1068	Hone
0464	8042	Group 7	1060	Flint Burin
0489	8027	Group 7	1059	Hammer stone
0493	0495	Group 5	1062	Worked antler
0510	0511	Group 7	1033	Fe object (Brooch)
0510	0511	Group 7	1034	Loom weight frags
0510	0511	Group 7	1065	Hammer stone
0540	0543	None	1036	Quern Fragment
0540	0543	None	1037	Quern Fragment
0540	8003	None	1044	Fe object
0548	0549	Group 8	1038	Finishing stone?
0559	0562	Group 5	1015	Fe object
0563	0564	Group 8	1039	Burnishing stone/ Hone
0577	0578	Group 7	1040	Hammer stone
0577	0578	Group 7	1041	Hammer stone
0577	0578	Group 7	1069	Loom weight frag
0577	0579	Group 7	1043	Scraper?
0577	0581	Group 7	1042	Hammer stone
0577	0583	Group 7	1051	Hammer stone
0602	0603	Group 7	1045	Scraper
0634	0636	Group 8	1053	Loom weight frag
0634	0636	Group 8	1054	Loom weight frag
0634	0639	Group 8	1055	Loom weight frag
0634	0639	Group 8	1056	Loom weight frag
0634	0639	Group 8	1057	Loom weight frag
0634	0639	Group 8	1064	Hammer stone
0634	0642	Group 8	1058	Scraper

Table 13. FAS 055 EX1 small finds within pits

4.2.7.4 Volunteer project

The volunteer project was conducted on EX1 West for four weeks in June 2016, completing the excavation of the pits that had already been 50% excavated and recorded by SACIC staff. The volunteers excavated the pits stratigraphically, linking the fills with the already excavated context numbers. The fills were sieved using a 10mm mesh swing sieve. The table below shows volunteer excavated contexts that contained pottery, with a comparison with the same contexts excavated by SACIC using normal commercial excavation techniques.

Volunteer context number	Sherd count	Corresponding context number	Sherd count	Sherd difference
8000	15	0164	2	+13
8001	1	0215	3	-2
8003	6	0193	1	+5
8004	5	0282	5	0
8006	2	0283	0	+2
8007	27	0297	20	+7
8008	19	0298	13	+6
8010	3	0312	0	+3
8011	2	0361	2	0
8013	19	0524	13	+6
8015	2	0605	1	+1
8016	7	0606	24	-17
8017	2	0328	3	-1
8019	1	0578	138	-137
8024	2	0492	2	0
8025	15	0384	0	+15
8027	4	0490	5	-1
8028	16	0503	0	+16
8029	12	0190	0	+12
8031	1	0609	6	-5
8032	44	0482	20	+24
8033	4	0191	15	-11
8034	392	0439	114	+278
8036	4	0394	14	-10
8037	1	0204	2	-1
8039	3	0594	0	+3
8041	82	0619	10	+72
8042	65	0465	0	+65
8043	17	0555	14	+3
8044	68	0530	36	+32
8045	83	0494	0	+83
8047	78	0455	28	+50
8048	14	0601	73	-59
8049	10	0600	3	+7
8050	1	0501	12	-11
8052	1	0162	0	+1
8053	12	0460	0	+12
8054	14	0570	0	+14
8055	17	0528	0	+17
8057	6	0380	28	-22
8058	10	0413	16	-6
8059	11	0443	10	+1
8060	16	0459	0	+16
8061	6	0425	1	-5

Volunteer context number	Sherd count	Corresponding context number	Sherd count	Sherd difference
8062	40	0549	37	+3
8064	6	0397	2	+4
8072	52	0511	68	-16
8076	3	0421	0	+3
8077	2	0418	0	+2
8078	3	0453	0	+3
8079	10	0519	0	+10
8080	15	0513	8	+7
8083	10	0648	0	+10
8088	12	0471	7	+5
8089	19	0470	14	+5
8090	1	0557	1	0
8091	1	0558	3	-2
8094	1	0562	0	+1
8098	5	0467	0	+5
8099	1	0573	0	+1
8100	12	0574	0	+12
8102	23	0508	0	+23
Total difference				+502

Table 14. Volunteer contexts with finds comparison with SACIC excavated contexts

The table above shows that sieving generally produced higher sherd counts but the specialist assessment also shows that these were smaller and less diagnostic than those recovered during normal excavation techniques. However, this project does highlight two important points: firstly, that finds distributions can significantly differ from each half of the same pit and secondly that although more finds can be recovered using a more thorough finds recovery technique, the diagnostic material recovery rate is similar to that using the less intense strategy, more usually employed in commercial excavation. These conclusions are relevant for a site of this date and prehistoric type but maybe not for other sites of a different date or type. For example, sieving urban Saxon sites, the smaller finds would be more diagnostic.

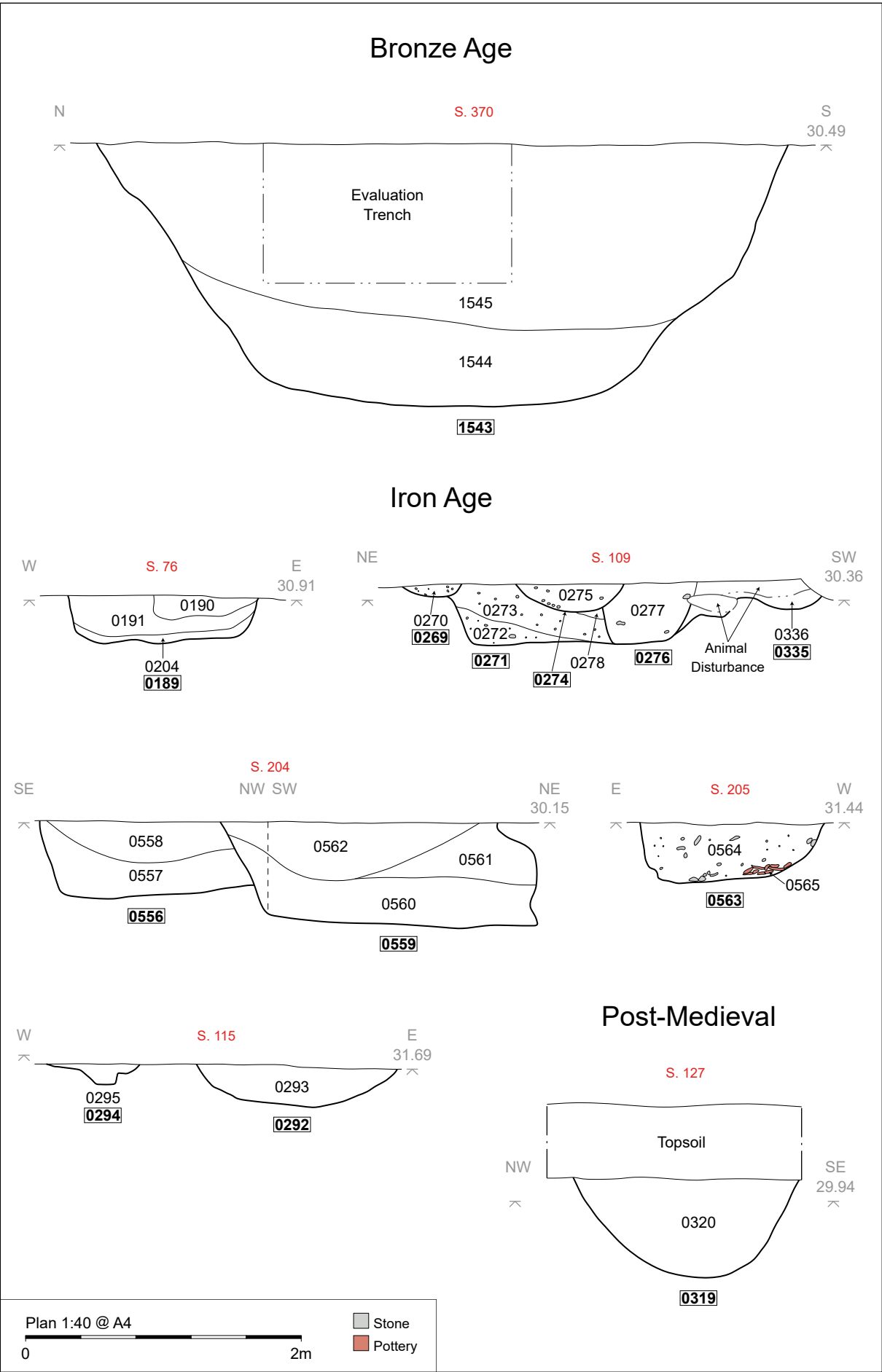


Figure 8. FAS 055 selected sections

4.2.8 Early Roman

A single early Roman extraction pit was seen in FAS 055 (Fig. 4 and Fig. 7). Two slots (0060 and 0078) were excavated through it in EX1 East which showed multiple cuts and fills representing repeated small excavations (Pl. 21). The area of quarrying was large and amorphous extending at least 20m east to west and 5.8m north to south. The fills consisted of mixed soft light-yellow brown or mid brown sandy silts and contained occasional sherds of Roman pottery. The quarrying continued into EX4 but was not further investigated and seemed to have been deliberately located into a large natural hollow. Full feature and fill descriptions are in Appendix 2a.



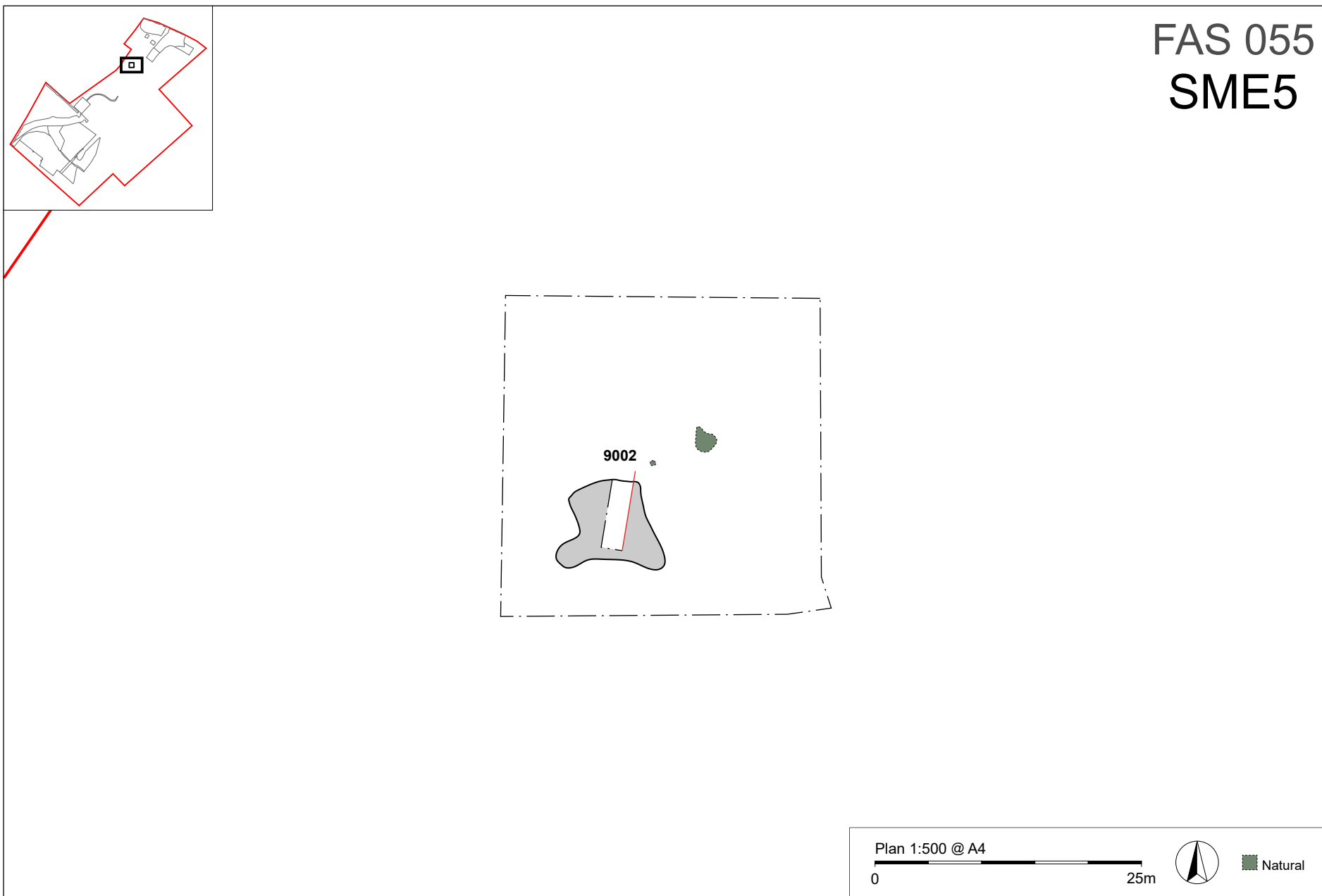
Plate 21. Quarry pits 0060, 0061, 0062 and 0063, looking north-west, 2x2m scale

SF1001 a complete silver denarius of Augustus (27BC - AD14) was recovered from metal detecting the topsoil in EX1 East. This is fully described in section 5.4.

4.2.9 Late Roman

Small finds dating to the 3rd to 4th centuries were recovered from topsoil metal detecting. These are fully described in section 5.4 but include SF 1030, a 4th century nummus, SF 1031, a 3rd century radiate and SF 1032, a possible Roman steel yard weight. These small finds were all recovered in the topsoil of EX4. There were no features relating to this phase.

FAS 055 SME5



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Figure 9. FAS 055 SME5 plan

4.2.10 Medieval

A single medieval quarry pit, 9002, was discovered on site in SME5 (Fig. 7 and Fig. 9). It had an irregular shape, and was 4m x 5m x 1m deep with three fills from which small quantities of 12th to 14th century pottery was recovered (Pl. 22). This feature was seen in the evaluation phase as 0560 and was further investigated in the excavation phase. This pit was also assessed for environmental remains but only contained material suitable for C14 dating. Full feature and fill descriptions are in Appendix 2a.

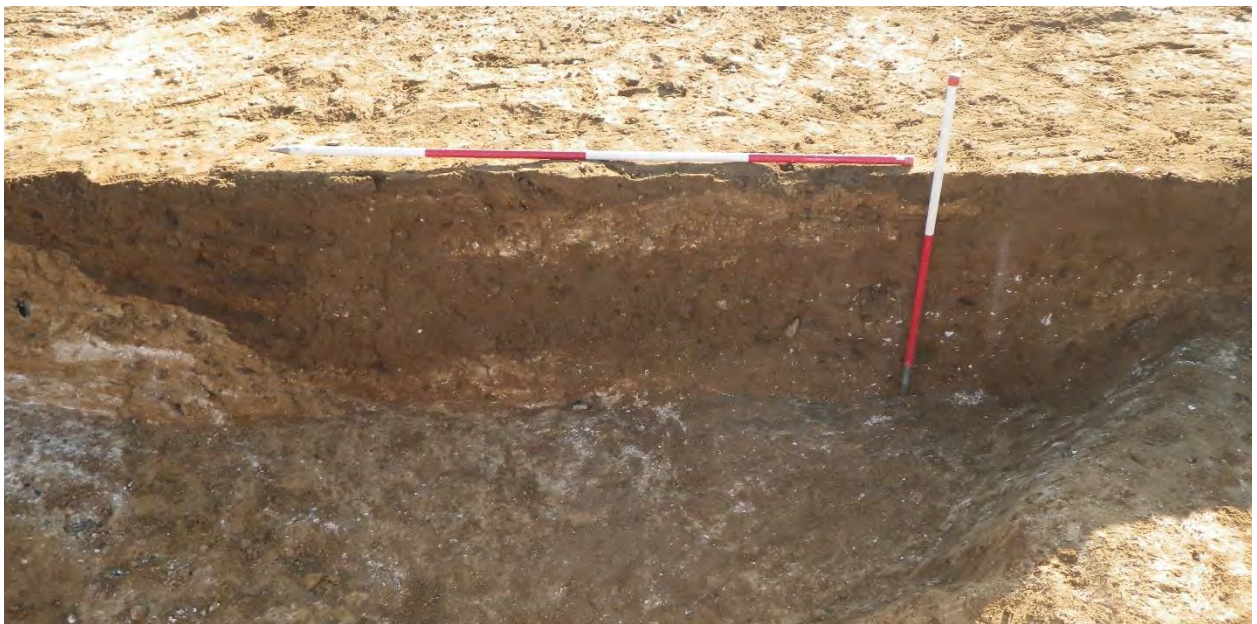


Plate 22. Quarry pit 9002, looking south-west, 1x2m and 1x1m scale

In addition to this feature a small collection of finds recovered from metal detecting of the topsoil and subsoil deposits was associated with this phase of activity. These are fully described in section 5.4 but include a jetton (SF 1003) and a silver voided long cross penny of Henry III (SF 1012). An early medieval (Saxon) hook tag (SF 3052) was also discovered during the metal detecting within the topsoil in EX1 West.

Material dating to the medieval and later post-medieval periods was also discovered during the evaluation phase.



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Figure 10. FAS 055 SME4 plan

4.2.11 Post-medieval

With contribution from Cameron Bate.

Most linear features in FAS 055 date to this phase (Fig. 7) and are mostly associated with small strip field boundaries that are seen on historic mapping (Beverton (a) and (b) 2013, section 7.1). A small number of quarry pits was also discovered relating to this phase, mostly seen in SME4 (Fig.10) (Pls. 23-26). In addition to these features a small collection of finds recovered from metal detecting of the topsoil and subsoil deposits was associated with this phase of activity. These are fully discussed in section 5.4 but include a jetton (SF 1025) and a coin weight (SF 1004). Material dating to the post-medieval periods was also discovered during the evaluation phase mostly relating to the linear features seen on site.

The features have been summarised in Tables 15 and 16 below and the full feature descriptions can be seen in Appendix 2a.

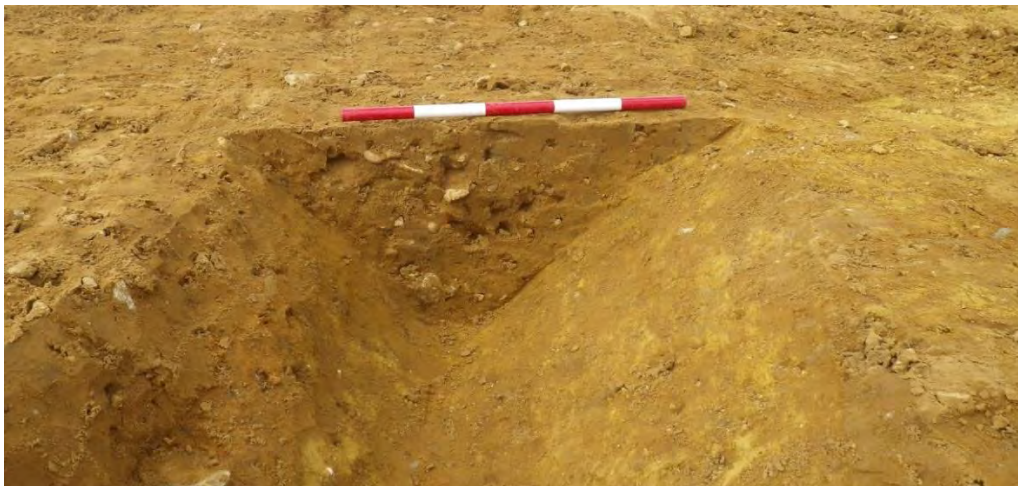


Plate 23. Ditch slot 0141 (group 0655) looking north-east, 1x0.5m scale



Plate 24. Ditches 0352, 0354 (group 0658) cutting ditch 0356, looking south-west, 1x1m scale

4.2.11.1 Ditch groups

Location (area)	Group	Cut numbers	Feature description	Fill numbers	General fill description	Length (m)	Width (m)	Depth (m)	Findings
EX1 East	0655	0155,0141 0139,0137 0135,0153 0151,0149 0147 0159	This ditch group contains three ditches running north-west to south-east. The general profile of the ditches is U-shaped, with steep slightly concave sides and concave base, although some slots are more V-shaped (Plate. 25).	0136, 0138, 0140, 0142, 0148, 0150, 0152, 0154, 0156, 0160.	Mid orangey brown or brown, firm or soft silty sandy clay with occasional sub angular flints and rare charcoal flecks, some slots were a slightly paler or darker.	34.6-53	0.29-0.4	0.08-0.56	No finds
EX1 West	0658	0250,0251, 0255,0261, 0269,0274, 0284,0286, 0288,0292, 0301,0303, 0307,0317, 0319,0336, 0343,0345, 0348,0352, 0354,0404, 0429	Located at the east of the excavation area and consisted of five parallel ditches running north-east to south-west. The ditches profiles are generally U-shaped with concave bases, although variations in the profile and sides were seen in some places which were more vertical to V-shaped. Slot 0319 illustrated (Fig.8. Section 127) (Plate. 26).	0209,0252, 0254,0256, 0270,0275, 0285,0287, 0289,0295, 0302,0304, 0308,0318, 0320,0338, 0340,0344, 0346,0349, 0355,0357, 0356,0376, 0405,0430.	In general, the fills are of a light orangey brown to dark orangey brown loose to friable silty sand and soft silty clay, containing moderate amounts of small flint inclusions.	14.85-67.7	0.2-1.64	0.03-0.76	Findings include a single piece of animal bone, struck flint and residual Iron Age pottery.
EX1 West	0659	0219,0233, 0267,0640, 0643,0623	Single ditch running north-west to south-east. The ditch profile was gently sloping with concave sides down to a concave base although some excavated slots had steeper concave sides (Plate. 27).	0220,0234, 0268,0624, 0641,0644	In general, the fill was a mid-orangey brown loose sandy silt with occasional charcoal flecks and moderate amounts of stone and flint inclusions.	59.7	0.42-0.90	0.19-0.38	Struck flint only
SME 4	1022	1005,1007, 1011,1016, 1018,1020	Two ditches running roughly south to north, both ditches terminate to the north of the south-eastern edge of the area of excavation (Plate. 28).	1006,1008, 1012,1017, 1021	Generally, a mid-greyish brown, silty sand fill. This fill is soft, loose and contains some small pebble inclusions.	35.77-36.33	0.3-0.5	0.1-0.15	No finds

Table 15. FAS 055 Post-medieval ditch group descriptions



Plate 25. Ditches 0623 (group 0659), looking north-west, 1x0.3m scale



Plate 26. Ditch 1005 and re-cut 1007 showing bulk (group1022), looking south-west, 1x1m scale

4.2.11.2 Pits

Location (area)	Cut nos	Feature description	Fill numbers	General description fill	Length (m)	Width (m)	Depth (m)	Findings
EX1 West	0615	Oval shaped in plan, elongated north-west to south-east with shallow convex sides and an undulating irregular base	0616	Pale grey yellow brown soft silty sand with moderate amounts of small and mid-sized stones and flints.	2.75	1.35	0.18	Finds include iron nails (SFs104 7-1049).
EX1 West	0637	Irregularly shaped in plan and had a shallow undulating profile, truncated by three mole drains	0638	Dark/mid grey-brown clayey silt fill with a firm compaction and lumps of redeposited clay.	8.7	1.0	0.18	Finds include an iron nail (SF 3065)
SME 4	1002	Irregular in plan with a vertical side on north-east but a more irregular side on the south-west edge (Plate. 27).	1003, 1004	Primary fill 1003, light orange to grey mixed backfill of sandy gravel. Top fill 1004 is a light brownish grey silty sand.	30	6.9	1.1m not fully excavated	No finds
SME 4	1009	Irregular in plan with moderate sloping concave sides and an uneven base.	1010	Mixed backfill of light orange brown and brown orange loose silty sand with some gravel.	1.15	6.75	0.6	Single piece of animal bone

Table 16. FAS 055 post-medieval pit descriptions



Plate 27. Quarry pit 1002 (oblique), looking south, 2x2m and 1x1m scale

4.2.12 WWII and modern

Contributions by Cameron Bate.

4.2.12.1 EX1 East

Three modern machine-excavated trial holes were found in EX1 East (Figs. 4 and 7). One was recorded as 0113, two were excavated and not recorded. All displayed clear machine-toothed bucket scars and contained topsoil deposits near the base of the features. They measured 0.8m to 1m in depth and were located at the north-west corner of the excavation area. A single modern post hole 1013 was also seen in SME 4.

In addition to these features a small collection of finds recovered from metal detecting of the topsoil and subsoil deposits was associated with this phase of activity. These are fully discussed in section 5.4 and include a German coin (SF 1002).

4.2.13 Plough soil archaeology

Metal detecting surveys of the topsoil and subsoil across the area revealed slightly below average amounts of plough soil metal finds. These objects mostly date to the medieval, post-medieval and modern periods and can be interpreted as chance loss items showing a continued use of the land. Some items may also be recovered from the topsoil due to plough disturbance of underlying archaeological deposits. A single Iron Age coin, a single Roman coin and a single brooch fragment were also found. The distribution map (Fig. 11) shows plough soil and subsoil recovered finds in FAS 055. These are further described in section 5.4.

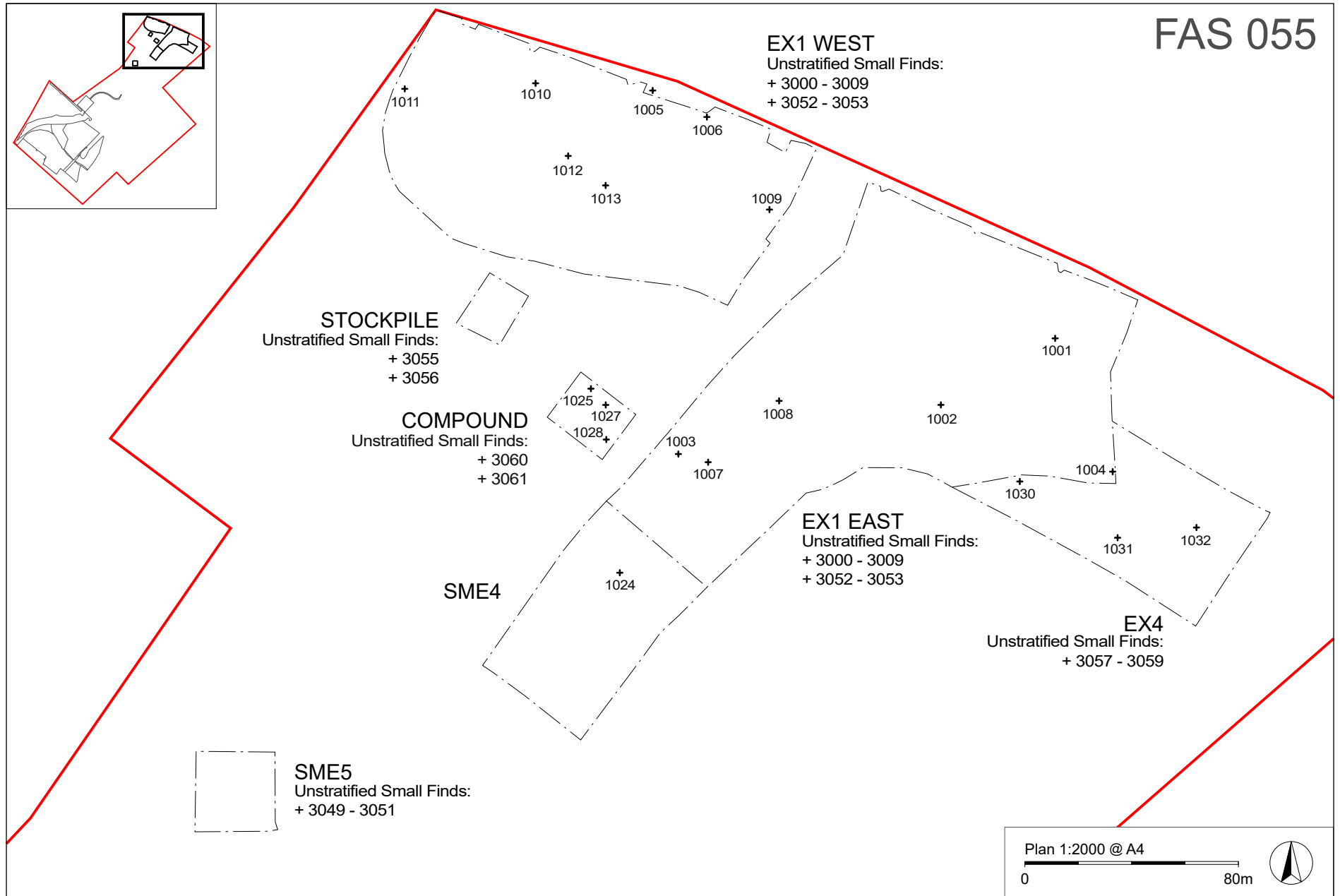


Figure 11. FAS 055 Topsoil and subsoil metal detected find distribution

4.2.14 Excavated in the evaluation, undated and natural features

Table 17 below summarises the features excavated within the evaluation phase.

Information has been added where additional investigation has occurred during the excavation phase.

Undated and natural features were discovered in all areas of FAS 055 and are also shown on Table 17. Most of the features are likely to be associated with bioturbation. Tree throws, tree bowls and burrows were identified. Residual or intrusive finds were present in some features, mostly consisting of a small number of struck flints (Figs. 4, 5, 6, 9 and 10).

Location (area)	Evaluation features	Notes on evaluation features	Further excavated features	Natural unrecorded feature count	Undated features
EX1 West	Seven pits and Three linear features	Most features were seen to be natural once the area was stripped for the excavation phase apart from three pits	None	73	16 pits, 1 post hole, 3 linear features
EX1 West	Twenty-four pits and linear features	Most features were fully excavated and recorded in the evaluation.	Four pits	53	27 pits, 4 post holes, 4 linear features
EX 4	Eight features	Only a single large pit warranted further work in the excavation stage and all other features were fully excavated in the evaluation.	One natural sink hole	10	8 pits, 3 post holes
SME 4	Two pits	One natural and one pit.	One pit	3	-
SME 5	Three features	Mostly excavated within the evaluation phase	One additional slot in quarry.	2	-

Table 17. Evaluation excavated, undated and natural feature summary

4.3 FAS 056

4.3.1 Introduction

FAS 056 is located at the southern end of the development on the higher ground and archaeological works were conducted as part of Phase 1, Phase 1 Extra and Phase 2. In total 13.48 hectares were investigated and FAS 056 contained more varied archaeology than FAS 055, both in feature function and period. The table below shows the sub divided areas with number blocks that are included within FAS 056.

Area name	Size (Ha)	Context numbers	Topsoil	Subsoil	Section Number Block	Plan Number Block	Sample number block	Small find numbers
SME1	1.93	2000-2120 (121)	2000	2001	400-442 (43)	300-342 (43)	51-65 (15)	2015, 2030 2033-2034 2394-2395 3040. (7)
SME2	0.93	2500-3280 (781)	2500	2501	450-602 (153)	350-494 (145)	100-149 450-484 (85)	2017-2018 2069-2072 2085-2087 2089-2090 2098-2105 2107-2111 2113-2114 2117-2118 2124 2134-2149 2153-2160 2163-2173 2176-2179 2182-2199 2201-2211 2213-2218 2222-2272 2274-2388 2391-2393 3054. (272)
SME3	0.90	10000-10027 (28)	10000	10001	1100-1108 (9)	1000-1008 (9)	350-351 (2)	2093-2097 3010-3016 3036-3037. (14)
EX2	4.23	5001-5126 5131-5560 (556)	5000 5001	5002	700-750 752-921 (221)	600-799 (200)	71-99 300-328 (57)	2001-2014 2016 2019-2029 2031-2032 2035-2068 2073-2084 2091-2092 2106 2112 2115-2116 2119-2123 2125-2133 2150-2152 2161-2162 2174-2175 2180-2181 2200, 2212 2219-2221

Area name	Size (Ha)	Context numbers	Topsoil	Subsoil	Section Number Block	Plan Number Block	Sample number block	Small find numbers
								2273 2389-2390 3017-3030 3041-3048. (133)
Track Slot	0.001	5127-5130 (4)	5127	5130	751 (1)	GPS	-	-
Phase 1 extra	0.86	11000-11149 (150)	11000 11002 11008 11010 11012 11058 11090	11001 11003 11009 11011 11013 11059 11091	2000-2050 (51)	2000-2045 (46)	500-508 (9)	4000-4017 (18)
Phase 2	4.63	12000-12832 (833)	12000	12001	3000-3222 (223)	3000-3205 (206)	600-726 (127)	5000-5136 (137)
Totals	13.481	2473	14	13	701	649	295	581

Table 18. FAS 056 on site number blocks

The sections below discuss the features by phase and site area sub divisions (as shown in the table above) for ease of illustration and location purposes.

4.3.2 Mesolithic

Two residual finds were recovered from two contexts. Fill 2956 was backfill from an evaluation trench near to burnt mound complex 1. It contained SF 2196 a Mesolithic adze. A tranchet axe fragment (SF 5131) was also recovered from fill 12788 in burnt mound complex 2. No features associated with this period were found.

4.3.3 Neolithic to Early Bronze Age

Whilst many features in FAS 056 can be associated with Early to Middle Bronze Age activity and contained both Early and Middle Bronze Age material, four features contained finds dated to the Neolithic and Early Bronze Age periods without the later component. All are likely to be tree throws that have been utilised. One (5403) was found in EX 2 (Fig. 15) and was an irregular oval in plan which measured 1.43m by 1.47m by 0.32m deep. Finds include 32 pot sherds, struck flint and spearhead (SF 2181) dating to the Late Neolithic to Early Bronze Age periods. Three (12225, 12331 (Pl. 28) and 12241) (Figs. 17 and 19) were found in Phase 2. Tree throws 12225 and 12331 were again irregular in plan; 12225, 1.16m x 0.8m x 0.14m and 12331, 1.94m x 1.0m x 0.26m (Figs. 5 and 9). Two sherds of pottery were recovered from 12225

but the two fills of 12331 contained 360 sherds of pottery and fill 12332 contained a leaf shape arrow head (SF 5136). This lay within the area south of Burnt Mound 2 where, Bronze Age pits and structures were found but the material assemblage was distinctively different from the later phase. The large amount of pottery from tree throw 12331 was associated with multiple vessels (at least 8 different bowls) and is likely to represent a tree throw being utilised to dump waste, or it could represent a placed deposit within this feature. This material is also likely to date to the earlier Neolithic period, with mixed later material.

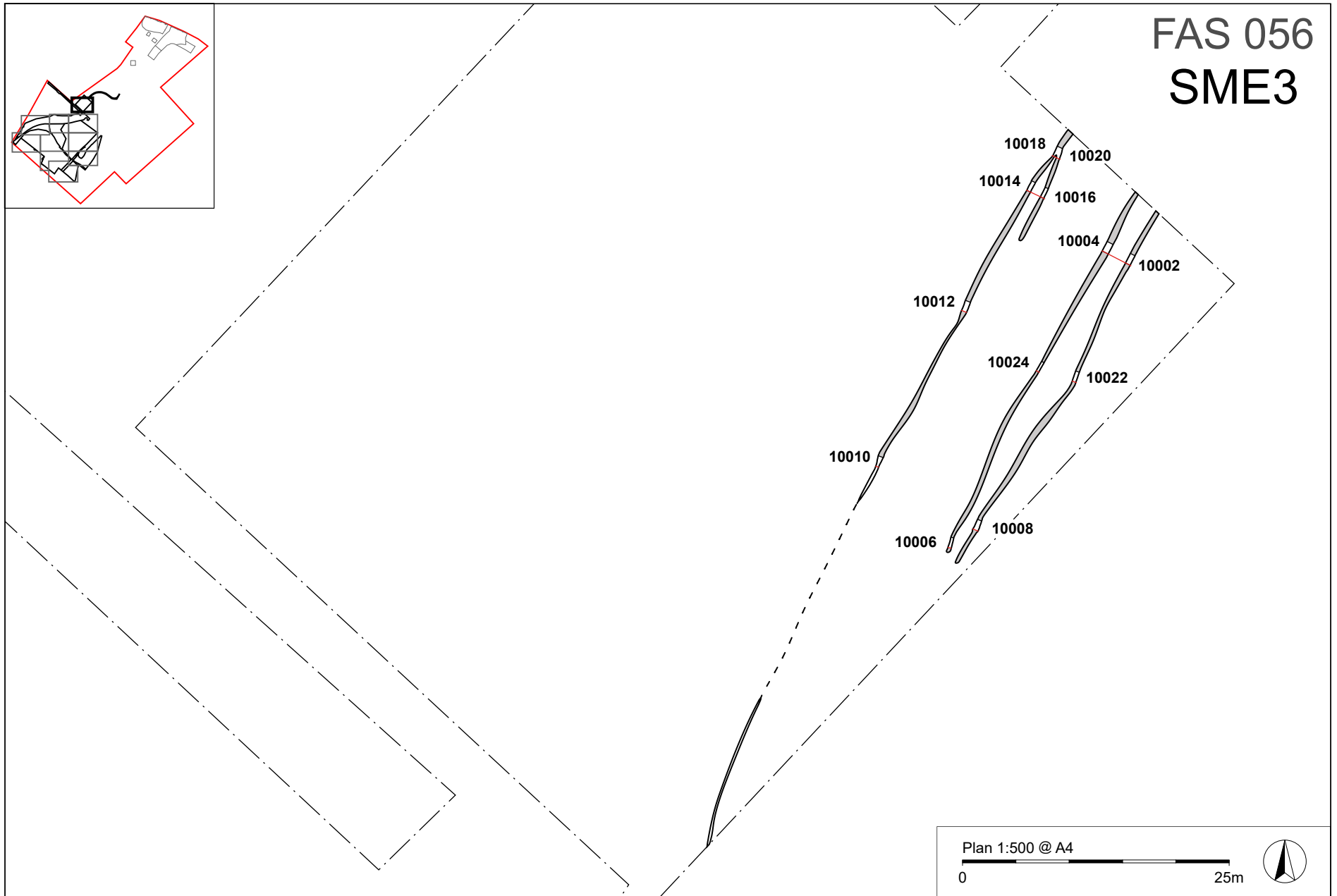
The third tree throw in Phase 2 was 12241. It measured 1.92m by 2.4m by 0.18m deep and the single fill contained 255 sherds of pottery, some joining, and including a near intact Late Neolithic/Early Bronze Age vessel as well as struck flint and SF 5087, a flint scraper. The presence of the near complete vessel suggests it is probably a primary deposit although the remainder of the ceramic material is more likely to date to the Early Bronze Age rather than Late Neolithic.

Two possible pits were also discovered being cut by burnt mound complex 1 in SME2. These may also be Neolithic in date and are discussed within section 4.3.4.3. Full feature and fill descriptions are in Appendix 2b.



Plate 28. Tree throw 12331, looking north-east, 1x1m scale

Finds associated with this phase were also found as residual finds within later features. These include spear-head SF 4016 from fill 11081 and sparse Neolithic pottery from a few later features. Neolithic subsoil finds were also recovered including SF 5031, a polished stone axe fragment. In addition, eight more small finds that broadly date to this phase of activity were recovered from topsoil and subsoil deposits. These include a leaf shape arrow head (SF. 2390), a near complete crude hand-axe (SF 2106), scrapers (SFs. 2402, 2403, 5026, 5040, 5095 and 5101) and a hammer stone (SF 5021).



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Figure 12. FAS 056 plan part 1

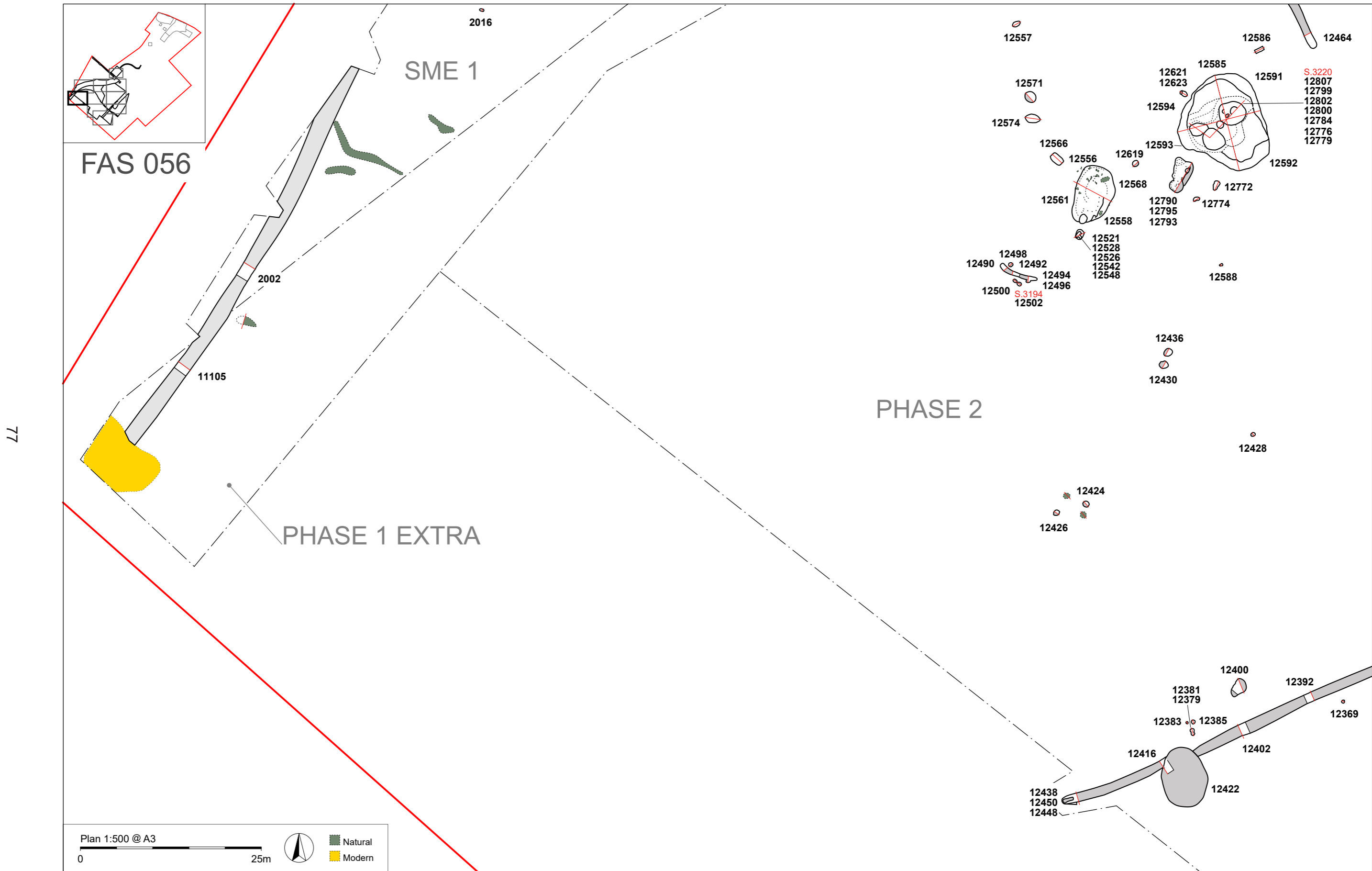


Figure 16. FAS 056 plan part 5

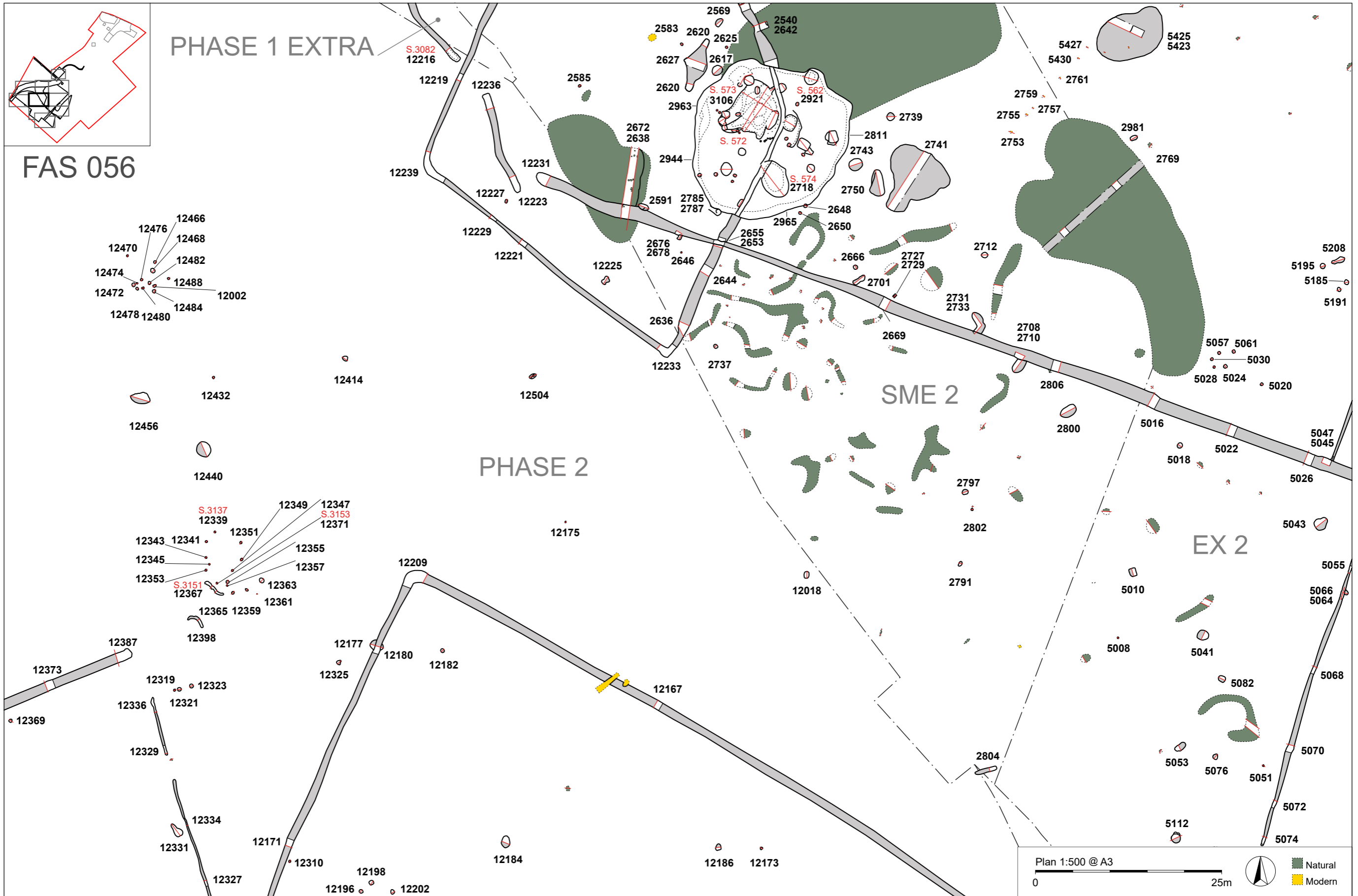


Figure 17. FAS 056 plan part 6

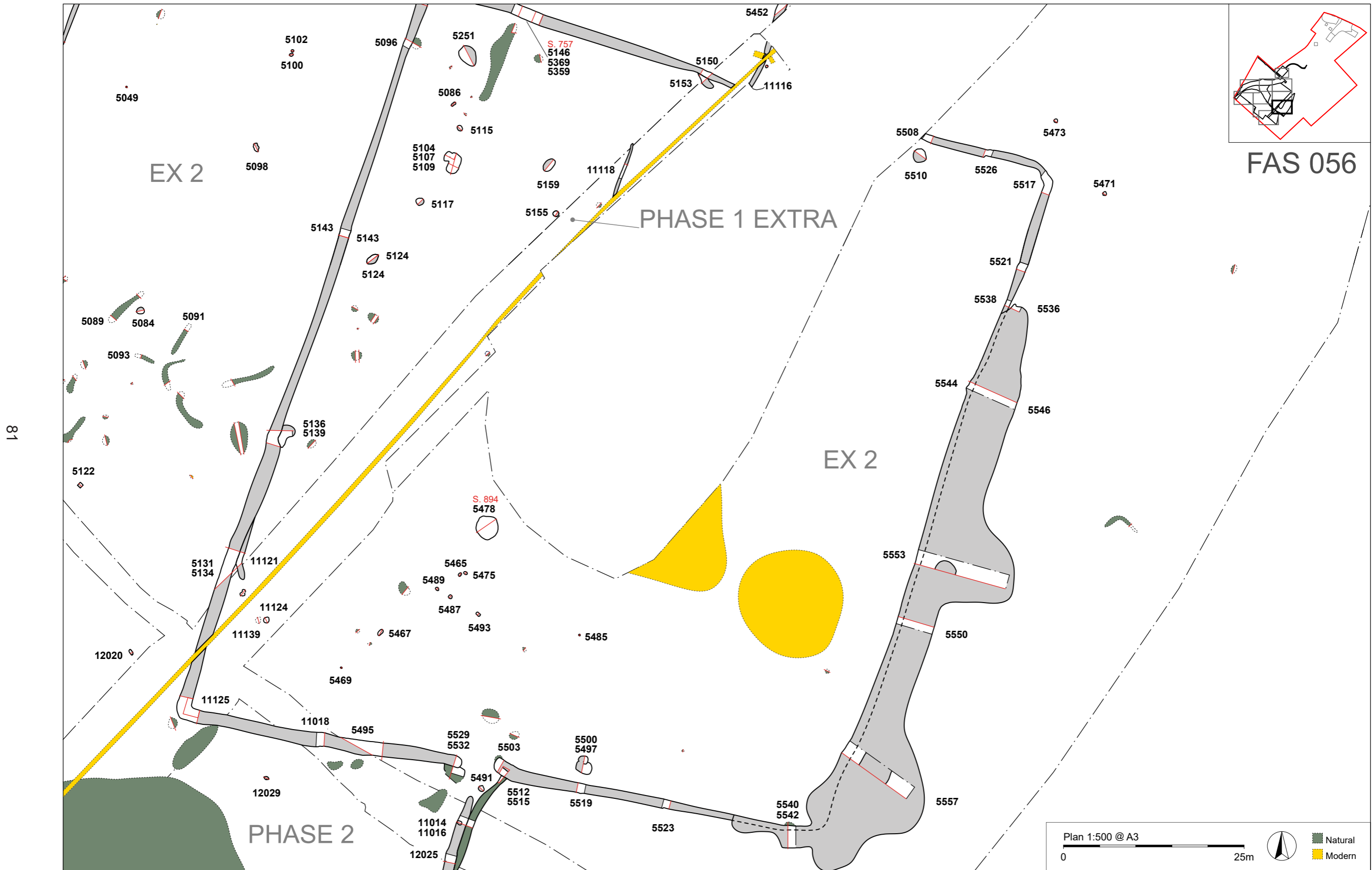


Figure 20. FAS 056 plan part 9

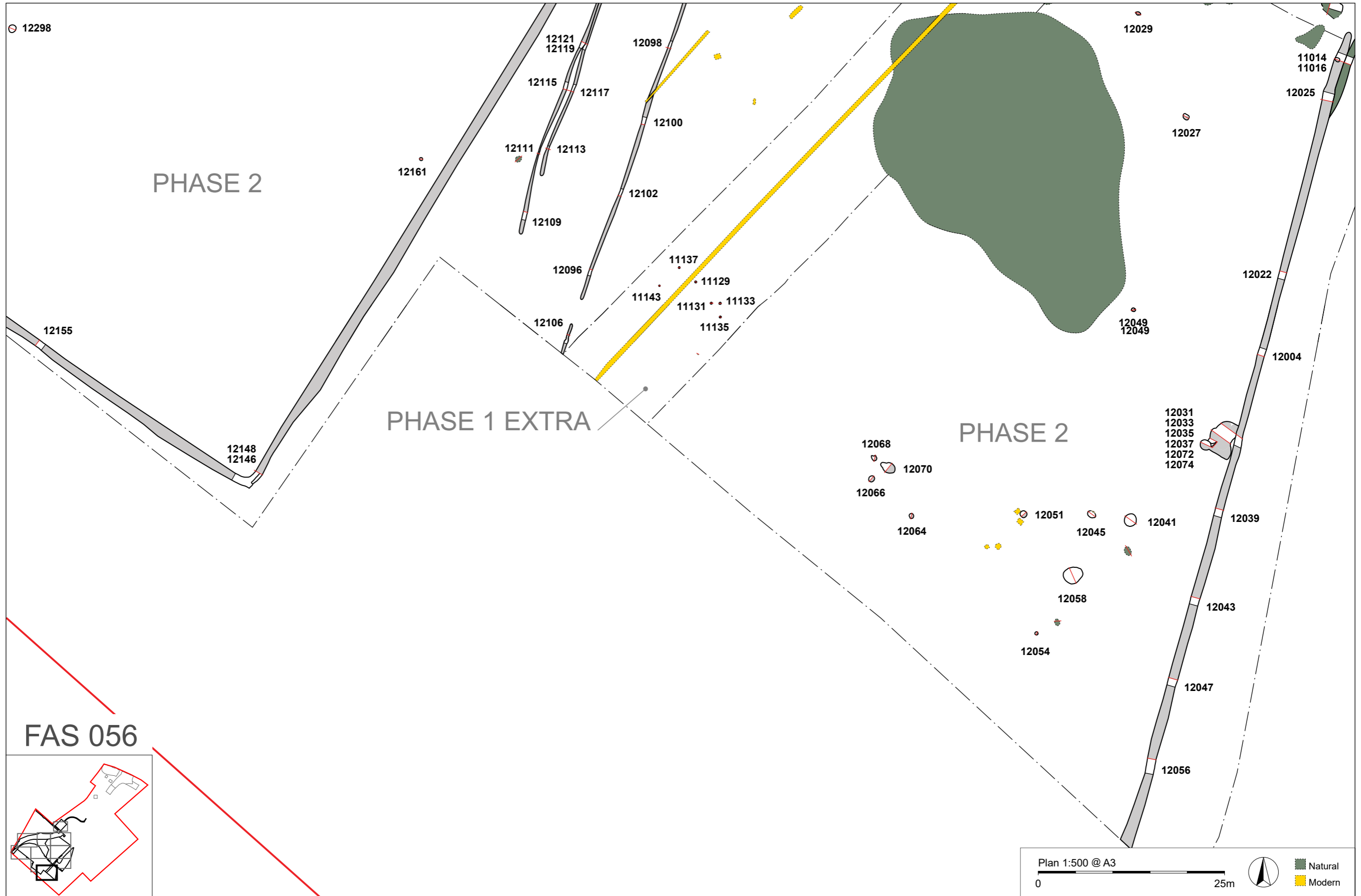


Figure 21. FAS 056 plan part 10

4.3.4 Early to Middle Bronze Age

Contributions by Preston Boyles.

4.3.4.1 Introduction

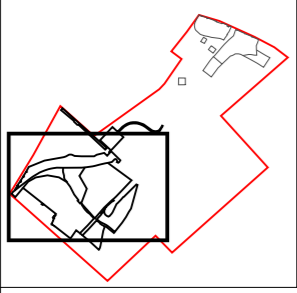
This represents the dominant phase of activity on FAS 056 with features seen in all areas of work with foci of activity in SME2, EX2 and Phase 2 (Figs. 12-22). Features included ditches, gullies, pits, postholes and structural complexes. The main foci include two burnt mound complexes (seen in SME2 and Phase 2), three structures (in Phase 2), multiple pit groups, ditches and a drove-way. Eight environmental samples were assessed from most of the main feature groups. The results showed only sparse survival of material with rare seeds, cereal grains and hazel-nut shells. Full feature and fill descriptions are in Appendix 2b.

4.3.4.2 Burnt mound complexes

The most enigmatic features found relating to this phase were the two burnt mound complexes. These differed from what is normally called a burnt mound in location and complexity, but the function of these complexes is thought to be the same as other burnt mounds in the country, which is to heat water (Bates, 2001, Barfield, 1991). Both burnt mound complexes were placed on high ground, over 1km away from the River Lark on a clay ridge than runs from east to west at the southern end of the development area. One of the key identifying features of burnt mounds usually are preserved mounds of heat-altered material such as stone, flint and charcoal (Brown, *et al*, 2016); these mounds were not present here and had presumably been removed by agricultural activities on the site as a result of their location on the clay ridge. What did remain was a complex array of working hollows with metaled surfaces, pits, well/ reservoir type features and postholes.

Burnt mound complex 1 (BM1) was located in SME2 on the south-west edge of the area and measured 18.3m by 21.3m. This was the most stratigraphically complex of the two, with multiple phased uses seen with one large working hollow which was metaled, two well/ reservoir type features, twenty associated pits and seventeen postholes. 305 flint tools, utilised flakes and utilised blades were recovered from the fills associated with BM1 clearly showing intensive use of the feature.

Burnt mound complex 2 (BM2) was located in Phase 2 works 102m west of BM1. BM2 was smaller than BM1 (11.7m by 13.5m) and was less stratigraphically complex; it also contained far less heat altered material. It did however contain an additional feature which may be a natural glacial feature utilised as a waste disposal area for the heat-affected flint and stone. BM2 consisted of two hollows, one of which was metaled, two well/ reservoir type features within the metalled hollow, twenty pits located around the two hollows and three postholes. A lower count of flint tools was associated with this feature with nineteen found in total from all associated features and layers. Both burnt mound complexes are shown on phase plan figure 22.



FAS 056

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Plan 1:2000 @ A3

0 100m

■ Bronze Age ■ Natural

■ Not Bronze Age

Figure 22. FAS 056 Bronze age phase plan

4.3.4.3 Burnt mound complex 1 (2658)

Introduction

BM1 is located on a ridge overlooking the valley of the River Lark to its north within SME2. The complex is situated within a hollow depression of glacial origin, 2630, formed on top of a broad band of clay strata, which runs roughly north-east to south-west across the ridge of the hill. It was seen to be cut by a later ditch, 2634 in plan and section (Figs. 23 and 24).

Methodology

To investigate its nature and extent, two 1 metre wide trenches were first hand-excavated across the entire length of the feature, one orientated roughly north-north-west to south-south-east, and a second from west-south-west to east-north-east, intersecting in what was reckoned to be the centre of the feature. Each layer removed and each cut feature identified was allocated an individual context number in each trench. For the north-north-west to south-south-east orientated trench, layers were further subdivided into two metre segments, each assigned its own context number. This was in order to plot the distribution density of finds within the layers seen. The trenches were excavated to 1m in depth, or to the cobbled surface (which was not removed at this stage).

The results from this initial investigation revealed that the layers within the hollow were consistent across the whole feature, with the same sequence of fills identified in both trenches. Overall group numbers were therefore assigned to each layer, to tie together the individual numbers given to them within the two trenches. Digital photographs and 1:20 scale drawings were made of the four section faces created by the two trenches, along with 1:20 scale hand drawn plans of each trench. Small Finds uncovered during this initial intervention were located by GPS.

The two interventions revealed that the feature was most-likely to be Bronze Age in date, containing a large amount of fire-cracked flint and ashy deposits overlaying an artificial cobbled flint surface, with a large pit also identified in one of the trenches. Given the unusual nature of the feature, and the questions posed by these findings

as to its function, it was decided to excavate larger areas to uncover more of the feature (Pl. 29).

To achieve this, the burnt mound complex was divided into four quadrants, each separated by the two initial trenches. Each quadrant was excavated systematically by stratigraphic layer. Prior to removal, each layer was photographed with a digital camera from several angles; it was then recorded with a 1:50 scale hand-drawn plan, and levels referencing the OD were taken on the layer surface. At certain stages aerial photographs were also taken of the entire feature.



Plate 29. Burnt mound complex 1 (initial slots and quad 1), looking south-west, 2x2m scale

Each layer in each quadrant was given a separate context number which was tied into the overall group numbers given during the initial intervention trenches. Each layer was then further sub-divided into 2 metre squares within the four quadrants, so that the distribution of finds could be broadly identified within each fill. Small finds

were located on each 1:50 scale drawn plan, as well as with a GPS. Those found within discrete features, such as pits, were located with a GPS only. Discrete features were first 50% excavated, with individual sections and plans being recorded at 1:20 scale. They were also located on the overall 1:50 drawn plans of each quadrant. All discrete features were then fully excavated, and a digital photograph taken afterwards. The two larger pits discovered during the investigation, 2718 and 3106, were excavated in quadrants, with two continuous sections being recorded through the centres of them at 1:20 scale (Fig. 33, Sections 572, 573 and 574).

Bulk sections were retained, recorded and then removed as appropriate and extensive consultation was undertaken with regional specialists with prior experience of this feature type. This included Kasia Gdaniec (Cambridgeshire Historic Environment Team), Alex Bliss (Suffolk County Council Archaeological Service) and Edward Martin (formerly Suffolk County Council Archaeological Service).

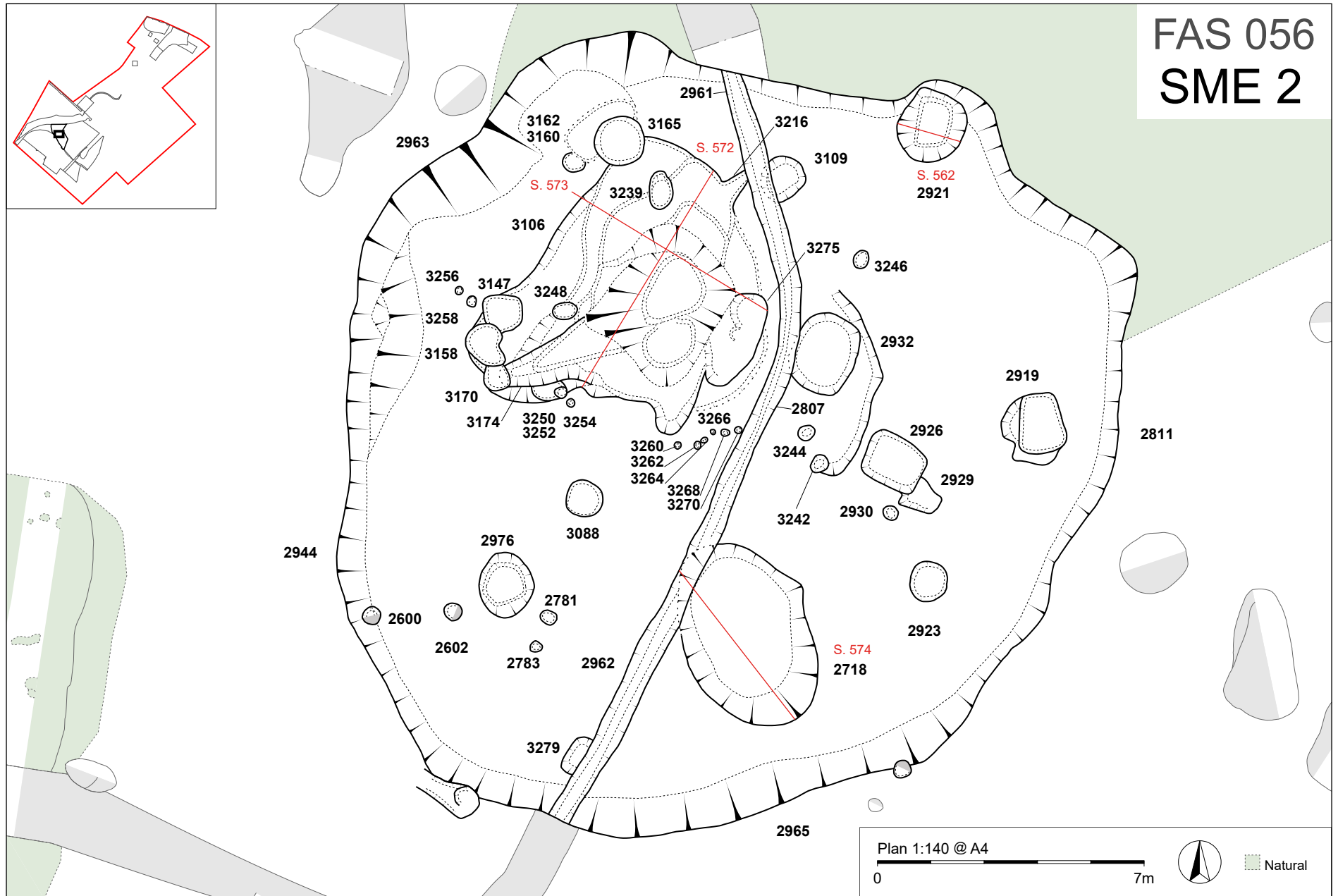


Figure 23. FAS 056 Burnt mound complex 1 plan, close view showing sections

Three 40L bulk samples were taken from each layer within each quadrant, with the exception of the uppermost layer of silt, 2703, as well as from each discrete feature associated with the hollow. Several monolith samples were also taken through the entire sequence of layers in the feature, including into pits 2718 and 3106. Series samples were obtained from several of the smaller pits, and larger charcoal fragments were retained where found for C14 analysis. A kubiena sample in the base of the feature was also taken.

Overview

The excavations revealed that the main cut, 2658, was deliberately placed within the natural hollow, 2630 (Pl. 30). It had a metalled surface and contained two large reservoir pits alongside twenty smaller pits. Seventeen postholes and two gullies were also found during the excavation, some of which are interpreted as closely associated with the mound, whilst others appear to predate it. Burnt mound complex 1 has been simply illustrated for this report in two technical plans (Figs. 23 and 24), a phase plan (Fig. 22) and four sections (Fig. 33).

Description

Burnt mound hollow 2658

Cut no.	Cut type	Fill no.	Dimensions			Small finds
			Width	Length	Depth	
2658	Burnt Mound Complex		18.30m	21.30m	0.40 - 0.90m	N/A
		2693	13.60m	18.30m	0.60m max	2364, 2195, 2118, 2489, 2476, 2372, 2373, 2490, 2393, 2375, 2376, 2377, 2378, 2387, 2391, 2491, 2365
		2917	13.50m	18m	0.12m max	2163, 2164, 2165, 2166, 2167, 2411, 2168, 2169, 2170, 2171, 2412, 2183, 2185, 2187, 2184, 2186, 2188, 2189, 2190, 2191, 2192, 2194, 2193, 2182, 2483, 2222, 2223, 2425, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2251, 2252, 2253, 2254, 2255, 2256, 2247, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2295, 2488, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2288, 2289, 2495, 2291, 2292, 2293, 2296, 2294, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2284, 2285, 2248, 2249, 2250, 2287, 2286, 2437, 2457, 2458, 2459, 2460, 2461, 2462, 2437, 2457, 2458, 2459, 2460, 2461, 2462
		2704	12m	19m	0.20 - 0.44m	2447, 2448, 2449, 2450, 2320, 2321, 2466, 2467, 2468, 2469, 2451, 2452, 2453, 2454, 2436, 2455, 2456, 2472, 2110, 2111, 2473, 2396, 2209, 2204, 2205, 2206, 2207, 2208, 2416, 2201, 2202, 2203, 2401, 2211, 2218, 2417, 2418, 2419, 2214, 2215,

Cut no.	Cut type	Fill no.	Dimensions			Small finds
			Width	Length	Depth	
						2420, 2421, 2422, 2423, 2424, 2216, 2217, 2493, 2494, 2415, 2213, 2117, 2155, 2156, 2157, 2158, 2159, 2160, 2153, 2154
		2703	18.30m	21.30m	0.20 - 0.36m	2409, 2410, 2470, 2108, 2439, 2445, 2446, 2089, 2098, 2475, 2477, 2107, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2478, 2479, 2109, 2113, 2114, 2409, 2410, 2470
2630	Natural hollow	2668	40.5m	43.6m	0.20 – 0.40m	2440, 2441, 2442, 2443
3174	Gully	3272	3.00m	0.90m	0.48m	2380, 2381, 2382, 2385, 2386, 2383, 2384, 2388
3216	Gully	3217	0.78m	0.50m	0.10m	N/A

Table 19. FAS 056 SME2 burnt mound 1 (2658), associated cut numbers and feature dimensions

The burnt mound complex consisted of a large oval cut, 2658, created in the remains of a naturally formed hollow, 2630. This natural hollow had an irregular shape, and an inconsistent depth. The cut for the burnt mound hollow was orientated north-north-west to south-south-east, with a broad, shallow profile. It contained a series of pits (see below), and was surfaced with a layer of flint cobbles, 2693. This surface consisted of rounded flint cobbles, 5cm – 20cm in size, pressed into the natural clay, and incorporated a few small outcrops of stones already naturally present in the ground. Fire-cracked flint was also present within this surface layer.

Alongside the pits, another integral part of the burnt mound complex was the two narrow gullies, 3174 and 3216. These appeared to be closely associated with pit/well 3106. These were roughly triangular in plan, becoming wider where they attach to pit/well 3106.

Three distinct layers had infilled the feature. The earliest and most distinctive was 2917, a deposit of dark, charcoal-bearing silt containing large quantities of fire-cracked flint, which lay over most of the cobble surface. This layer contained approximately 3.5 tonnes of fire-cracked flint. Whilst some of this may have been deliberately backfilled at the end of the life of the complex (as evidenced by the large numbers of scrapers found), it is probable that some accumulated during use, but the two events are indistinguishable stratigraphically. Above this were two layers of silt, 2704 and the top fill 2703. These layers contained a large amount of worked flint, almost entirely consisting of Bronze Age flint scrapers. The burnt mound complex was cut by Iron Age enclosure ditch, 2634.



Plate 30. Burnt mound complex 1 (2 quads and pits excavated), looking west, 2x2m and 2x1m scale, by Flypod

Burnt mound complex pits

Cut no.	Cut type	Fill no.	Dimensions			Small finds
			Length	Width	Depth	
2718	Pit		4.10m	6.20m	2.40m	
		3108	1.26m		0.20m	
		3146	2.70m		0.20m	2332, 2333
		3107	3.46m		0.56m	
		2736	1.20m		0.20m	2322, 2471
		2721	1.40m		0.24m	
		2719	1.60m		1.50m	2316, 2317, 2318, 2090, 2338, 2339, 2463, 2464, 2465
		2720	1.60m		0.12m	
2919	Pit	2920	2.00m	1.70m	0.60m	
2921	Pit		2.00m	1.70m	0.60m	
		3151		1.70m	0.30m	
		3150	2.00m	1.70m	0.10m	
		2957		0.80m	0.20m	2149
		2922		1.70m	0.40m	2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2342, 2343, 2344, 2345, 2346, 2347, 2140, 2348, 2349, 2350, 2351, 2352, 2368, 2369
2923	Pit		1.10m	1.20m	0.80m	
		2925				
		2924	1.10m	1.20m	0.30m	2481
2926	Pit	2928	1.60m	1.70m	0.56m	
2929	Pit	2927	1.00m	0.95m	0.18m	2335, 2336, 2337
2932	Pit		1.93m	1.42m	0.71m	
		3145	1.93m	1.42m	0.39m	
		2935	1.93m	1.42m	0.24m	
		2934	1.93m	1.42m	0.18m	
		2933	1.93m	1.42m	0.37m	
2976	Pit		1.60m	1.20m	0.50m	
		2979		0.88m	0.20m	
		2977		1.20m	0.36m	2323, 2172, 2173, 2176, 2177, 2178, 2179
3088	Pit	3089	1.00m	1.00m	0.38m	
3106	Pit		8.00m	6.50m	2.42m	
		3113	2.00m	2.00m	0.32m	
		3189		0.76m	0.06m	
		3188		0.80m	0.06m	
		3187		0.90m	0.10m	
		3114		1.00m	0.80m	
		3115		0.80m	0.03m	
		3116		2.10m	0.12m	
		3117		1.80m	0.20m	
		3118		0.98m	0.20m	
		3119		0.90m	0.15m	
		3120		1.10m	0.04m	
		3121		1.30m	0.10m	
		3122		0.94m	0.02m	
		3123		2.70m	0.30m	
		3124		0.60m	0.02m	
		3125		0.50m	0.10m	
		3126		0.40m	0.04m	
		3127		0.40m	0.08m	
		3128		1.70m	0.20m	
		3129		1.80m	0.20m	
		3130		1.00m	0.02m	
		3131		1.30m	0.08m	
		3132		0.70m	0.02m	
		3133		1.30m	0.26m	
		3134		1.70m	0.02m	
		3135		0.80m	0.08m	
		3136		1.20m	0.20m	
		3137		1.10m	0.02m	

Cut no.	Cut type	Fill no.	Dimensions			Small finds
			Length	Width	Depth	
		3138		1.30m	0.26m	
		3220		1.38m	0.06m	
		3219		2.50m	0.30m	2374
		3139		1.40m	0.20m	
		3140		0.50m	0.02m	
		3141		1.08m	0.16m	
		3142		0.70m	0.40m	
		3143		2.20m	0.52m	2328, 2329, 2330, 2331, 2397, 2398, 2399, 2400, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2370
		2918	7.50m	6.20m	0.96m	2136, 2137, 2138, 2139, 2113, 2114
3109	Pit		1.36m	1.10m	1.08m	
		3110	1.36m	1.10m	0.50m	
		3111	1.36m	1.10m	0.72m	
		3112	1.36m	1.10m	0.58m	
3147	Pit		1.15m	0.90m	0.55m	
		3148	1.15m	0.90m	0.55m	
		3149	1.15m	0.90m	0.48m	2360, 2361, 2362, 2363
3158	Pit	3159	1.00m	1.00m	0.15m	
3160	Pit	3161	0.60m	0.55m	0.22m	2340
3162	Pit		1.10m	0.80m	0.26m	
		3169		0.41m	0.17m	
		3164		0.71m	0.12m	
		3163		0.80m	0.14m	
3165	Pit		1.69m	1.50m	0.74m	
		3168		1.35m	0.34m	
		3167		1.18m	0.03m	
		3166		1.41m	0.56m	2341
3170	Pit		0.76m	0.76m	0.36m	
		3171		0.76m	0.36m	2366
		3172		0.68m	0.16m	
		3173		0.70m	0.20m	2367
3239	Pit		1.00m	0.75m	0.40m	
		3241		0.75m	0.40m	
		3240		0.75m	0.40m	
3248	Pit	3249	0.70m	0.50m	0.30m	
3250	Pit	3251	0.84m	0.50m	0.18m	
3273	Pit	3274	1.04m	0.70m	0.64m	
3275	Pit	3276	2.51m	1.70m	0.36m	

Table 20. FAS 056 SME2 burnt mound 1 (2658) pits, associated cut numbers and feature dimensions

The burnt mound complex contained twenty-two pits (Table 20), some of which can be grouped together based on the similarities of shape and fills. All pits were fully excavated to the base of each feature and 100% excavated where safe to do so.

The main group of pits had a distinctive shape, being roughly oval, or slightly rectangular, with steep, slightly concave edges and a flat base. They generally measured between 1.5m and 2m long, and were slightly narrower than they were long. They contained a very similar sequence of fills, namely a dark, charcoal-bearing deposit which contained large quantities of fire-cracked flint, and in some cases a second fill of dark grey-brown silt above this. This group included pits 2919, 2921

(Fig. 33. Section 562), 2926, 2932, 2976, 3109, 3162, 3165, 3239, 3248, 3250, 3273 and 3275.

A second group were smaller, and had a more irregular, usually slightly-circular, shape. These mostly measured around 1m in circumference, some being significantly larger or smaller however. These contained a similar type of fill to the first group, with large amounts of fire-cracked flint in a dark, charcoal-bearing matrix. Pits that fit this description were 2923, 2929, 3088, 3147, 3170, 3160 and 3158.

Much different were pits/ wells 2718 (Fig. 33. Section 574) and 3106 (Fig. 30. Sections 572 and 573). These were far more substantial, measuring 6m x 4m and 8m x 6.5m respectively. Both went down to a depth of 2.4m, and contained a sequence of fills completely distinct from the two groups discussed above. Instead of dark, charcoal and fire-cracked flint laden fills, these two pits contained a sequence of water-lain silts and slumps of clay.

With the exception of pits 3088, 3162, 3239, 3248 and 3273, all of the pits within the mound contained worked flint. In addition, pits 2718, 2921, 2923, 2926, 2976, 3158 and 3170 contained Early to Middle Bronze Age pottery, with pit 2921 producing a large assemblage of pottery finds. Pit 3106 contained a sherd identified as possibly Late Bronze Age, whilst pit 3147 contained two pottery sherds dating possibly to the Middle to Late Iron Age.

Postholes

Cut no.	Cut type	Fill no.	Dimensions			Small finds
			Length	Width	Depth	
2781	Posthole	2782	0.40m	0.38m	0.06m	
2783	Posthole	2784	0.30m	0.28m	0.20m	
3252	Posthole	3253	0.34m	0.26m	0.28m	
3254	Posthole	3255	0.22m	0.22m	0.32m	
3256	Posthole	3257	0.20m	0.20m	0.08m	
3258	Posthole	3259	0.22m	0.26m	0.14m	
3277	Posthole	3278	0.30m	0.30m	0.16m	
3242	Posthole	3243	0.56m	0.45m	0.18m	
3244	Posthole	3245	0.54m	0.50m	0.20m	
3246	Posthole	3247	0.46m	0.35m	0.25m	
3260	Posthole	3261	0.20m	0.20m	0.11m	
3262	Posthole	3263	0.26m	0.26m	0.14m	
3264	Posthole	3265	0.20m	0.20m	0.08m	
3266	Posthole	3267	0.18m	0.18m	0.10m	
3268	Posthole	3269	0.25m	0.25m	0.13m	
3270	Posthole	3271	0.24m	0.24m	0.12m	

Cut no.	Cut type	Fill no.	Dimensions			Small finds
			Length	Width	Depth	
2930	Posthole	2931	0.40m	0.37m	0.20m	

Table 21. FAS 056 SME2 burnt mound 1 (2658) postholes, associated cut numbers and feature dimensions

As well as groups of pits, several postholes were excavated during the investigation of the burnt mound complex (Table 21). Some of these appear to predate the mound, or are at least contemporary with its early phases before the creation of cobble surface 2693. These postholes are 3242, 4244, 3246, 3252, 3254, 3256, 3258, 3260, 3262, 3264, 3266, 3268 and 3270. They are circular in plan, and measured 0.25m – 0.50m in diameter, with an average depth of 0.25m, with several being slightly shallower, at around 0.15m deep.

A smaller number of postholes appeared to either cut, or were possibly respected by, cobble layer 2693. These consisted of postholes 2930, 2781 and 2783. They measured 0.40m in diameter. 2781 was much shallower than the other two. Postholes 2781 and 2930 contained small amounts of worked flint.

Phasing of burnt mound complex 2658

Phase 1 – Preceding activity

Two features predate the construction of the burnt mound complex, pit 3279, which may be Neolithic in date, and pit 2787. Both were later cut by the burnt mound features, and the composition of their fills is distinctive when compared to the fills and finds within the later pits clearly associated with 2658. These pits would have been created close to hollow 2630, a feature of perhaps glacial origin.

It is unclear whether postholes 3256, 3258, 3260, 3262, 3264, 3266, 3268 and 3270 also belong to this phase. These postholes look to be closely related to each other, as they are distinctly similar in size, shape, fill and general location, but they stand out in comparison to those postholes which are more assuredly linked to burnt mound complex 2658, such as 3652 and 3654. The fill within the postholes had already accumulated prior to them being covered by the laying down of cobble surface 2693. Their position close to pit 3106, the main well/reservoir within 2658, might be fortuitous, or may indicate that they were in fact associated with an early

phase of the feature, perhaps a superstructure, before its enlargement and before the cobble surface was created.

Phase 2 – First stage of burnt mound complex 2658

Burnt mound complex 2658 was created by landscaping the pre-existing natural depression, 2630, to produce a large, roughly oval-shaped hollow area with a broadly flat base. There is no evidence remaining as to whether the basic outline and extent of the feature was completed in one event, or over the course of several expansions. The choice of location for the burnt mound complex may have been influenced by the underlying geology, which is composed of a largely impermeable clay. As one of the functions of the mound appears to have been to collect and process water, the presence of a natural hollow that already retained water would have been ideally suited. The area was still prone to waterlogging at the time of the archaeological investigation, despite its location on the top of the hill.

An integral part of the burnt mound complex was a large, very deep pit or well, 3106, which may have been created for the purpose of accumulating and holding large amounts of water. This well/reservoir pit was located in the north-west corner of burnt mound complex 2658. The complicated build-up of water-borne sediments within the pit suggests it was open for a prolonged period, and contained water for much of its existence. The accumulated layers of silt were disturbed towards the centre of the pit, perhaps by the constant activity of bringing water out of the reservoir.

Several smaller pits located around 3106 may also belong to this initial phase. These pits, 3239, 3248, 3250, 3275, 3162, 3242, 3244 and 3246, were filled by dark, ash and charcoal bearing layers that contained a sizeable quantity of fire-cracked flints. Water stored in pit 3106 may have been decanted into these smaller pits, where it would have been heated by placing the fire-heated flints into it. No sign of an *in-situ* fire was uncovered within the hollow, suggesting that the flints may have been heated outside of the burnt mound hollow and complex. The heating of a large quantity of water may have been related to activities such as hide or wood processing. The numbers of flint scrapers found in later deposits in the burnt mound hollow suggest that they may also have been related to this activity.

These early pits were found to have been backfilled with waste debris, such as ash and heat-altered flints, before they were truncated by a later expansion of pit 3106 (see below), and sealed by cobble layer 2693.

Phase 3 – Expansion of reservoir pit 3106

The expansion of 3106 may have been to increase its size and water-bearing capacity, and involved the deliberate closure of the smaller pits located around it, along with the creation of the terraced sides around its upper edge. Evidence for this extension, seen from the truncation of the earlier pits, also comes from the position and shape of the central part of the main pit/ well 3106, which is much more oval in plan, and may retain 3106's original shape, closely resembling the second later reservoir pit 2718 (see below).

Extensive arrays of terraced ledges were created around much of the circumference of 3106, perhaps to aid access into the pit for the removal of water. These steps were also surfaced with a layer of flint cobbles, 2693, to aid traction for those entering it. A still later addition to pit 3106 was the creation of two distinctive, steep-sided gullies, 3174 and 3216, both of which are cut through the ledges around the pit. The purpose of these gullies may have been to aid the deposition of water into the pit either by rainfall or perhaps, by allowing it to be poured from the very top of the feature. This expansion demonstrates a significant investment in the feature.

Of the smaller pits around the reservoir, pit 3275 was found to have cut through two earlier features, pit 3273 and a possible post hole, 3277. These might represent earlier features associated with 3106, being closed and later destroyed in turn by subsequent expansions of the well/reservoir. Two deep postholes, 3252 and 3254, also lie close to the edge of 3106, with 3252 cutting an earlier pit, 3250. These two postholes closely resemble each other in size and fills, and might be part of some form of superstructure located close to the edge of the large reservoir pit. This would have been created after the expansion of 3106, as pit 3250 was also closed and truncated by this event, but before cobble surface 2693 was lain down, as this covers both postholes.

Phase 4 – Construction of cobble surface 2693

Cobble surface 2693 (Pl. 31) was laid down whilst pit 3106 was still open and operational, but after its early expansion, as the cobbles were also seen along the terraced ledges around its upper extent. With the exception of layer 3105, it was not possible to discern clear phases in the creation of 2693, as it consisted of largely the same material across its entire surface. Towards the centre of hollow 2658 it was found that the surface had been built up and augmented over time, with additions of further cobbles and fire-cracked flint. This surface would have provided firm footing during the operation of the feature, which would have involved moving and using large amounts of water.

Layer 3105 represents the only clearly discernible expansion of this cobble surface. This extension was over the edges of 3106 whilst it was still in use, and was probably to counter the difficulties in accessing the water in the pit as the edges became more silted up over time.

The fill arrangement in pit 3106 shows a continuous sequence of water-borne sedimentation, with layers of silt repeatedly alternating with layers of sand. This regular sequence is interrupted by occasional deposits of reddish yellow clay, formed from material which had slumped into the pit during the erosion of its edges. The formation of these layers caused the surface area of the pit to shrink over time, with the edges of the pit narrowing and in turn also causing the centre of the pit to shift position. The fills in the centre of 3106 show signs of constant truncation, but without any obvious indication of a concerted attempt at re-cutting or cleaning out the pit. This may instead suggest that they were repeatedly disturbed during the act of collecting water from the centre of the feature. The extension of the cobble surface over the silted-up edges of the pit, in the form of layer 3105, allowed the centre of the pit to continue to be open and accessible. The expansion of the cobble surface 3105 led to the loss of gullies 3174 and 3216, which had already begun to fill up with sediment concurrently with the rest of pit 3106.



Plate 31. Burnt mound complex 1 (cobbles exposed), looking north, 2x2m scale

Phase 5 – Later stages of burnt mound complex 2658

As pit 3106 became increasingly silted up, and its edges receded, smaller pits were cut around the edges of it. These include 3147, 3170, 3160 and 3165. Pit 3158 was a still later addition, cutting pits 3147 and 3170. The final filling up of reservoir/well pit 3106 involved the formation of layer 2918 in the top of it, a heterogeneous layer created from a combination of natural silting and deliberate backfilling. This took place before the deliberate backfilling of the rest of burnt mound complex 2658, represented by layer 2917, which overlay 2918 in the top of 3106.

As the silting-up of pit 3106 made it unviable as a reservoir, pit 2718 appears to have taken over this role. Pit 2718 is a large oval cut located in the south-east of burnt mound complex 2658, opposite 3106. Unlike 3106, it does not have a complex sequence of fills. Instead it appears to have been backfilled in several large stages. This suggests that it was not open for long enough to allow repeated layers of

sediments to form. Unlike pit 3106, there is no sign that this pit was expanded or enlarged in anyway. Part of the reason for this might be because burnt mound complex 2658 was closed relatively soon after this pit's creation. Another cause might be due to the failure of pit 2718 to hold water. This is due to a porous area of sand within the clay into which the pit is cut, allowing water to escape from the bottom of the reservoir. Remedial action, in the form of a clay lining, 3108, applied to the edge of the pit where it cut through this sandier material, does not seem to have been successful.

Associated with this later activity around the new reservoir are pits 2919, 2921, 2923, 2926, 2929, 2932, 2976, 3088 and 3109, and postholes 2930, 2781 and 2783. Pits 3147, 3158, 3160, 3165 and 3170 mentioned above, may also have still been operational at this time. Pits 2919, 2921, 2926, 2932, 2976, 3109 and 3165 are large, deep features that appear to have been used as containers in which to heat water like the earlier smaller pits seen. These pits must have been open and in use up to the time of the final backfilling of burnt mound complex 2658 (see below), as they are infilled with the same material as the hollow itself, 2917, which consisted of a fire-crack flint and ash/charcoal. Pits 2921, 2923, 2926, 2932, 2976, 3109 and 3165 contain fills which had built up prior to the final backfilling of the feature, suggesting that they were already abandoned or were being infilled shortly before the closure of 2658. As the main fill within these pits is essentially identical to layer 2917, the time between their abandonment and the closure of the hollow cannot have been too great. Unlike pits 3239, 3248, 3250, 3275, and 3162 from the first phase of the feature, none of these pits were cobbled over, which would be expected had they have been backfilled at separate times.

Phase 6 – Closure and deliberate backfill

Layer 2917, a large deposit of fire-cracked flint mixed with silt containing ash and charcoal, was the first deposit to fill hollow 2658. This material represents the accumulated waste product of the activity associated with the operation of the burnt mound complex, and appears to have been deliberately pushed into the feature. The layer is concentrated around the north-east edge of the feature, closest to the majority of the pits which would have been used to heat water. This suggests that the fires used to heat the flints were located just beyond the edge of the hollow close to

where they were being used in the pits. Prior to the infilling process, these heaps of fire-cracked flint and charcoal would have formed mounds of burnt material around the hollow.

Phase 7 – Later activity

Following the deliberate back-filling event, a build-up of grey silt in the hollow, layer 2704, accumulated. This layer contained occasional fragments of heat-altered flint and flint scraper tools, and might represent material from outside of the hollow being washed in, as well as more deliberate attempts at backfilling the feature. A layer of brown silt, 2703, then formed in what remained of the top of the abandoned hollow, sealing the lower layers. 2703 represents the last phase of deposition in the hollow.

Two later features cut burnt mound complex 2658. These are Iron Age enclosure ditch 2634 and a gully, 2785. Ditch 2634 was created well after layer 2703 had fully formed within 2658, and it makes no attempt to avoid the hollow and cuts through its uppermost layers. This suggests that by the time the enclosure ditch was created in the Iron Age, burnt mound complex 2658 had completely disappeared as a significant mark in the landscape.



Plate 32. Burnt mound complex 1 (100% excavated), looking south-east, 2x2m scale

4.3.4.4 Burnt mound complex 2 (12576)

Introduction

Burnt mound complex 12576 consists of a cluster of related features, located just northwest of BM1 (2658) (Figs. 22 and 25).

Methodology

Following the machine stripping of the site, group 12576 was observed as a series of oval features. The largest, 12585, was a dark oval area, with a second, less well-defined oval feature, 12555, just to the south west. Nine oval/rectangular pits were located around the edges of these two larger features. The methodology employed to excavate these features was developed from that used to excavate burnt mound complex 2658, which was similar in shape to 12585.

The two larger features were divided into equal quadrants. Stratigraphic layers were assigned overall context number within each of the four quadrants. Larger feature, 12585, was subdivided into 2m x 2m squares in order to plot finds distributions. In both larger features, opposing quadrants were excavated in stratigraphic sequence, creating running sections across both lengths of each feature. Nine discrete smaller pits were 100% excavated. Recording followed the same methodology as for BM1. The progress of the excavation was also recorded on time-lapse photography.

Two 40L bulk environmental samples were taken from each layer within each quadrant of features 12585 and 12555, and a single 40L bulk sample was taken from each of the nine discrete pits in the group. In addition, a bulk sample comprising 50% of the fill was taken from a select number of these smaller pits to quantify the amount of heat-altered flint within them. Bulk series samples were also obtained from each of the fills of pit 12769 within 12585, up to 40L depending on the volume of the fill. In addition, a sequence of monolith samples was taken through feature 12585, which was inclusive of the main fills of the feature and the fills of the larger internal pit, 12769. A monolith sample of pit 12772 was also taken. A kubiena sample was produced from the metaled surface, 12805, at the base of hollow 12585.

BM2 has been simply illustrated for this report in one technical plan (Fig. 25) a phase plan (Fig. 22) and one section (Fig. 34. Section 3220).

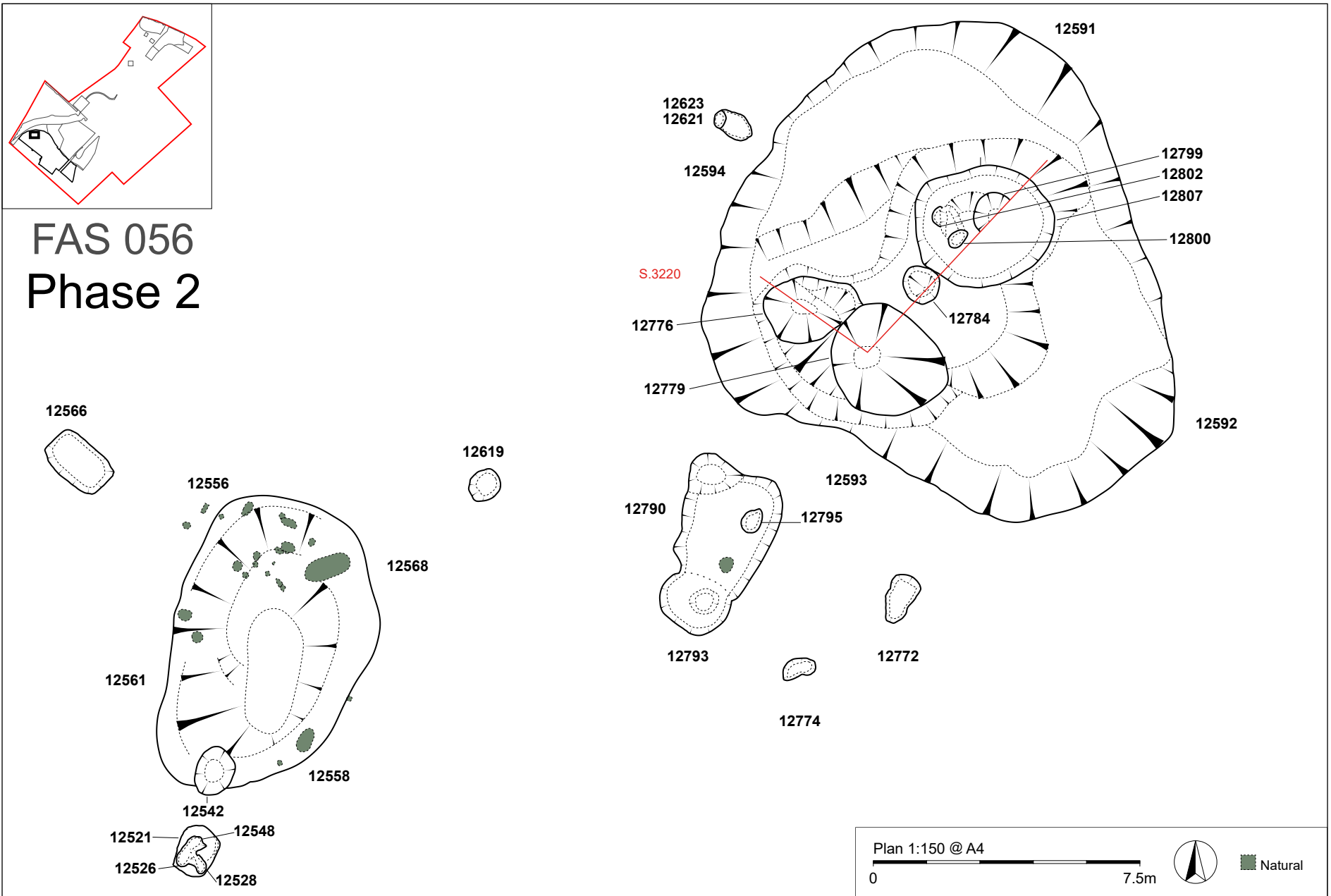


Figure 25. FAS 056 Burnt mound complex 2 plan, showing illustrated sections

Description

Burnt mound hollow 12585

Cut no.	Cut type	Fill no.	Dimensions			Small finds
			Length	Width	Depth	
12585	Burnt Mound hollow		13.55m	11.75m	0.60m	
		12805	12.00m	9.50m	0.20m	
		12765/12743	6.50m	6.00m	0.20m	
		12752/12760/12735	12.50m	5.00m	0.10m	
		12715/12719/12726/12730	9.00m	5.00m	0.10m	
		12701/12689/12694/12708	9.50m	9.00m	0.15m	5124, 5125, 5126, 5127, 5128
		12666/12648/12677/12657	13.00m	10.5m	0.20m	5120, 5121, 5122, 5123
		12636/12625/12595/12606	13.55m	11.75m	0.10m	5115, 5116, 5117, 5118, 5119

Table 22. FAS 056 Phase 2 burnt mound 2, hollow 12585, associated cut numbers and feature dimensions

The burnt mound hollow 12585 was placed at the centre of the complex of features (Pl. 33). It had an oval cut in plan, orientated north-east to south-west, with shallow concave sides down to a flat base. The base of the feature was surfaced with a layer of flint cobbles, 12805, generally measuring 0.10cm – 0.20m in size, which were pressed into the clay geology into which the hollow was cut. Covering the cobble surface was layer 12765/12743, which did not extend into the north or west quadrants of the burnt mound complex. It consisted of a layer of yellow clay, containing flecks of charcoal. Above this was layer 12760/12752/12735. The presence of pit 12776 within the burnt mound divided this layer into two non-contiguous patches, 12735 in the NW quadrant, consisting of mid yellow-red sandy clay, with occasional charcoal flecks and stones, and 12752/12760 across the southern half of the burnt mound. Overlying these deposits was a spread of mid to dark grey, soft silt with moderate amounts of flint charcoal flecks inclusions (12726/12730/12715/12719) which was located in the central area of burnt mound 12585. Over this was a layer of mid to dark grey brown, loosely compacted silt, containing moderate amounts of small stones and charcoal flecks (12689/12694/12708/12701), above which was a layer of mid-greyish brown sandy silt, with frequent numbers of medium sized stones throughout (12648/12657/12666/12677). The uppermost fill in the sequence was 12625/12636/12595/12606, a mid-reddish grey/brown soft sandy silt with occasional

amounts of small flint inclusions, charcoal flecks and fragments of heat altered flint. These fills produced a very small amount of worked flint and Bronze Age pottery.



Plate 33. Burnt mound complex 2, hollow 12585 (start of excavation), looking west, 1x2m and 1x1m scale

Burnt mound pits

Cut no.	Cut type	Fill no.	Dimensions			Small finds
			Length	Width	Depth	
12769	Pit		4.00m	3.90m	1.60m	
		12789	2.75m	2.75m	0.25m	
		12797	2.05m	2.05m	0.10m	
		12788	3.25m	3.25m	0.25m	
		12770	3.90m	3.50m	0.35m	5133
		12771	4.00m	3.90m	3.65m	5129, 5130
12776	Pit		2.10m	2.00m	0.55m	
		12777	2.00m	2.00m	0.10m	
		12778	2.10m	2.00m	0.45m	
12779	Pit		3.15m	2.90m	1.50m	
		12780	1.00m	1.00m	0.15m	
		12781	2.85m	2.90m	0.30m	
		12782	2.25m	2.25m	0.30m	
		12783	1.30m	1.30m	0.20m	5132
		12803	1.75m	1.75m	0.50m	
12784	Pit		1.20m	0.90m	0.65m	
		12785	0.35m	0.35m	0.10m	
		12786	0.70m	0.70m	0.25m	
		12787	1.20m	0.90m	0.40m	
12798	Posthole	12799	0.60m	0.10m	0.30m	
12800	Posthole	12801	0.50m	0.40m	0.16m	
12802	Posthole	Only seen in plan	0.50m	0.25m	0.30m	

Table 23. FAS 056 Phase 2 burnt mound 2 pits and post holes, cut numbers and feature dimensions

BM2 included four pits and three possible postholes. The two larger pits, 12769 and 12779, resembled each other in terms of size, profile and fill sequences. Both had steep convex edges down to a concave base, measuring 1.50m – 1.60m deep. The fill sequences were broadly similar, consisting of alternating layers of silt and clay, some with occasional flecks of charcoal. At the base of both pits was a layer of reddish-yellow clay slump, fill 12789 in pit 12769 and fill 12803 in pit 12779 respectively (Fig .34. Section 3220). Three smaller cuts, 12798, 12800 and 12802, were seen in the base of pit 12769. These were oval in plan, with steep sides and were filled with mid-brownish grey silty clay. 12798 appears to have been cut by pit 12769, whereas 12800 and 12802 may have been contemporary.

Pit 12776 was smaller than pits 12769 and 12779, but had a similar oval shape in plan. It had moderately sloping concave sides down to a broad concave base. It contained two fills, 12777 at the base, consisting of a mid-yellow/grey clay, and 12778, a light grey-brown silty clay. It appeared to be cut by pit 12779 (Fig. 34. Section 3220).

A much smaller pit in the burnt mound was 12784, oval in plan with moderately sloping concave edges down to a concave base. It contained three fills. The basal fill was 12785, consisting of mid-greyish brown silty clay, beneath fill 12786, composed of mid-greyish brown clay with reddish brown flecks. The upper fill of the pit was 12787, a dark brownish grey, clayey silt with occasional flecks of charcoal.

All of the pits except for 12776, 12800 and 12802 contained worked flint, with all but 12784 also containing animal bone. Moderate amounts of Early to Middle Bronze Age pottery was recovered from pits 12769, 12779 and 12784, much of which showed decoration.

Hollow 12555

Cut no.	Cut type	Fill no.	Dimensions		
			Length	Width	Depth
12555	Hollow		8.20m	5.50m	0.28m
		12570/12552/12546/12569	8.20m	5.50m	0.10m
		12563/12551/12545	2.40m	2.10m	0.08m
		12544/12562/12541	1.50m	1.10m	0.10m
Evaluation Segment					
0252	Hollow		2.00m	3.25m	0.51m

Table 24. FAS 056 Phase 2 burnt mound 2, hollow 12555, associated cut numbers and feature dimensions

A second hollow, 12555 (Pl. 34) was also included into group 12576. This hollow was much shallower and smaller than the cut of burnt mound hollow 12785 which lay 10.2m to the north-east of it. This had been partially investigated during the evaluation phase as feature 0252 in Trench 265, where it was described as having an asymmetrical profile. The cut of the hollow was broad and shallow, with convex edges and a flat base. Three fills were contained within the cut, the lowest of which was 12546/12552/12569/12570, a reddish-brown clayey silt. This deposit appears to have been cut by pit 12542. Fills 12545/12551/12563 and 12541/12544/12562 were above this bottom layer, and were located within the centre of the hollow. 12545/12551/12563 was composed of a dark brown/grey silt containing frequent amounts of heat-altered flint and charcoal. The upper fill, 12541/12544/12562, was similar but distinguished from it in that it contained far fewer heat-altered flints.

There were four pits within hollow 12555. These were 12542, 12578, 12580 and 12582. Pit 12542 appeared to cut through the lower fill of the hollow, the other three appeared to be sealed beneath it.



Plate 34. Hollow 12555 (two quads removed), looking north, 1x2m scale

Pits within Hollow 12555

Cut no.	Cut type	Fill no.	Dimensions			Small finds
			Length	Width	Depth	
12542	Pit		1.10m	1.00m	0.32m	
		12543	1.10m	1.00m	0.12m	
		12553	0.90m	0.80m	0.20m	
12578	Pit		0.80m	0.50m	0.20m	
		12584	0.72m	0.50m	0.10m	
		12579	0.80m	0.50m	0.12m	
12580	Pit	12581	0.84m	0.80m	0.08m	
12582	Pit	12583	0.80m	0.80m	0.08m	

Table 25. FAS 056 Phase 2 burnt mound 2, hollow 12555 pits, associated cut numbers and feature dimensions

Although later than pit 12578, which was sealed beneath the fills of hollow 12555, pit 12542 was similar in terms of shape and fills. Both had shallow concave edges down to a concave base, and contained two fills, a lower fill consisting of mid-reddish-brown clay and a darker silt upper fill containing occasional amounts of heat-altered flint.

Pits 12580 and 12582 were a similar size and depth, being shallow concave features with a single fill. In both pits this fill consisted of a dark reddish-brown, loose sandy silt with frequent amounts of charcoal and heat-altered flint. These pits appeared to be beneath the lower layer in hollow 12555.

Aside from pit 12582, these features contained worked flint. Pit 12542 also contained animal bone and fire-cracked flint.

Other pits in group 12576

Cut no.	Cut type	Fill no.	Dimensions			Small finds
			Length	Width	Depth	
12521	Pit		1.40m	1.20m	0.50m	
		12547	0.30m	0.25m	0.30m	
		12522/12533	1.00m	1.00m	0.10m	
		12523/12532	0.40m	0.40m	0.10m	
		12524/12531	0.80m	0.80m	0.20m	5112
		12525/12530	1.40m	1.10m	0.34m	
12526	Pit	12527/12534	0.40m	0.28m	0.12m	
12528	Pit	12529/12535	0.60m	0.20m	0.10m	
12548	Pit	12549	0.50m	0.40m	0.15m	
12566	Pit	12567	1.70m	1.20m	0.20m	
12586	Pit		1.25m	0.50m	0.18m	
		12587	1.25m	0.50m	0.10m	
		12835	1.10m	0.40m	0.08m	
12619	Pit		0.81m	0.80m	0.10m	
		12620	0.81m	0.80m	0.06m	
		12833	0.60m	0.54m	0.04m	
12621	Pit		1.14m	0.68m	0.24m	
		12622	1.14m	0.68m	0.18m	
		12834	1.02m	0.56m	0.16m	
12623	Pit	12624	0.44m	0.32m	0.36m	
12772	Pit	12773	1.30m	0.50m	0.18m	
12774	Pit	12775	0.90m	0.43m	0.26m	
12790	Pit		4.00m	2.50m	0.30m	
		12791	4.00m	2.50m	0.20m	
		12792	2.30m	0.60m	0.10m	
12793	Pit	12794	1.90m	1.82m	0.34m	
12795	Pit	12796	0.70m	0.52m	0.16m	

Table 26. FAS 056 Phase 2 burnt mound 2, group 12576 pits, associated cut numbers and feature dimensions

Beyond the two main hollows BM2 also included thirteen smaller pits. Several of these contained fills with large amounts of charcoal and heat-altered flint. Of these, pit 12521 contained a series of fills with natural silts towards the base overlain by fills that included charcoal and heat-altered flint. This pit cut three smaller ones, 12526, 12528 and 12548, all of which had similar, irregular concave profiles and similar fills, consisting of pale yellow-brown silt, although the fill of 12548 was slightly darker.

Scattered around the two main hollow groups were nine smaller pits, 12566, 12586, 12619, 12621, 12623, 12772, 12774, 12793 and 12795. Two of these, 12566 and 12586, had rectangular cuts in plan, whilst the other pits had oval cuts. Pit 12586 had steep, vertical sides whereas the other pits had a shallow concave profile. These pits all contained a dark grey silt fill, which had a large amount of charcoal and heat-altered flint within it. In the case of pits 12586, 12619 and 12621 there was also a shallow upper fill, consisting of a mid-grey brown silt, with much less charcoal and heat-altered flint compared to the lower fill. Pit 12621 cut 12623, and pits 12793 and 12795 cut a hollow feature 12790.

Hollow 12790 was an irregular shape in plan, roughly oval, with shallow concave sides and contained two fills, 12791 and 12792, both consisting of reddish-brown clayey silt, but with 12791 being slightly darker than the pale reddish-brown 12792.

Pits 12521, 12566, 12619, 12621, 12623, 12790, 12793 and 12795 contained a few pieces of worked flint and pit 12790 also contained a single sherd of what could be Late Bronze Age pottery.

Phasing

Three phases of activity have been identified in the burnt mound group. Firstly, its initial creation and use, followed by minor additions which may have included a cobble surface and new wells, and finally the build-up of silt within the disused complex. These phases remain broad, in part due to the lack of clear stratigraphic relationships between cut features within the burnt mound.

Phase 1 – Creation and initial use

Hollow 12585, and its associated well pit 12769, were created in an area with underlying clay geology, certainly deliberately selected for its water-retaining properties. The hollow was excavated down to the top of this clay, cutting into it by 0.60m. The well, 12769, was excavated in the centre of this hollow to collect and store water. The lack of waterborne deposits within this feature have been interpreted as a possible indication that it failed as a well, and that pit 12799 in the base of the pit may have been dug in an attempt to further breach the water table. Postholes 12800

and 12802 have been interpreted as the remains of a possible log ladder placements for accessing the well pit.

Pit 12776 within the hollow which might also be associated with the early stages of the mound complex could have been dug as a water storage feature, appears to have been completely infilled by the time a third well/water-storage pit, 12779, was dug through it.

Set apart from this main hollow was a smaller hollow, 12555. This was a second, much smaller cut into the clay geology, although it may have been a pre-existing natural hollow which was utilised. It appears to have been used as a dumping area for heat-altered flint and charcoal waste products from the activity at hollow 12585, which may explain why less heat altered material was present within the main hollow 12585.

This waste material was the result of heating large amounts of water using hot stones, gathered from well 12769, and poured into a series of pits around the hollow. These pits include 12521, 12526, 12528, 12548, 12566, 12586, 12619, 12621, 12623, 12772, 12774, 12790, 12793, 12795. Whether these were all open and operating at the same time, and whether some are related to the later phases of the hollow, is difficult to determine.

Phase 2 – Cobble layer 12805 and later well 12779

A layer of cobbles, 12805, was laid down as a surface across the base of hollow 12585 in order to provide traction on the clay base of the feature. This surface was patchy and inconsistent in depth and extent, with frequent interruptions. Some of these cobbles were seen within the lower fills of well 12769, suggesting that the filling of the well occurred after these cobbles had been in place. The cobble layer may have been in place from the start of the feature, or may be a later addition.

The relationship between this cobble surface and pit 12779 is unclear. The cobbles do not seal this pit, suggesting that either the surface respected its borders or was cut through by it. This pit may have been created as an additional well, perhaps to try and augment or replace the original well, 12769. Well 12779 was cut through an

earlier water-storage pit, 12776, which had become completely filled in by the time this was dug. The deposits in 12776 suggest that there was an initial build-up of clay, eroded from the edges of the feature, followed by an accumulation of silt.

At some point during this phase a pit containing a fragment of Early-Middle Bronze Age collared urn, 12784, was cut next to well 12769. This pit was cut through some of the earlier fills of this feature, suggesting that it was created at a time when the original well had accumulated a large amount of silt.



Plate 35. Burnt mound complex 2, hollow 12585 (showing cobbles), looking west, 1x2m and 1x1m scale

Phase 3 – Silting up of the mound complex

The smaller pits within the group, 12521, 12526, 12528, 12548, 12566, 12586, 12619, 12621, 12623, 12772, 12774, 12790, 12793 and 1279, had been filled with charcoal and heat-altered flint, both waste products from the operation of the burnt mound. This deposition may have been the deliberate dumping of waste material into pits which were no longer in use to close them, or may have been due to the erosion of waste heaps into the disused pits. The presence of a layer of silt in the top of pits 12586, 12619 and 12621 suggests that after this dumping had occurred natural

silting processes filled the remains of the pits. The closing of these pits might have been concurrent with the operation of the hollow, or may have occurred when the whole burnt mound complex was no longer in use.

Hollow 12555 had already accumulated a layer of silt, although if it was a natural glacial feature this may have happened before its use as part of the mound complex. The upper fills of the hollow resembled those of the small pits, being composed of heat-altered flint and charcoal. This may have been dumped into the hollow during the operation of the burnt mound, or might have washed into the hollow from eroding waste heaps. As with the case of the smaller pits, this may have occurred at any time during or after the use of the burnt mound complex.

The two larger wells within the main hollow, 12769 and 12779, were filled by alternating deposits consisting of clay, weathered from the sides of the features, and silt, washed in from above. None of these layers suggested that large amounts of standing water had been present within the wells, instead a steady sequence of erosion and silting up has been interpreted. These fills may have developed at the same time as build-up of silt material within the hollow itself. The uppermost fill of the well, 12771, also filled the top of pit 12784, as fill 12787. This fill contained a notable amount of charcoal flecks and fragments, which perhaps originated as waste material from the operation of the mound.

The silting up of hollow 12585 has been interpreted as a naturally occurring event, with little evidence for a deliberate attempt to backfill the complex and its associated wells. The lowest fill in the sequence, 12765/12743, and the one above this, 12760/12735/12752, appeared to consist of clay and silt which had washed in from the edges of the feature. This was followed by 12715/12719/12726/12730, a dark silt which had washed into the hollow, bringing with it small amounts of waste material such as charcoal from around the edges. Two further accumulations of silt material, 12689/12694/12701/12708 and then 12648/12657/12666/12677, then washed in to cover this. A final covering of silt, 12595/12606/12625/12636, filled the remainder of the feature.



Plate 36. Burnt mound complex 2, hollow 12585 (100% excavated), looking south-west, 1x2m and 1x1m scale

4.3.4.5 Drove-way

A drove-way consisting of two to four small parallel gullies (Fig. 22) seen in SME1, SME2, SME3, EX2, Phase 1 extra and Phase 2 works was seen running for c.385m. It was poorly preserved and heavily truncated at the north, within SME3 and the south, within Phase 2 but the central area in EX2 survived to depths of 0.3m. It was excavated under a series of group numbers in each area, which are detailed in Tables 27 to 32 below. Finds were generally sparse from the entire length of the feature and most finds are likely to be intrusive. Due to the mixed date of the finds associated with this feature (including Bronze Age, Iron Age and Roman pottery) it is difficult to securely place this feature in a defined phase of activity. It is possible that this drove-way was used throughout the Bronze Age into the Iron Age periods but due to the stratigraphic cut sequence seen on site, where the drove way was cut by middle Iron Age pits, it is likely to originate to the broader Bronze Age period.

Drove way ditch group 2103

Context Number	Group Number	Feature Number	Length	Width	Depth	Ditch
2104	2103	2104		0.28	0.19	E1
2105	2103	2104		0.28	0.19	E1
2106	2103	2106		0.62	0.2	E2
2107	2103	2106		0.62	0.2	E2
2108	2103	2108		0.54	0.2	E1
2109	2103	2108		0.54	0.2	E1
2110	2103	2110		0.66	0.12	E2
2111	2103	2110		0.66	0.12	E2
2112	2103	2112		0.42	0.16	E1
2113	2103	2112		0.42	0.16	E1
2114	2103	2114		0.46	0.08	E2
2115	2103	2114		0.46	0.08	E2
2116	2103	2116		0.34	0.1	W
2117	2103	2116		0.34	0.1	W

Table 27. FAS 056 SME1 drove-way group 2103, associated cut numbers and feature dimensions

Three ditches were present in this group (Fig. 15 and Fig.22), a single ditch (2116) on the north-west side 7.7m from two running parallel and close together on the south-east. All faded out to the south within the SME 1 area. Segment 2106 appeared to cut segment 2104, suggesting that this inner ditch was a recut of the outer. 2116 was 7.70m to the north-west of the other two ditches, which were cut so close together that they intercut in places. The ditches measured 0.30m – 0.60m in width, and were between 0.08m – 0.20m deep. Three segments produced finds, with worked flint found within 2108, 2110 and 2114. In addition, segment 2110 also produced a small amount of pottery dated to the Late Bronze Age to Iron Age but this is likely to be intrusive.



Plate 37. Drove-way group 2103, ditch cuts 2108 and 2110, looking south-west, 1x1m scale

Drove-way ditch group 10026

Context Number	Group Number	Feature Number	Length	Width	Depth	Ditch	Small Find No.
10002	10026	10002	1	0.4	0.04	E1	
10003	10026	10002	1	0.4	0.04	E1	
10004	10026	10004	1	0.5	0.1	E2	
10005	10026	10004	1	0.5	0.1	E2	
10006	10026	10006	1	0.34	0.07	E1	
10007	10026	10006	1	0.34	0.07	E1	
10008	10026	10008	1	0.58	0.07	E2	
10009	10026	10008	1	0.58	0.07	E2	
10010	10026	10010	1	0.35	0.1	W1	
10011	10026	10010	1	0.35	0.1	W1	2097
10012	10026	10012	1	0.53	0.14	W1	
10013	10026	10012	1	0.53	0.14	W1	
10014	10026	10014		0.42	0.1	W1	
10015	10026	10014		0.42	0.1	W1	
10016	10026	10016		0.32	0.08	W2	
10017	10026	10016		0.32	0.08	W2	
10018	10026	10018	1	0.22	0.08	W1	
10019	10026	10018	1	0.22	0.08	W1	
10020	10026	10020	1	0.4	0.08	W2	
10021	10026	10020	1	0.4	0.08	W2	
10022	10026	10022	1	0.3	0.05	E1	
10023	10026	10022	1	0.3	0.05	E1	
10024	10026	10024	1	0.25	0.05	E2	
10025	10026	10024	1	0.25	0.05	E2	

Table 28. FAS 056 SME3 drove-way 10026, associated cut numbers and feature dimensions

Group 10026 in SME 3 consisted of four parallel ditches, in two pairs approximately 8.3m apart, all of which faded out within the SME 3 area (Figs. 12 and 22). The fills were all similar, generally consisting of a mid to light greyish brown, silty sand with occasional amounts of small to medium sized flints and they maintained a fairly consistent depth and width, between 0.25m and 0.58m wide and c.0.10m deep. Finds recovered from segments 10006, 10008 and 10012, consisted exclusively of small amounts of worked flint.



Plate 38. Drove-way group 10026, ditches 10002 and 10004, looking south, 2x1m scale

Drove way ditch group 5015

Context Number	Group Number	Feature Number	Length	Width	Depth	Ditch
5012	5015	5012		0.56	0.33	
5013	5015	5012		0.56	0.33	
5038	5015	5023	1m ex	1.6	0.6	
5045	5015	5045		0.3	0.1	
5046	5015	5045		0.3	0.1	
5055	5015	5055	1m ex	0.3	0.06	
5056	5015	5055		0.3	0.06	
5063	5015	5063		1.6	0.6	
5064	5015	5064	1	0.4	0.1	
5065	5015	5064	1	0.4	0.1	
5068	5015	5068	1	0.4	0.1	
5069	5015	5068	1	0.4	0.1	
5070	5015	5070	1	0.6	0.3	
5071	5015	5070	1	0.6	0.3	
5072	5015	5072	1	0.4	0.1	
5073	5015	5072	1	0.4	0.1	
5074	5015	0574	1	0.4	0.1	
5075	5015	5074	1	0.4	0.1	
5180	5015	5180	1m ex	1	0.2	
5181	5015	5180	1m ex	1	0.2	
5182	5015	5182	0.97	0.88	0.29	
5183	5015	5182	0.97	0.88	0.29	
5193	5015	5193	1	0.38	0.14	
5194	5015	5193	1	0.38	0.14	
5197	5015	5197	1m ex	0.4	0.18	
5198	5015	5197	1m ex	0.4	0.18	
5199	5015	5199	1m ex	0.3	0.15	
5200	5015	5199	1m ex	0.3	0.15	
5204	5015	5204		0.7	0.16	
5205	5015	5204		0.7	0.16	
5210	5015	5210	1	0.54	0.22	
5211	5015	5210	1	0.54	0.22	
5237	5015	5237	1m ex	0.42	0.14	
5238	5015	5237	1m ex	0.42	0.14	
5239	5015	5239	1m ex	0.64	0.24	

Context Number	Group Number	Feature Number	Length	Width	Depth	Ditch
5240	5015	5239	1m ex	0.64	0.24	
5241	5015	5241	1.07	0.42	0.16	
5242	5015	5241	1.07	0.42	0.16	
5243	5015	5243	1	0.36	0.16	E2
5244	5015	5243	1	0.36	0.16	E2
5247	5015	5247	1m ex	0.44	0.06	W
5248	5015	5247		0.44	0.06	W
5253	5015	5253	1m ex	0.4	0.15	E1
5254	5015	5253	1m ex	0.4	0.15	E1
5255	5015	5255	1m ex	0.18	0.12	E1
5256	5015	5255	1m ex	0.18	0.12	E1
5257	5015	5257	1m ex	0.4	0.22	E1
5258	5015	5257	1m ex	0.4	0.22	E1
5259	5015	5259	1m ex	0.4	0.24	E1
5260	5015	5259	1m ex	0.4	0.24	E1
5261	5015	5261	1m ex	0.45	0.12	E1
5262	5015	5261	1m ex	0.45	0.12	E1
5263	5015	5263	1m ex	0.38	0.08	E1
5264	5015	5263	1m ex	0.38	0.08	E1
5271	5015	5271		0.4	0.15	W
5272	5015	5271		0.4	0.15	W
5273	5015	5273	1.08	0.4	0.1	E1
5274	5015	5273	1.08 ex	0.4	0.1	E1
5292	5015	5292	0.6m ex	0.32	0.09	W
5293	5015	5292	0.6	0.32	0.09	W
5304	5015	5304	1m ex	0.65	0.15	E2
5305	5015	5304	1m ex	0.65	0.15	E2
5306	5015	5306	1m ex	0.56	0.31	W
5307	5015	5306	1m ex	0.56	0.31	W
5310	5015	5310	1m ex	0.45	0.1	W
5311	5015	5310	1m ex	0.45	0.1	W
5314	5015	5314	1.05m ex	0.54	0.26	W
5315	5015	5314	1.05m ex	0.54	0.26	W
5316	5015	5316	1m ex	0.45	0.22	E2
5317	5015	5316	1m ex	0.45	0.22	E2
5318	5015	5318	1m ex	0.4	0.1	E2
5319	5015	5318	1m ex	0.4	0.1	E2
5320	5015	5320	1m ex	0.4	0.08	E2
5321	5015	5320	1m ex	0.4	0.08	E2
5347	5015	5347	1.14m ex	0.34	0.08	W
5348	5015	5347	1.14m ex	0.34	0.09	W
5349	5015	5349	1.24m ex	0.42	0.12	W
5350	5015	5349	1.24m ex	0.42	0.12	W

Table 29. FAS 056 EX2 drove way group 5015, associated cut numbers and feature dimensions

Three drove-way ditches were seen in area EX2 (Figs. 15, 19 and 22). The fill of all three was consistent, comprised of a mid-orange brown, firm clayish silt with occasional angular flint inclusions. There was little variation in the composition or colour of the fill in any of the ditches. The westernmost ditch in the group was cut by pit 5294, which contained Iron Age finds, and cut hollow 5003 at its southernmost end. The inner eastern ditch was cut by pit 5275, which contained Iron Age pottery, by undated pit 5249 and was cut by part of the Roman enclosure 1 at its

southernmost extent it. The easternmost ditch cut undated pits 5265 and 5066 and natural hollow 5003 at segment 5204. It was cut by pit 5202 and the Roman enclosure ditch.

Finds included small quantities of worked flint from excavated segments 5012, 5234, 5241, 5271, 5068, 5072, 5180, 5182, 5193, 5204, 5210, 5306, 5314 and 5239. Small amounts of Late Bronze Age pottery were recovered from segments 5239 and 5304, and smaller amounts of Middle to Late Iron Age pottery sherds were recovered from segments 5253 and 5257. These are assumed to be intrusive. Drove-way slots 5255 and 2318 have been illustrated (Fig. 34. Sections 801 and 826).



Plate 39. Drove-way group 5015, ditch 5210, looking south-west, 1x0.3m scale

Drove-way ditch (Phase 1 extra slots)

Context Number	Feature Number	Length	Width	Depth
11006	11006	1.00	0.50	0.10
11007	11006	1.00	0.50	0.10

Table 30. FAS 056 Phase 1 Extra drove-way 11006, associated cut numbers and feature dimensions

A length of a single ditch was excavated in area Phase 1 Extra, 11006 (Figs. 19 and 22). A small amount of worked flint and Late Bronze Age pottery was recovered from

the fill. These are assumed to be intrusive although the later Bronze Age pottery may suggest that this feature was used later than the burnt mound complexes. It is also possible that the drove way was used throughout the Early to Late Bronze Age phases and maybe even into the Iron Age.

Drove-way ditch (Phase 2)

Two parallel north to south aligned ditches spanning 112m formed the drove way in the Phase 2 works. Ditch group 12089 comprised the eastern side and ditch group, 12108 formed the western edge that branched into two separate ditches in the central area, then re-joined (Figs. 19 and 22).

Drove-way group 12089

Context Number	Feature Number	Length	Width	Depth
0232	12089		0.43	0.13
0233	12089		0.43	0.13
12090	12090	1m ex	0.60m	0.10m
12091	12090	1m	0.60m	0.10m
12092	12092	2m Ex	0.48m	0.12m
12093	12092	2m ex	0.48m	0.12m
12094	12094	1m ex	0.70m	0.10m
12095	12094	1m ex	0.70m	0.10m
12096	12096	0.86m ex	0.40m	0.10m
12097	12096	0.86m ex	0.40m	0.10m
12098	12098	1m	0.34m	0.08m
12099	12099	1m	0.34m	0.08m
12100	12100	1m ex	0.6m	0.17m
12101	12101	1m ex	0.6m max	0.17m
12102	12102	1m	0.36m	0.14m
12103	12102	1m	0.36m	0.14m
12104	12104	0.98m	0.52m	0.11m
12105	12104	0.98m	0.52m	0.11m
12106	12106	1.2m ex	0.5m	0.04m
12107	12106	1.2m ex	0.5m Max	0.04m

Table 31. FAS 056 Phase 2 drove-way group 12089, associated cut numbers and feature dimensions

The profile of the drove-way ditch had shallow to moderately sloping concave edges down to a concave base, becoming very shallow in places. The fill of the drove way was composed of a mid-orange brown, soft silty sand with moderate amounts of small to medium sized flint inclusions. Worked flint was found at segments 12090, 12092, 12100 and 12096, whilst a sherd of Middle Iron Age pottery was found in segment 12104. The pottery is assumed to be intrusive but may show continued use of the drove-way.



Plate 40. Drove-way group 12089, ditch 12100, looking south, 1x0.3m scale

Drove-way group 12108

Context Number	Feature Number	Length	Width	Depth
0222	12108			0.3
0223	12108	>8	<1	0.3
0224	12108			>0.7
0225	12108		0.44	0.7
12143	12143	1m ex	0.56m	0.08m
12144	12144	1m ex	0.56m	0.08m
12109	12109	1m ex	0.56m	0.14m
12110	12109	1m ex	0.56m	0.14m
12111	12111	1m ex	0.19m	0.03m
12112	12111	1m ex	0.19m	0.03m
12113	12113	1m ex	0.34m	0.08m
12114	12113	1m ex	0.34m	0.08m
12115	12115	1m ex	0.5m max	0.09m
12116	12115	1m ex	0.5m	0.09m
12117	12117	1m ex	0.4m	0.12m
12118	12117	1m ex	0.4m max	0.12m
12119	12119	0.86m ex	0.34m	0.12m
12120	12120	0.86m ex	0.34m	0.12m ex
12121	12121	0.88m ex	0.56m ex	0.16m ex
12122	12122	0.88m ex	0.56	0.16
12123	12123	1.5m ex	0.40m	0.14m
12124	12123	1.5m ex	0.40m	0.14m
12127	12127	1.5m ex	0.36m	0.08m
12128	12127	1.5m ex	0.36m	0.08m
12129	12129	1m ex	0.40m	0.13m

Context Number	Feature Number	Length	Width	Depth
12130	12129	1m ex	0.40m	0.13m
12131	12131	1m ex	0.28m	0.14m.
12132	12131	1m ex	0.28m	0.14m
12133	12133	1m ex	0.47m	0.13m
12134	12133	1m ex	0.47m	0.13m
12135	12135	1m ex	0.69m	0.15m
12136	12135	1m ex	0.69m	0.15m
12137	12137	1m ex	0.34m	0.11m
12138	12137	1m ex	0.34m	0.11m

Table 32. FAS 056 Phase 2 drove-way group 12108, associated cut numbers and feature dimensions

The drove-way was cut by Roman enclosure 12452 at its northern end. Where it was cut by Roman enclosure 12452 the drove-way ditch split into two parallel ditches, 12135 to the west and 12133, which ran close together with no stratigraphic relationship visible between them. The western segment continued as 12131, 12127, 12119, 12115 and 12111. The eastern segment continued as 12129, 12123, 12121, 12117 and 12113. At 12111 and 12113 these two sections merged and continued as one ditch, 12109.

The fill of this drove-way ditch group was similar to ditch group 12089, composed of a mid-orange brown, soft silty sand with moderate amounts small to medium sized flint inclusions. Except for segments 12127, 12115, 12111, 12109 and 12113, worked flint was recovered from all of the excavated sections. In addition, pottery was found in segment 12119, consisting of a small amount of Middle to Late Iron Age pottery, and from segment 12123, consisting of a small number of Late Iron Age/Early Roman sherds which are likely all intrusive.



Plate 41. Drove-way group 12108, ditch 12119 and 12121, looking north, 1x1m scale

4.3.4.6 SME 1

Introduction

In addition to the drove way, four post holes and four pits were seen in this area. The postholes and a single pit were number as group 2018 (BA pit group 1) and were associated with a small focus of activity at the north edge of the area. Three additional pits were seen scattered across the area (Figs. 13 and 22).

BA Posthole/ pit group 1 (2018)

Context Number	Group Number	Feature Number	Length	Width	Depth
2004	2018	2004	0.6	0.5	0.25
2005	2018	2004	0.6	0.5	0.25
2006	2018	2006	0.7	0.7	0.3
2007	2018	2006	0.7	0.7	0.3
2008	2018	2008	0.3	0.3	0.3
2009	2018	2008	0.3	0.3	0.3
2010	2018	2010	0.45	0.45	0.2
2011	2018	2010	0.45	0.45	0.2
2012	2018	2012	0.5	0.5	0.2
2013	2018	2012	0.5	0.5	0.2

Table 33. FAS 056 SME1 pit group 2018 associated cut numbers and feature dimensions

Group 2018 consisted of four circular postholes, organised into a roughly square shape, centred around a small, circular pit (Fig. 22). The postholes were spaced about 2.50m apart. Three of the postholes, 2004, 2010 and 2012, were a similar size and shape, posthole 2008 was slightly smaller and deeper. The fills of these postholes consisted of a mid-brownish grey silty clay, with frequent amounts of burnt flint, fired clay and charcoal. The central pit, 2006, was circular in plan with a steep profile and a concave base which sloped down to the west. The fill, 2007, consisted of a mid-brownish grey silty clay, with fragments of burnt flint and charcoal.



Plate 42. Pit group 2018 part excavated, looking north, 1x1m and 1x0.3m scale

All of the features in group 2018 except for postholes 2006 and 2008, contained small quantities of worked flint and Early to Middle Bronze Age pottery. Posthole 2012 stood out as containing a larger assemblage of pottery, including a number of decorated Grooved ware sherds. It is hard to ascertain the function of this group of features as there is no defined structural shape and the area encompassed is too small for most structures normally associated with Bronze Age activity.

Dispersed pits

Pit Number	Fill Number	Length (m)	Width (m)	Depth (m)	Shape	Fill description	Finds
2025	2025	1.56	1.18	0.38	Circular		
2025	2026	1.56	1.18	0.38		Compacted brown clay	Middle Bronze Age pottery
2035	2035	0.74	0.56	0.34	Oval		
2035	2036	0.74	0.56	0.34		Compact, mid to dark greyish brown silty clay with moderate amounts of charcoal and fired clay flecks	Early to Middle Bronze Age pottery
2035	2037	0.74	0.56	0.15		Light to mid orangey brown, compact silty clay.	

Pit Number	Fill Number	Length (m)	Width (m)	Depth (m)	Shape	Fill description	Finds
2038	2038	1.45	1.42	1.20 stop. >1.84	Circular		
2038	2039	1.45	1.42	1.20/ 1.84 +		Mid orangey brown clay, very compact with a few large natural flint inclusions	Small quantities of worked flint and Early to Middle Bronze Age pottery

Table 34. FAS 056 SME1 dispersed Bronze Age pits, associated cut numbers and feature dimensions

There were three pits assigned Early to Middle Bronze Age dates in SME1. Of these 2038 was a large pit over 1.84m deep and probably represents a well or utilised sink hole. It was cut by pit 2042, which sat in the top of it.



Plate 43. Pit/ sink hole 2038, vertical, 1x1m scale

4.3.4.7 SME2

In addition to BM1, six pits and a natural hollow dating to this phase were found in SME2 (Figs. 14, 17 and 22).

Pits

Context Number	Group Number	Feature Number	Length (m)	Width (m)	Depth (m)	Shape	Fill description
2522		2522	0.76	0.62	0.1	Oval	
2523		2522	0.76	0.62	0.1		dark grey brown soft clayey silt with common amounts of small flint inclusions and rare charcoal flecks
2555		2555	0.54	0.4	0.34	Oval/SR	
2556		2555	0.54	0.4	0.34		dark grey brown, soft clayey silt with common amounts of small flint inclusions and rare charcoal flecks,
2569	2658	2569	1.2	0.8	0.28	Oval/SR	
2570	2658	2569	1.2	0.8	0.16		Mid grey brown soft sandy silt with abundant fire cracked flint
2571	2658	2569	1.2	0.8	0.16		Dark brown and mottled grey brown charcoal rich soft sandy silt
2572	2658	2569	1.2	0.8	0.11		Mid grey brown soft sandy silt with flint inclusions
2591		2591	1.46	0.74	0.16	Oval	
2592		2591	1.0	0.74	0.16		dark grey brown charcoal rich clayey silt, with a firm compaction, containing abundant amounts of fire cracked flint and charcoal flecks.
2593		2591	0.9	0.74	0.16		mid-grey brown slightly clayey silt with a firm compaction This contained common amounts of fire cracked flint, rare amounts of heat altered stone and common amounts of charcoal flecks.
2617		2617	1.48	1.24	0.54	Oval/SR	
2618		2617	1.48	1.24	0.54		Dark brown and mottled grey brown charcoal rich soft sandy silt
2619		2617		0.25	0.22		Mid grey brown soft sandy silt with flint inclusions
2712		2712	0.86	0.72	0.46	Oval/SR	
2713		2712	0.86	0.72	0.34		Dark brown and mottled grey brown charcoal rich soft sandy silt
2714		2712	0.7	0.72	0.14		Mid grey brown soft sandy silt with flint inclusions

Table 35. FAS 056 SME2 Bronze Age pits, associated cut numbers and feature dimensions

Where there was more than one fill the upper fills contained heat-altered flint and charcoal rich sands, the lower, or only fills tended to have lesser evidence of burning

(Table 35). Pits 2522 and 2555 contained a small amount of worked flint and one sherd of Early to Middle Bronze Age pottery each. Pits 2591 and 2617 only contained worked flint. Worked flint was recovered from both fills of pit 2712, with a very large quantity of Late Neolithic to Middle Bronze Age pottery recovered from fill 2713. This included several decorated sherds, with Groove Ware and Beaker Ware well represented.



Plate 44. Pit 2712, looking north, 1x1m scale

Natural hollow 2630

Context Number	Group Number	Feature Number	Length	Width	Depth
2813	2630	2813	5.2m ex	1m ex	0.38 seen
2814	2630	2813	5.2m ex	1m ex	0.38m seen

Table 36. FAS 056 SME2 hollow 2630, associated cut numbers and feature dimensions

Slot 2813 was excavated into hollow 2630. This hollow, a large amorphous area in plan with irregular gentle concave sides and an irregular base, contained deposit 2814, a mid-grey brown, soft sandy silt with occasional small to medium sized angular and rounded flint and stone inclusions. A small quantity of Early to Middle Bronze Age pottery and flint was found in this deposit.

4.3.4.8 EX2

Introduction

In total seventeen pits, one possible cremation, two natural hollows and three gullies associated with the drove way relating to this phase of activity were found in EX2 (Figs. 14, 15, 17, 18 and 22). The tables and descriptions below show the variations in the features seen.

Bronze Age pits

Single fill pits

Eight pits contained a single fill (Table 37); these were oval or circular and none had intensely burnt fills. Pits 5053, 5067, 5380, 5382, 5417, 5419, 5480 and 5491 contained small amounts of worked flint. In addition, several pits contained pottery. Pits 5380, 5382, 5417, 5420 and 5491 contained small amounts of Early to Middle Bronze Age pottery sherds, including decorated pieces such as Beaker fragments from 5380 and 5417. Small Find 2429 was recovered from 5491.

Pit Number	Fill Number	Length (m)	Width (m)	Depth (m)	Shape	Fill description
5053	5054	1.55	0.75	0.26	Oval	mid orange brown, loose sandy silt with moderate amounts of small flint inclusions and occasional chalk flecks
5267	5268	1.09	0.37	0.21	Circular	brown silt with sub rounded flints and chalk inclusions
5380	5381	0.54	0.54	0.18	Oval	mid orange brown, loose sandy silt with moderate amounts of small flint inclusions and occasional chalk flecks
5382	5383	0.52	0.48	0.06	Circular	dark greyish-brown, soft silt with moderate amounts of charcoal flecks and occasional small flints
5417	5418	0.8	0.64	0.27	Oval	dark grey brown sandy silt, with moderate amounts of charcoal and chalk flecks throughout
5419	5420	1.51	0.48	0.25	Circular	mid-orange brown, soft silty sand with occasional amounts of large to medium sized flint inclusions
5480	5481	1.66	0.83	0.59	Oval	mid orange brown, loose sandy silt with moderate amounts of small flint inclusions and occasional chalk flecks
5491	5492	0.86	0.8	0.15	Oval	mid orange brown, loose sandy silt with moderate amounts of small flint inclusions and occasional chalk flecks

Table 37. FAS 056 EX2 single fill Bronze Age pits, associated cut numbers and feature dimensions

Multiple fill pits

Context Number	Feature Number	Length (m)	Width (m)	Depth (m)	Shape	Fill description
5384	5384	1.26	1.08	0.3	Sub-circular	
5385	5384	0.35	0.42	0.08		pale grey compacted silty clay slump with frequent chalk flecks, occasional charcoal flecks and small flint inclusions
5386	5384	1.26	1.08	0.24		was composed of a dark grey brown silt, with frequent charcoal flecks and occasional chalk flecks and small flint inclusions
5400	5400	0.8	0.75	0.25	Sub-circular	
5401	5400		0.75	0.1		mid brown sandy silt with occasional small flint inclusions, chalk flecks and charcoal flecks
5402	5400		0.75	0.15		mid-grey brown sandy silt with occasional chalk fleck
5482	5482	0.98	0.58	0.38	Sub-circular	
5483	5482	0.98	0.58	0.38		mid-orange brown, loose sandy silt with moderate amounts of small flint inclusions
5484	5482	0.98	0.58	0.38		light grey brown loose sandy silt with occasional small flint inclusions.

Table 38. FAS 056 EX2 multiple fill Bronze Age pits, associated cut numbers and feature dimensions

Three pits 5384, 5400 and 5482 had two fills (Table 38). Upper fill 5386 of pit 5384, lower fill 5483 of pit 5482, and both fills 5401 and 5402 of pit 5400 contained a moderate quantity of Early to Middle Bronze Age pottery, with decorated Beaker sherds recovered from 5386. Worked flint was also found within these fills, alongside fill 5484 of pit 5482.



Plate 45. Pit 5384, looking south-east, 1x1m scale

BA pit group 2 (5186)

Context Number	Feature Number	Length (m)	Width (m)	Depth (m)	Small Find Number	Shape	Fill description
5184	5184	0.6	0.5	0.15		Circular/sub-circular	
5185	5184	0.6	0.5	0.15	2112		dark blackish brown sandy silt with frequent flints inclusions
5195	5195	0.67	0.31	0.4		Circular/sub-circular	
5196	5195	0.67	0.31	0.4			a mid-orange brown, friable sandy silt with moderate amounts of flint inclusions
5208	5208	1.86	0.41	0.21		Circular/sub-circular	
5209	5208	1.86	0.41	0.21	2150		a mid-orange brown, friable sandy silt with moderate amounts of flint inclusions

Table 39. FAS 056 EX2 Bronze Age pit group 2 (5186), associated cut numbers and feature dimensions

Pit group 5186 (BA pit group 2) consisted of four features, one of which was cremation 5190 (see below) (Figs. 17 and 22). These features formed the corners of a rough rectangle 4m long by about 2.20m wide and orientated north-west to south-east, located just to the west of Bronze Age drove-way 5015. Fill 5185 of pit 5184

produced a large amount of Early to Middle Bronze Age pottery, alongside a smaller amount of worked flint. Some of the pottery sherds from this fill might have a Late Neolithic date, whilst a small amount might have a Late Bronze Age date. Fill 5196 of pit 5195 contained a small amount of Late Bronze Age pottery, alongside a small quantity of worked flint, but due to the proximity of this pit to the others in this group the pottery is likely to be earlier. Fill 5209 of pit 5208 contained a small amount worked flint only.



Plate 46. Pit group 5186 part excavated, looking south, 2x2m scale

Cremation burial 5190

Context Number	Group Number	Feature Number	Length (m)	Width (m)	Depth (m)
5191	5190	5191	0.5	0.4	0.2
5192	5190	5191	0.5	0.4	0.1
5201	5190	5191	1m ex	0.4	0.1

Table 40. FAS 056 EX2 cremation 5190, associated cut numbers and feature dimensions

A possible cremation burial, 5190, was associated with pit group 5186. The cremation pit, 5191, was oval in plan, aligned east to west. The fill was excavated in two 10cm spits, 5192 and below it 5201. This fill consisted of a dark greyish black, firm clayish silt with occasional amounts of large stones. A small quantity of calcined white bone that could be human was recovered from the fill and a large number of Late Bronze Age pottery sherds was recovered from both segments. The pottery dating appears to be inconsistent with the site dating but the spatial relationship between this and the pits seems incontrovertible, although this needs some further consideration.

Bronze Age hollows

Two hollow features with Bronze Age finds, distinct from the hollows of Burnt Mound complexes 2658 and 12576 were located in EX2. These were 5003 and 5413 (Fig. 18).

Bronze Age hollow, Group 5003

Context Number	Group Number	Feature Number	Length (m)	Width (m)	Depth (m)
5003		5003	13.6	1m excavated	0.28
5004		5003	8.5	1m excavated	0.26
5014		5003		1m excavated	0.48

Table 41. FAS 056 EX2 hollow 5003, associated cut numbers and feature dimensions

Hollow 5003 was oblong in plan, orientated north-east to south-west, with a shallow, uneven profile. It contained a single fill of mid-orange brown, very firm clay with small to medium rounded and angular flints and pebbles along with occasional charcoal flecks, which was excavated in two separate segments, 5004 and 5014 and contained Bronze Age finds. It was cut by drove-way 5015. Fill segment 5014 contained a small quantity of Late Bronze Age pottery sherds which are interpreted as intrusive and resulting from continued use of the area into the Late Bronze Age, although it is possible that the fill may have accumulated naturally over a considerable period of time.

Bronze Age hollow, Group 5413

Context Number	Group Number	Feature Number	Length (m)	Width (m)	Depth (m)	Small Number	Find
5005	5413	5005	9.25	9.25	0.16		
5006	5413	5005	9.25	9.25	0.16		
5007	5413	5005	-	-	-		

Context Number	Group Number	Feature Number	Length (m)	Width (m)	Depth (m)	Small Number	Find
5375	5413	5414	4.4	3.75	0.16	2174, 2175	
5414	5413	5414	4.4	3.75	0.16		
5415	5413	5415	5.0	6.25	0.12		
5416	5413	5415	5.0	6.25	0.12		
5462	5413	5005	6m	8m	0.04		
5463	5462	5414	3.5	3.0	0.04		
5464	5462	5415	4.0	5.5	0.04		

Table 42. FAS 056 EX2 hollow group 5413, associated cut numbers and feature dimensions

Group 5413 (PI. 47) comprised a second, smaller hollow located around 30m to the east of drove way 5015. It formed an irregular circle measuring 9.25m in diameter and 0.16m deep. Two opposing quadrants were excavated, the southern numbered 5414 and the northern 5415. The unexcavated quadrants were assigned the cut number 5005. Two fills were seen within the hollow. The lowest of these fills, 5462/5463/5464, was composed of an uneven layer of gravel and flint, poorly sorted with large and small flint rounded pebbles and angular large flints. This was generally around 0.04m deep. This was overlain with layer 5006/5375/5416, a 0.12m deep deposit of mid-greyish brown, soft silt with common amounts of small to large sized angular and rounded flints and pebbles with occasional charcoal flecks. Unstratified surface finds were assigned to context number 5007. This feature was initially thought to be another possible burnt mound complex or well but after investigation it was found to be a natural solution hollow.

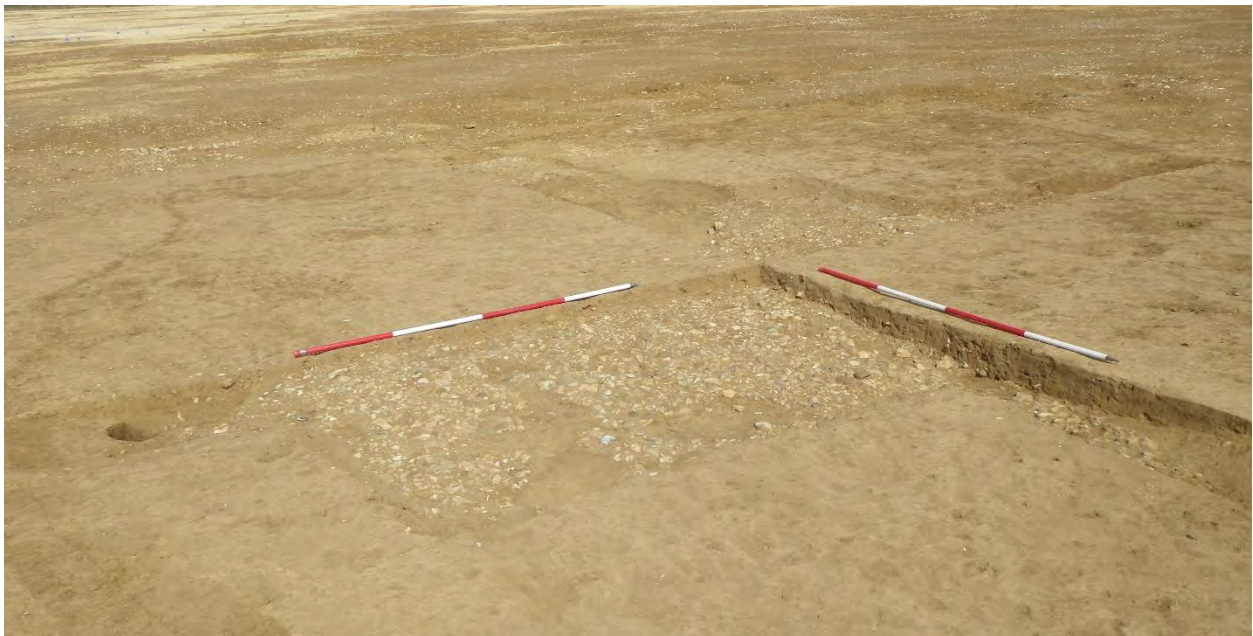


Plate 47. Hollow 5413 two quads removed, looking north, 2x2m scale

4.3.4.9 Phase 1 Extra

Introduction

Four pits and one posthole, in addition to the drove way ditch reported above were found in this phase, mostly located at the eastern area of the site (Fig. 22).

Pits

Pit Number	Fill Number	Length (m)	Width (m)	Depth (m)	Small Find Number	Fill description	Shape
11068	11068	2.30	1.30	0.27			Elongated oval
11068	11069	2.30	1.30	0.27		dark orange-brown sandy clay/silt with moderate amounts of small sized flint inclusions.	
11068	11070	2.30	1.30	0.27		orange-brown chalky/clay silt with occasional stone inclusions	
11120	11120	0.60	1.00	0.25			Elongated oval
11120	11121	0.60	1.00	0.25		dark brown-orange clay/sandy silt with organic patches throughout.	
11122	11122	0.82	1.00	0.28		mid-yellow-brown silty clay with a firm compaction and infrequent amounts of small stone inclusions.	
11122	11123	0.82	1.00	0.28			Elongated oval
11122	11124	0.82	0.64	0.26		dark grey silty clay with a relatively firm compaction and occasional flint inclusions	
11139	11139	0.74	0.80	0.26			Elongated oval
11139	11140	0.74	0.30	0.14		mid-brown-orange, firm silty sand with occasional amounts of small sub-rounded stone inclusions.	
11139	11141	0.74	0.24	0.20		mid-brown-grey, firm silty sand with occasional amounts of small/medium stone inclusions	
11139	11142	0.74	0.50	0.18	4017	mid-brown-grey, silty sand with a firm compaction	

Table 43. FAS 056 Phase 1 Extra Bronze Age pits, associated cut numbers and feature dimensions

Three of the pits 11120, 11122 and 11139 were grouped together at the eastern side of the site. Fill 11121 in pit 11120 contained a large assemblage of Late Neolithic to Middle Bronze Age pottery, alongside a smaller quantity of worked flint. Fills 11069, 11123, 11124 and 11142 in the other pits all contained small amounts of worked flint

and Late Neolithic to Middle Bronze Age pottery. In addition, fill 11124 contained some of animal bone.



Plate 48. Pit 11120 (pottery in section), looking north, 1x1m scale

Posthole 11099

A single circular posthole, 0.1m by 0.15m by 0.07m deep and contained brownish-orange clay/sandy silt with occasional stone inclusions from which a small quantity of Bronze Age pottery was recovered. It was located close to three undated postholes, 11095, 11097 and 11101.

4.3.4.10 Phase 2 works

Introduction

Twenty-five pits, twenty-one of which were arranged in two distinct clusters, three possible posthole structures, two larger ditches, a small cremation cemetery containing three poorly preserved urned cremations (one of which was discovered during the evaluation) and six possible un-urned cremations in addition to the continuation of the drove way and the second burnt mound complex were excavated in Phase 2 (Figs. 16, 17, 19 and 22).

Pits

BA pit Group 3

Feature Number	Context Number	Length (m)	Width (m)	Depth (m)	Small Find Number	Shape
12006	12006	0.74	0.82	0.33		Sub-circular
	12007	0.74	0.82	0.33		
12008	12008	0.63	0.74	0.2		Sub-circular
	12009	0.63	0.74	0.2	5113	
12010	12010	0.61	0.56	0.26		Sub-circular
	12011	0.61	0.56	0.26		
12012	12012	0.48	0.36	0.18		Oval
	12013	0.48	0.36	0.18	5069	
12014	12014	0.52	0.44	0.44		Sub-circular
	12015	0.52	0.44	0.18		
12016	12016	0.62	0.48	0.13		Oval
	12017	0.62	0.48	0.13		
12280	12280	0.6	0.6	0.2		Circular
	12281	0.6	0.6	0.2		
12282	12282	0.18	0.4	0.06		Oval
	12283	0.18	0.4	0.04		
12284	12284	0.34m	0.34m	0.10m		Circular
	12285	0.34m	0.34m	0.10m		
12286	12286	0.84m	0.85m	0.28m		Circular
	12287	0.84m	0.85m	0.28m	5090, 5092	
12288	12288	0.59m	0.49m	0.19m		Oval
	12289	0.59m	0.49m	0.19m	5134	
12290	12290	0.59m	0.60m	0.14m		Circular
	12291	0.59m	0.60m	0.14m		
12292	12292	0.30m	0.30m	0.12m		Circular
	12293	0.3	0.3	0.12		
12294	12294	1m	1m	0.42m		Circular
	12295	1m	1m	0.42m		
12296	12296	1m	0.8m	0.2m		Oval
	12297	1m	0.8m	0.2m		

Table 44. FAS 056 Bronze Age pit group 3, associated cut numbers and feature dimensions

A group of fifteen pits, consisting of 12006, 12008 (Fig.34, Section 3000), 12010 (Fig 34. Section 3000), 12012, 12014, 12016, 12280, 12282, 12284, 12286, 12290, 12292, 12294, 12296 and 12298, were positioned in a group close to the western edge of Roman enclosure ditch 12452 (Figs. 19 and 22). All had a similar single fill, a pale to mid-yellow brown, soft sandy silt with occasional flint inclusions, although that in pits 12286 and 12296 was a darker grey and contained more flecks of charcoal. These pits also contained a small quantity of Bronze Age pottery and flints, with pits 12290 and 12292 containing only flint. Although containing no finds, pits 12016, 12282 and 12292 were grouped based on similarity of location, fill and profile.



Plate 49. BA pit group 3, pits 12006, 12008, 12010, 12012, 12014, and 12016, looking southwest, 1x1m scale

BA pit Group 4

Pit Number	Fill Number	Length (m)	Width (m)	Depth (m)	Small Find Number	Shape
12379	12379	0.60m	0.50m	0.14m	5093	Oval
12381	12381	0.39m	0.56m	0.26m		Oval
12383	12383	0.31m	0.24m	0.10m		Oval
12385	12385	0.55m	0.40m	0.10m		Oval
12400	12401	1.94m	1.40m	0.24m		Oval

Table 45. FAS 056 Bronze Age pit group 4, associated cut numbers and feature dimensions

A second, smaller cluster of five pits was located close to the northwest edge of Bronze Age ditch 12577 (Figs. 16 and 22). The fill of pits 12381, 12285 and 12400 were a mid-yellow brown, clayey silt, containing occasional flecks of charcoal. Pits 12379 and 12383 had darker grey/brown sandy silt fills, with larger amounts of charcoal. These fills all contained small amounts of Bronze Age pottery and flint. Pit 12379 also contained SF 5093, a flint scraper.



Plate 50. BA pit group 4, pits 12379, 12381, 12383 and 12385, looking west, 1x1m scale

Miscellaneous pits

Pit Number	Fill Number	Length (m)	Width (m)	Depth (m)	Shape	Fill description
12051	12051	0.88	0.90	0.23	Circular	
12051	12052	0.88m	0.90m	0.23m		mid to dark orange-brown silty clay
12051	12053		0.58	0.12		mid-orange brown silty clay
12125	12125	0.82m	0.52m	0.06m	Oval	
12125	12126	0.82m	0.52m	0.06m		mid-orange brown, silty clay with occasional flecks of charcoal,
12184	12184	1.10	0.9	0.19	Oval	
12184	12185	1.1	0.9	0.19		composed of a darker, brown-grey silty sand with charcoal flecks
12225	12225	1.16	0.8	0.14	Oval	
12225	12226	1.16	0.8	0.14		mid-orange brown, silty clay with occasional flecks of charcoal,

Table 46. FAS 056 Phase 2 miscellaneous Bronze Age pits, associated cut numbers and feature dimensions

Four other pits or tree throws scattered across Phase 2 also produced Bronze Age finds. All had single charcoal flecked fills except 12051 which had two cleaner fills. Pit 12125 contained only struck flint but the remainder had small amounts of Bronze age pottery and flint.

Structures

Three possible posthole structures were identified in this stage of works (Fig 22). Structure 12208 was sub-square and may have been a pen or small building and Structure 12338, the remnants of a round house and associated features. Structure 12458 was more dubious, perhaps an animal pen or pit group.

Structure 12208

Posthole Number	Fill Number	Length	Width	Depth	Shape
12196	12197	0.5	0.26	0.18	Oval
12198	12199	0.6	0.62	0.22	Circular
12200	12201	0.6	0.36	0.32	Oval
12202	12203	0.59	0.38	0.12	Oval
12204	12205	0.42	0.42	0.15	Circular
12206	12207	0.5	0.5	0.3	Circular

Table 47. FAS 056 Phase 2 Bronze Age structure 12208, associated cut numbers and feature dimensions

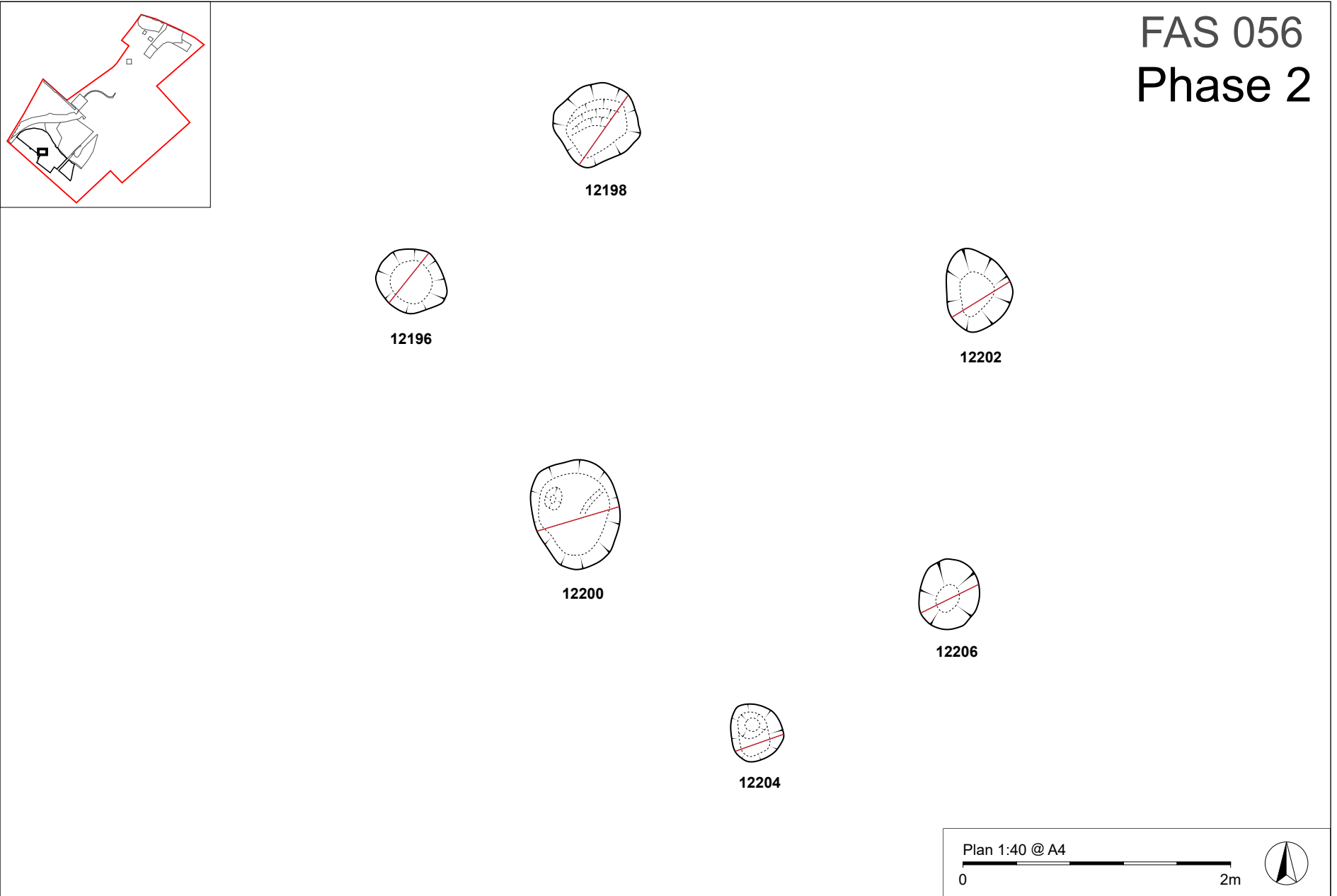
Structure 12208 (Fig. 26) was composed of six postholes, arranged into two lines of three, which together formed a rough rectangle 4.50m long by 3.50m wide aligned north-west to south-east. The postholes were fairly uniform in size and shape. They were sub-circular or oval in plan, with a diameter of between 0.42m and 0.60m and between 0.12m and 0.32m deep. The fills of postholes 12198, 12202, 12204 and 12206 were composed of a dark grey brown, soft sandy silt with frequent amounts charcoal flecks and moderate small to mid-sized flint inclusions, and that of postholes 12196 and 12200 dark orange brown, soft silty sand with frequent small flint inclusions.

Postholes 12196, 12198 and 12206 each contained several sherds of decorated Early to Middle Bronze Age pottery, including Beaker and Grooved ware, alongside a small number of worked flint flakes. Postholes 12202 and 12204 had no finds, whilst 12200 contained a small sherd of Roman pottery which is likely to be intrusive.



Plate 51. Structure 12208, looking south-east, 1x1m and 1x2m scale

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Figure 26. FAS 056 Bronze Age structure 12208

Structure 12338

Feature Number	Fill Number	Length (m)	Width (m)	Depth (m)	Shape
12339	12340	0.28m	0.25m	0.08m	Sub-circular
12341	12342	0.25m	0.25m	0.27m	Circular
12343	12344	0.31m	0.25m	0.22m	Oval
12345	12346	0.17m	0.20m	0.13m	Sub-circular
12347	12348	0.3m	0.33	0.16	Sub-circular
12349	12350	0.44m	0.29m	0.14m	Oval
12351	12352	0.24m	0.24m	0.1m	Circular
12353	12354	0.33m	0.3m	0.11m	Sub-circular
12355	12356	0.44m	0.36m	0.16m	Sub-circular
12357	12358	0.25m	0.16m	0.13m	Oval
12359	12360	0.42m	0.4m	0.24m	Circular
12361	12362	0.5m	0.32m	0.09m	Sub-circular
12363	12364	0.55m	0.5m	0.22m	Sub-circular
12365	12366	1m	>0.4m	0.11m	Oval
12367	12368	1m	>0.2m	0.13m	Oval
12371	12372	0.22m	0.18m	0.06m	Sub-circular

Table 48. FAS 056 Phase 2 Bronze Age structure 12338, associated cut numbers and feature dimensions

Structure 12338 comprised several elements (Fig. 27). A group of seven postholes, 12339 (Fig. 34. Section 3137), 12341, 12343, 12345, 12347, 12349 and 12351, formed a rough circle, measuring 5.50m long by 5.00m wide. This was surrounded on its southern and south-eastern sides by a small group of seven postholes or pits, 12353, 12355, 12357, 12359, 12361, 12363 and 12371 (Fig. 34. Section 3153). A small linear gully composed of 12365 and 12367 (Fig. 34. Section 3151), ran for a total length of 3.07m to the south-west of this group, on a north-west to south-east alignment. The structure group as a whole measured 9.50m long by 8.40m wide.

The postholes within the main circular group were between 0.08m – 0.27m deep with consistently mid-grey brown, silty clay fills with occasional amounts of small flint inclusions and occasional amounts of charcoal flecks. All except for posthole 12339 contained small amounts of worked flint.

The other postholes and pits clustered around the edge of this circular arrangement were mostly shallow, measuring around 0.10m – 0.20m deep with uniform fills of mid-grey brown, silty clay with occasional small flint inclusions and charcoal flecks, similar to the postholes of the circular structure. Only posthole 12363 was slightly different having a mid-orange brown, soft sandy silt fill with occasional amounts of small flint inclusions and charcoal flecks. Postholes 12353 and 12361 each contained a small,

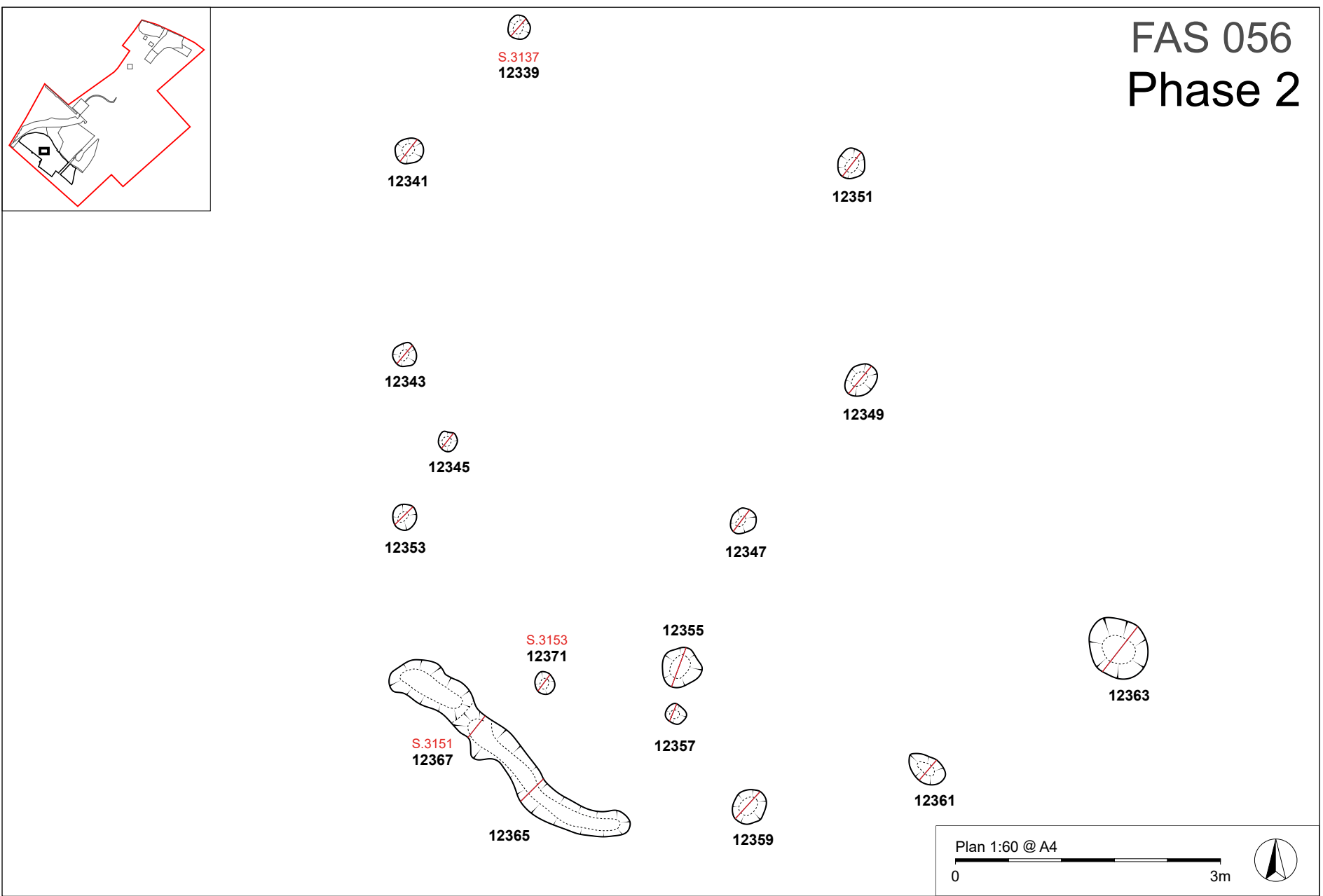
abraded fragment of Early to Middle Bronze Age pottery, with a small amount of struck flint also present in 12353. In addition to heat-altered stone and worked flint, posthole 12363 also contained a small number of decorated Beaker ware fragments. Postholes 12355 and 12359 only contained a small amount of worked flint, with 12359 also containing a small amount of fire-cracked flint. No finds were recovered from postholes 12357 and 12371.

Also associated with structure 12338 was a short, north-west to south-east aligned, narrow linear feature composed of segment 12365 at the south-east end and 12367 at the north-west end. This gully had an irregular, meandering shape and was filled with mid-greyish brown, silty clay with moderate amounts of gravel and charcoal inclusions. Segment 12367 produced a small number of Early to Middle Bronze Age pottery sherds. Perhaps this represented the remnants of a hedge line associated with the structure, animal burrowing or multiple disturbed features.



Plate 52. Structure 12338, looking east, 1x1m and 1x2m scale

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Figure 27. FAS 056 Structure 12338

Structure 12458

Feature Number	Fill Number	Length (m)	Width (m)	Depth (m)	Shape	Fill description
12002	12003	0.4m	0.16m	0.18m	Oval	dark brownish-grey, clayey silt containing moderate amounts of small stone inclusions
12466	12467	0.40m	0.22m	0.18m	Oval	dark brownish-grey, clayey silt containing moderate amounts of small stone inclusions
12468	12469	0.50m	0.40m	0.10m	Oval	dark brownish-grey, clayey silt containing moderate amounts of small stone inclusions
12470	12471	0.28m	0.10m	0.08m	Oval	mid-orangey brown sandy clay, containing occasional amounts of flint inclusions
12472	12473	0.50m	0.30m	0.12m	Oval	mid-orangey brown sandy clay, containing occasional amounts of flint inclusions
12474	12475	0.20m	0.16m	0.10m	Sub-circular	mid-orangey brown sandy clay, containing occasional amounts of flint inclusions
12476	12477	0.30m	0.16m	0.20m	Oval	mid-orangey brown sandy clay, containing occasional amounts of flint inclusions
12478	12479	0.32m	0.26m	0.22m	Sub-circular	mid-orangey brown sandy clay, containing occasional amounts of flint inclusions
12480	12481	0.30m	0.16m	0.31m	Oval	dark brownish-grey, clayey silt containing moderate amounts of small stone inclusions
12482	12483	0.40m	0.30m	0.14m	Oval	dark brownish-grey, clayey silt containing moderate amounts of small stone inclusions
12484	12485	0.44m	0.22m	0.24m	Oval	dark brownish-grey, clayey silt containing moderate amounts of small stone inclusions
12488	12489	0.30m	0.19m	0.06m	Oval	dark brownish-grey, clayey silt containing moderate amounts of small stone inclusions

Table 49. FAS 056 Phase 2 Bronze Age structure 12458, associated cut numbers and feature dimensions

Possible structure 12458 (Fig. 28) was composed of twelve postholes, 12002, 12466, 12468, 12470, 12472, 12474, 12476, 12478, 12480, 12482, 12484 and 12488 which formed no clear pattern over an area 6.60m long by 5.10m wide. All twelve postholes had a similar shape and profile and most were between 0.30m – 0.40m in diameter. With the exception of 12480 at 0.31m deep, the remaining eleven were either around 0.1m deep, or around 0.2m deep. Postholes 12002, 12466, 12470, 12472, 12476, 12478, 12480 and 12484 all contained small amounts of Early – Middle Bronze Age pottery, with 12002, 12472, 12476, and 12478 also containing small amounts of struck flint. Postholes 12482 and 12488 only produced worked flint, in small amounts. Postholes 12468, and 12474 contained no finds.



Plate 53. Structure 12458, looking east, 1x1m and 1x2m scale

FAS 056 Phase 2

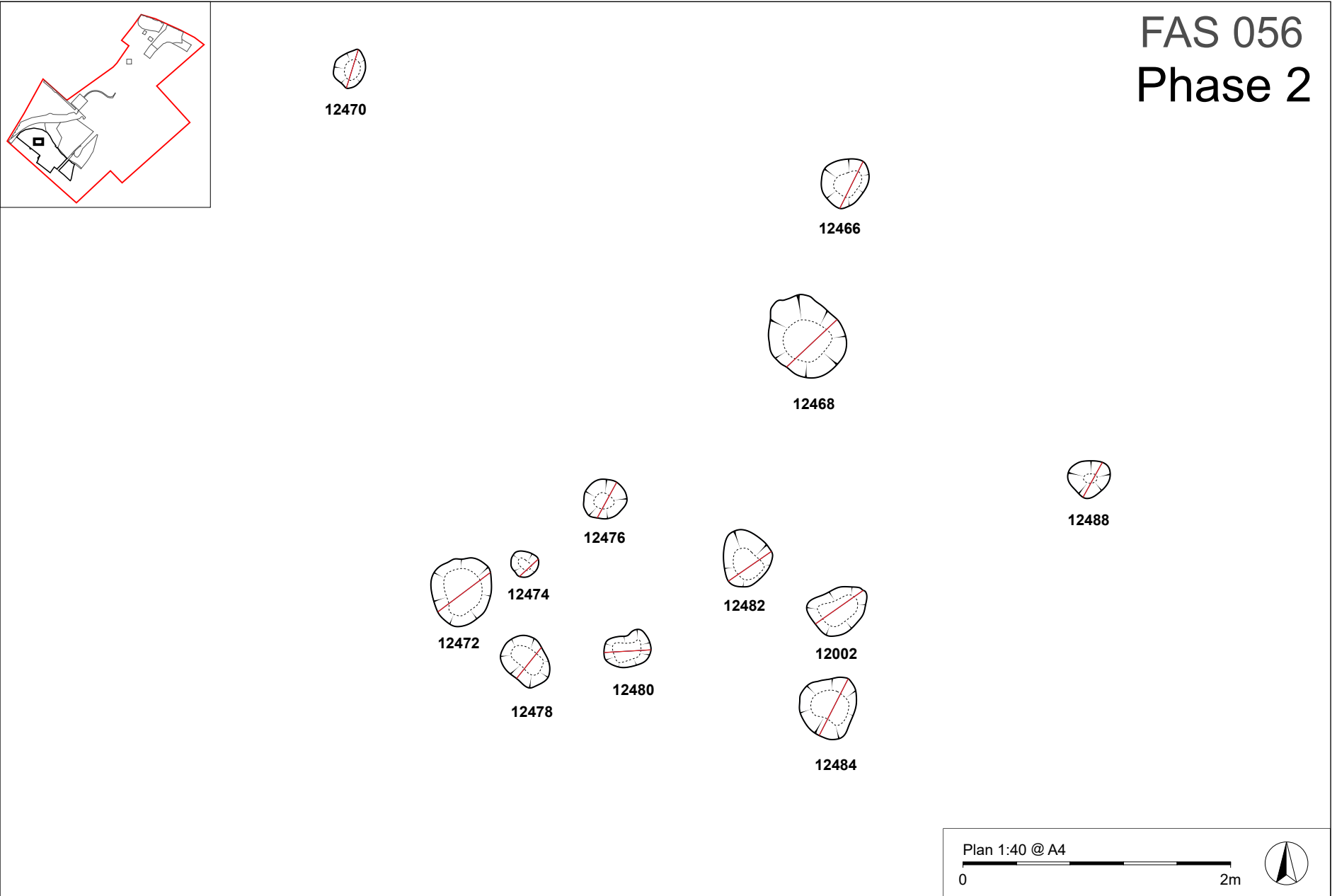


Figure 28. FAS 056 Structure 12458

Ditches

Three short lengths of ditches were found in the Phase 2 works. Ditches 12577 and 12453 were placed at right angles to each other and may have formed the corner of an enclosure but this couldn't be confirmed (Figs. 16, 17, 19 and 22) 12832 lay to the west, close to Iron Age ditches (Figs. 13 and 22).

Ditch group 12453

Segment Number	Fill Number	Length (m)	Width (m)	Depth (m)
12302		0.8m ex	0.17m ex	0.02m ex
12302	12303	0.8	0.17	0.02
12304		1m ex	0.27	0.08
12304	12305	1m ex	0.27	0.08
12306			0.2m	0.03m
12306	12307		0.2m	0.03m
12308			20m	0.12m
12308	12309		20m	0.12m
12312		1m ex	0.27m	0.12m
12312	12313	1m ex	0.27m	0.12m
12327		0.80m	0.35m	0.14m
12327	12328	0.80m	0.35m	0.14m
12329		1.1m	0.32m	0.1m
12329	12330	1.1m ex	0.32m	0.1m
12334		1m	0.18m	0.11m
12334	12335	1m	0.18m	0.11m
12336		1.1m	0.4m	0.12m
12336	12337	1.1m	0.4m	0.12m

Table 50. FAS 056 Phase 2 Bronze Age ditch group 12453, associated cut numbers and feature dimensions

Ditch 12453 was a narrow and shallow running for c.77m on a north-west to south-east alignment. The ditch averaged 0.10m deep, and in places it became so shallow that it only appeared as a slight staining on the ground. The north-west terminus of the feature was opposed to the north-east terminus of ditch 12577, which ran north-east to south-west at a right angle to 12453. The profile of the ditch was generally either V-shaped or a shallow concave cut, varying across the length of the feature and it contained a fill consisting of mid-orange brown loose sandy silt with occasional amounts of small flint inclusions. Early to Middle Bronze Age pottery sherds were recovered from segments 12334 and 12336.

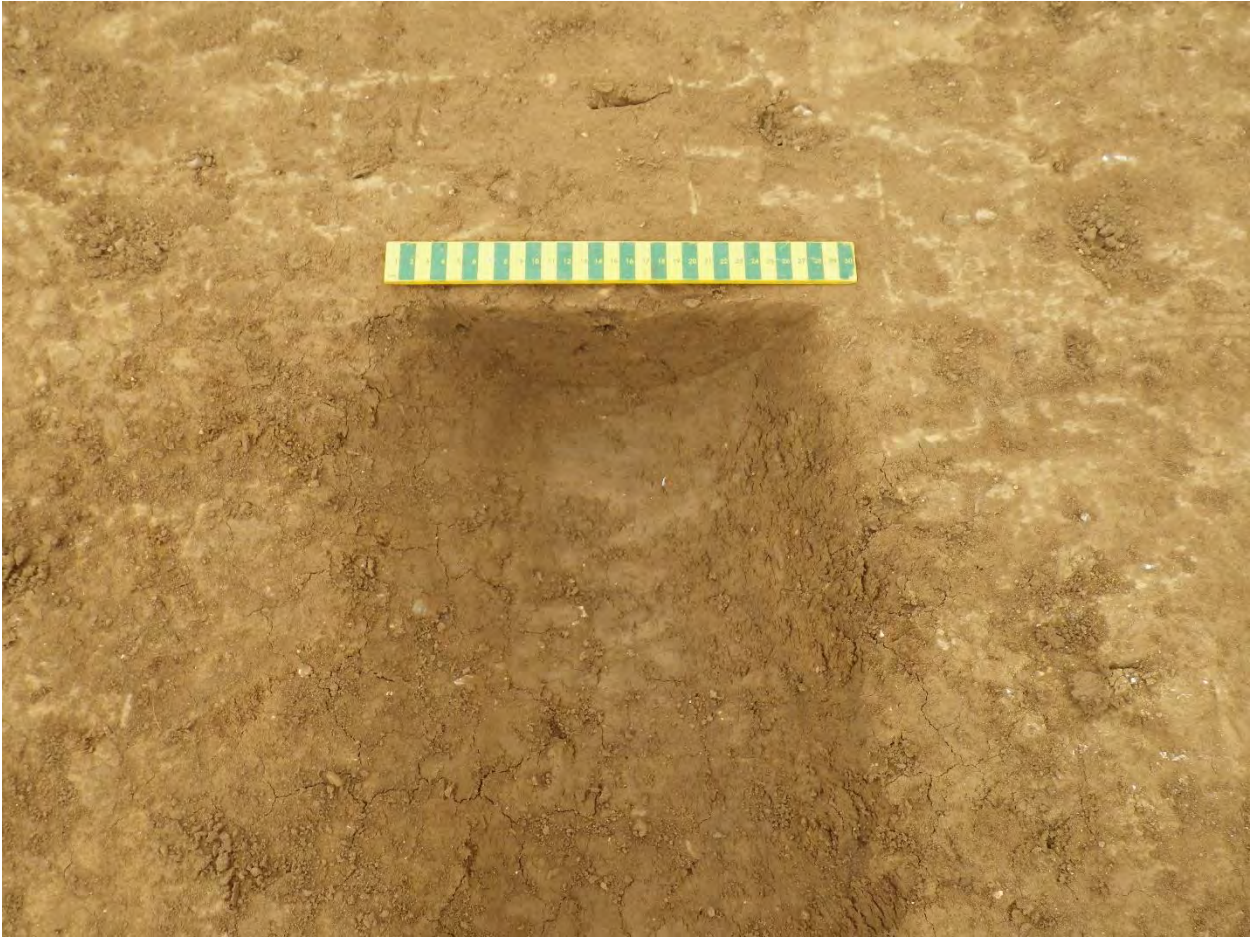


Plate 54. Ditch group 12453, ditch 12312, looking north-west, 1x0.3m scale

Ditch group 12577

Ditch 12577 was a north-east to south-west aligned linear feature, running for a total length of c.60m. Its north-east terminus was opposed to the north-west terminus of ditch 12453, and Bronze Age pit group 2 (see above) lay just to the north of it. It consisted of an original cut, consisting of excavated segments 12387, 12373, 12392, 12402, 12416 and 12438, and a recut consisting of excavated segments 12409, 12410, 12412, 12413, 12420 and 12448. It was cut by post-medieval quarry pit, 12422. One segment had been excavated as 0249 during the evaluation phase.

Original ditch cut.

Segment Number	Fill Number	Length (m)	Width (m)	Depth (m)	Small Find Number
12438			1.2m	0.96m	
12438	12439	1.4m	0.4m	0.2m	
12438	12442		0.22m	0.12m	
12438	12443		0.5m	0.2m	
12438	12444		0.6m	0.1m	
12438	12445		0.3m	0.05m	

Segment Number	Fill Number	Length (m)	Width (m)	Depth (m)	Small Find Number
12438	12446		0.4m	0.2m	
12438	12447		1m	0.2m	
12416		1.10m	1m	0.80m	
12416	12417	1m	0.20m	0.08m	
12416	12418	1m	0.40m	0.10m	
12416	12419	1.10m	1m	0.14m	
12402			1.45m	1.1m	
12402	12403		0.4m	0.2m	
12402	12405		0.69m	0.1m	
12402	12406		0.8m	0.4m	
12402	12407		0.8m	0.4m	
12392			1.2m	0.86m	
12392	12393		0.8m	0.2m	
12392	12394		0.6m	0.4m	
12392	12395		1.2m	0.5m	
12387		2m	1.28m	0.94m	
12387	12388	2m	0.16m	0.20m	
12387	12389	2m	0.4m	0.84m	
12387	12390	0.5m	0.18m	0.26m	5094
12387	12396	0.3m min	0.20m min	0.12m min	
12387	12397	2m	0.30m	0.12m	
12373			1.22m	0.85m	
12373	12374		0.4m	0.4m	
12373	12375		0.6m	0.2m	
12373	12376		1m	0.2m	
12373	12377		0.6m	0.2m	

Table 51. FAS 056 Phase 2 Bronze Age ditch group 12577 (original cut), associated cut numbers and feature dimensions

The original cut of ditch 12577 had very steep convex sides down to a flattish, and in some case quite narrow base. The terminals were broad and rounded. Each excavated segment contained multiple fills, not all of which were present within each segment and which ranged from pale yellowy sands, darker grey sands, and with chalk, charcoal and flint inclusions. Fills in the terminal ends were notable because they were deposited against the sides of the cut rather than mainly horizontally and further investigation may indicate a specific activity or use associated with the ends of the ditch. Few of the fills contained finds with only occasional sherds of Early to Middle Bronze Age pottery, worked flints and fragments of animal bone, however an arrowhead, SF 5094 was recovered from the eastern terminal end and fragments of fired clay from the western. These finds may show placed deposits in the terminals.

Ditch re-cut

Feature Segment Number	Fill Number	Length (m)	Width (m)	Depth (m)
12409			0.9	0.7
12409	12391		0.9	0.7
12410			0.8	0.4
12410	12411		0.8	0.4
12412			0.8	0.5

Feature Segment Number	Fill Number	Length (m)	Width (m)	Depth (m)
12412	12408		0.7	0.5
12413			1	0.3
12413	12378		1.01	0.3
12420		1	1	0.46
12420	12421	1	1	0.46
12448			1	0.44
12448	12449		1	0.44

Table 52. FAS 056 Phase 2 Bronze Age ditch group 12577 (re-cut), associated cut numbers and feature dimensions

Ditch 12577 was recut along the same alignment and extent. This consisted of segments 12409, 12413, 12410, 12412, 12420 and 12448. The ditch maintained roughly the same profile along its length, having moderate to steeply sloping convex sides down to a concave base and, in contrast to the earlier ditch, it contained a single fill, composed of a grey brown, friable sandy silt containing moderate amounts of small to large sized flint pebbles, chalk fragments and charcoal flecks. Within segment 12409 (12391), it contained a large amount of Early to Middle Bronze Age pottery, including Grooved ware, alongside small amounts of worked flint and animal bone; otherwise only small numbers of finds were recovered from it.



Plate 55. Ditch group 12577, ditch terminus 12387 (showing re-cut 12409), looking west, 1x1m scale

Ditch group 12832

Context Number	Feature Number	Length (m)	Width (m)	Depth (m)
12459	12459		1.07	0.68
12460	12459		0.4	0.1
12461	12459		0.4	0.15
12462	12459		0.8	0.4
12463	12459		1	0.5
12464	12464		1	0.42
12465	12464		1	0.42
12509	12509		1.05	0.82
12510	12509			0.3
12511	12509			0.42
12512	12512		0.65	0.33
12513	12512			0.33
12832	12832			

Table 53. FAS 056 Phase 2 Bronze Age ditch group 12832, associated cut numbers and feature dimensions

Ditch 12832 was 26.10m long, orientated north-west to south-east, located just to the north-east of Bronze Age burnt mound complex 2 (12576). It had rounded terminals at either end. It appeared to have two phases, with a later recut identified in two of the three sections excavated through it. The NW ditch terminus and the central excavated segments revealed that the original cut had a distinctive profile with steep, convex sides down to a flat base. This ditch cut through pit 12507 which is likely a natural feature. Two fills were noticeable in the earlier cut, a grey-brown of yellow-brown clay with abundant medium to large sized flint pebble inclusions and chalk flecks over a paler more sterile deposit. Early to Middle Bronze Age pottery sherds and worked flint were recovered from the upper fill.

The recut manifested itself clearly in the central excavated segment through the ditch group, and the earlier ditch was not visible at the south-east terminus, so the ditch may have been shorter originally. It followed the same alignment as the original cut, but differed markedly in profile with moderately sloping convex sides that were not as steep or as vertical as the original cut, and a concave base, differing from the flat base of the earlier ditch. It contained a single silty fill, which differed in composition along its length with fewer flint and stone inclusions to the south-east. Worked flint was recovered from all three segments, with two sherds of Early to Middle Bronze Age pottery, including a possible fragment of Beaker ware, recovered from 12465.



Plate 56. Ditch group 12832, ditch terminus 12459, looking north-east, 1x1m scale

Cremation burial group

Cut Number	Fill Number	Length (m)	Width (m)	Depth (m)	Human bone?	Urned?
12252		0.34	0.25	0.24		
12252	12255	0.34	0.25	0.24		
12253	12253	0.3	0.3	0.07	N	
12253	12254	0.3	0.3	0.07		
12256		0.22	0.2	0.04	N	
12256	12258	0.22	0.2	0.04		
12257		0.25	0.28	0.05		Y?
12257	12270	0.25	0.28	0.05		
12259		0.22	0.22	0.15	N	
12259	12260	0.22	0.22	0.05		
12259	12261	0.22	0.22	0.05		
12259	12262	0.22	0.22	0.05		
12263		0.3	0.3	0.03	N	
12263	12264	0.3	0.3	0.03		
12263	12269	0.3	0.3	0.03		
12271		0.3	0.2	0.08	N	
12271	12272	0.3	0.2	0.08		
12271	12273	0.3	0.2	0.08		
12300		0.3	0.3	0.2		Y?
12300	12301	0.3	0.3	0.2		
70219		0.26	0.22	0.12		Y
70219	70220	0.2	0.2	0.11		
70219	70221	0.2	0.2	0.11		

Table 54. FAS 056 Phase 2 Bronze Age cremation group, associated cut numbers and feature dimensions

A small cluster of nine pits, three of which contained the confirmed remains of cremation burials, was located to the south-east of Bronze Age ditch 12453 (Figs. 19 and 22). One of these pits, 0219 (now 70219), was excavated during the evaluation phase, whilst pits 12252, 12253, 12256, 12257, 12259, 12300, 12263 and 12271 were investigated during the excavation. The other pits contained less certain cremations. All nine pits were of a similar size and depth, and all were circular in plan. All of the features in this group were heavily plough truncated, and where possible cremation urns were visible, only 1cm – 2cm of the vessel remained.

Pit 0219 (evaluation) held a cremation urn, 0220, which contained within it a cremation burial, 0221. Pits 12257 and 12300 each contained dark silty material with what appeared to be fragments of burnt bone, and a few small sherds and chips of pottery which may represent the vestiges of cremation urns. Both of these were block lifted for excavation and analysis.

Pits 12253, 12256, 12259, 12263 and 12271 each contained a pale yellow-brown silty sand fill, mottled with patches of dark grey-brown/black silt. None of these features contained any finds or cremated bone.



Plate 57. Cremation 12257 before block lifting, looking south-east, 1x0.3m scale



Plate 58. Cremation 12300 before block lifting, looking north-west, 1x0.3m scale

4.3.5 Late Bronze Age to Early Iron Age

4.3.5.1 Introduction

Eleven pits or tree throw can be securely dated to this phase of activity. A small pit group was identified in SME 2, otherwise the features were all isolated. Full feature and fill descriptions are in Appendix 2b.

IA pit group 1

A small group of six pits (Figs. 14 and 29) was seen at the north-east edge of SME2, four of which were intercutting. Cut numbers include 2746, 2748, 2765, 2767, 2793 and 2795. All pits were seen cutting natural solution hollow 2630 whilst pit 2765 was seen cutting pit 2767 and pit 2793 was seen cutting pit 2795. The pits were oval in plan and varied in size from 0.9m to 1.48m in length, 0.7m to 1m in width and 0.18m to 0.37m in depth. All had a single fill of mid to dark grey brown soft or firm sandy silt with moderate to frequent charcoal flecks and occasional sub angular small flint inclusions. Pottery, struck flint and heat altered flint was recovered from all pit fills. The pits may suggest a small focus of activity in this area for this phase most likely to relate to cooking or other fire-dependent activity due to the amounts of heat-altered flint and charcoal present in the fills.



Plate 59. Pits 2765 and 2767, looking east, 1x1m scale

There were two features, pit/posthole 5223 and pit 5390 in EX2. 5223 was cut by middle Iron Age pit 5225 and contained a small amount of Late Bronze Age pottery. Pit 5390 was located at the north edge of the site and measured 1.5m in diameter and 0.66m deep. It had three fills, the middle of which produced a small quantity of Late Bronze Age to Middle Iron Age pottery.



Plate 60. Pit 5390, looking east, 1x1m scale

A single discrete feature, pit 2800, was located at the south of SME2. It measured 2.3m by 1.3m by 0.56m deep and contained a single fill of a mid-yellow brown soft sandy silt with occasional charcoal flecks with a small amount of pottery and struck flint. Although large, this may be remnants of a tree bowl rather than a pit (Fig. 17).

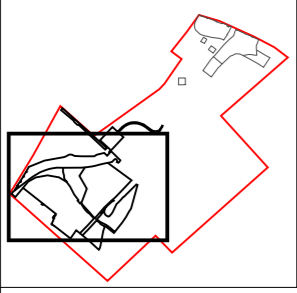
4.3.6 Middle Iron Age

4.3.6.1 Introduction

Middle to late Iron Age features were found in low to medium densities dispersed across FAS 056 (Fig. 29). The table below summarises the feature types and counts present, with relating group and cut numbers for this phase of activity. Six environmental samples were assessed from the main feature groups in this phase. The results showed poor survival of material with very rare charred cereal grains. Full feature and fill descriptions are in Appendix 2b.

Area	Group Numbers	Cut Numbers	Feature type and count ()	Notes
Evaluation	-	0265, 0272, 0509, 0511	2 ditches (Phase 1 extra) 2 pits (Phase 2)	Evaluation slots in Phase 1 Extra and Phase 2 only
SME1	2090	2054, 2056, 2058, 2073, 2075, 2077, 2079, 2081, 2086, 2088, 2091, 2093, 2095, 2097	7 pits 1 L shape enclosure (also seen in phase 1 extra)	2 pits contained small finds
SME2	2634	2589, 2594, 2596, 2598, 2605, 2607, 2609, 2615, 2631, 2636, 2640, 2644, 2655, 2807, 2961, 2962	1 partial enclosure	Part of sub-D shape enclosure also seen in Phase 2
EX2	5324, 5355	(Structure 1, 5325, 5327, 5329, 5331) (Structure 2, 5333, 5335, 5345, 5353) (Postholes, 5365, 5411) (Pits, 5043, 5082, 5225, 5269, 5275, 5280, 5282, 5285, 5289, 5294, 5312, 5322, 5341, 5343, 5363, 5373, 5387, 5394, 5407, 5421, 5497, 5500)	2 structures 2 postholes 22 pits	2 posthole structures, one 4-post, one 5-post
Phase1 Extra	11148, 11149	11030, 11071, 11046. (Enclosure 11148. 11020, 11022, 11024, 11027, 11060, 11063, 11066, 11073, 11080, 11087, 11113) (Enclosure 11149. 11040, 11048, 11051, 11075, 11083, 11107)	1 complete linear 11149, 1 partial enclosure 11148. 1 end of L shape enclosure 11046 (seen in SME1) 2 pits	Complete large linear feature 11149. Meandering ditch/ enclosure 11148 also seen in Phase 2.
Phase 2	12830, 12831, IA pit group 2	(Pits. 12018, 12031, 12033, 12035, 12041, 12058, 12068, 12070, 12072, 12074, 12078, 12082, 12177, 12182, 12188, 12242, 12246, 12249, 12265, 12298, 12414, 12456, 12557, 12571, 12574) (Enclosure. 12219, 12221, 12229, 12233, 12239) (Enclosure. 12216, 12223, 12236)	25 pits 1 partial enclosure (also seen in SME2) 1 ditch system (also seen in Phase 1 Extra)	Dispersed pits with 1 pit group and 3 intercutting sequences. Two ditch groups also present.

Table 55. FAS 056 middle Iron Age features, associated cut numbers and group numbers



FAS 056



162

Plan 1:2000 @ A3

0 100m

Iron Age

Not Iron Age

Natural

Figure 29. FAS 056 Iron Age phase plan

4.3.6.2 SME1

This area contained seven pits and a single small L-shaped ditch (group number 2090). The pits were all located at the northern end of the area and 2090 was seen in the central area of SME1 (Figs. 14, 15 and 29).

Pits

Two discrete and five intercutting pits were seen. The two discrete pits (2054 and 2056) were circular or oval in plan 1.54m to 1.24m in diameter and had depths of 0.28m and 0.69m. They had straight to concave moderate to steep sides with concave bases. They both contained a single fill of a dark grey brown clayey silt or silt with occasional to moderate charcoal flecks and occasional small flint inclusions. Both pits contained finds of pottery, animal bone and struck flint. South-east of these pit 2075 cut pit 2073 and pits 2077 and 2081 cut pit 2079 (Fig. 35. Section 429).

These pits were less regular in shape and at least one of the features is likely to be a utilised tree throw rather than a pit. Most fills within the pits were a dark brown or dark brown grey charcoal rich clayey silt or silt with the exception of pit 2073, which contained a paler yellow brown sandy silt. Four pits contained a single fill and pit 2081 contained two fills, all fills contained pottery and animal bone.

Pit 2075 contained two small finds, SF2030 a possible antler counter and SF2496 a stone weight. Pit 2079 contained a single small find, SF.2033, a small iron sickle blade and pit 2081 (fill 2083) contained SF 2034, a small copper alloy off cut. These small finds made these pits stand out amongst the majority of the Iron Age features in FAS 056, which contained solely domestic waste rather than these higher status tools and objects.



Plate 61. Pits 2073 and 2075, looking south-west, 1x1m scale

Ditch group 2090

A single small possibly truncated enclosure was also seen in SME1 and the Phase 1 extra works (Figs. 14 and 29). Six slots were excavated into this ditch which contained a possible entrance between terminal ends 2058 and 2091. It formed an L-shape in plan between 0.42m and 0.8m wide and was shallow and plough-truncated, measuring 0.05m to 0.15m deep. The western side was aligned north-east to south-west and the southern north-west to south-east. Both ends faded out and were probably plough-truncated. The ditch had a single fill of mid-red or mid-orange brown clay or silty clay with occasional small flint inclusions from which a small amount of struck flint was recovered. It is phased to the Iron Age from its shape and location with the dominant area of Iron Age activity.



Plate 62. Ditch group 2090, ditch 2088 (showing bulk), looking south, 1x1m scale

Enclosure, Group nos. 2634 and 12830

A half D-shaped enclosure was recorded in SME 2 and Phase 2 works. It lay in the centre of the site and cut burnt mound complex 1 (Figs. 14, 17 and 29). This was the only complete continuous Iron Age ditched enclosure seen on the site; it measured 72m north-east to south-west and 42m north-west to south-east, enclosing an area of 0.18ha. It had a steep sided concave profile 0.7m to 1.5m wide and 0.4m to 0.6m deep with a single fill of mid-orange or mid-grey brown silt or clayey silt with occasional small flint inclusions and charcoal flecks which contained sparse finds of pottery and struck flint. Where the ditch cut BM1 it became slightly wider and deeper with a more complex fill sequence; this was probably incidental rather than deliberate.

There were no contemporary features, other than the end of ditch 12831 (see section 4.3.7.4) identified within the enclosure.



Plate 63. Ditch group 2634, ditch 2961 (cutting burnt mound 1), looking north-west, 1x2m scale



Plate 64. Ditch group 12830, ditch corner slot 12239, looking north-east, 1x1m and 1x2m scale

4.3.6.3 EX2

This area contained two structures and twenty-two pits. The majority of the pits and the two structures were located in the central and northern area of the site and were seen cutting but potentially relating to the Bronze Age drove-way that ran across the entire area (Figs. 15, 18 and 29).

Structure 1 (5324)

This structure was made up of four postholes 5326, 5328, 5330 and 5332 (Fig. 34. Sections 829-832) and set out in a square shape covering an area of 2m by 2.2m (Figs. 15 and 29). This structure, like the one found in FAS 055, can be interpreted as a 4-post grain store. It was located west of structure 2 and east of the majority of the contemporary pits. The postholes were circular in plan and measured 0.2m to 0.3m in diameter and 0.08m to 0.15m in depth. All had a single fill of a mid-grey brown firm silt with occasional small flint inclusions and charcoal flecks. Sparse finds of pottery were present in three of the postholes.



Plate 65. Four post structure 5324 (part excavated), looking east, 1x2m and 1x1m scale

Structure 2 (5355)

This possible structure was composed of five postholes or truncated pits. It was located east of structure 1 and was irregular in shape. This possible structure could be a truncated roundhouse, a large grain store or animal pen (Figs. 15 and 29).

The postholes were either circular or oval and measured 0.53m to 0.7m in diameter and 0.07m to 0.28m deep. All had a single fill of a light to mid brown or mid to dark brown sandy silt or silty clay with occasional charcoal flecks and small flint inclusions from which occasional pieces of pottery and struck flint were recovered.



Plate 66. Five post structure 5355 (part excavated with marker flags), looking south-west, 1x2m scale

Un-related postholes

Two small discrete postholes were also found; posthole 5365 was located at the north end of the site near some of the pits associated with this phase of activity and

posthole 5411 to the south of structure 1 and structure 2. Small quantities of pottery were recovered from both features (Fig. 15).

Pits

Twenty-two middle Iron Age pits were excavated within EX2. Eighteen were located west of Structure 1 and Structure 2, close to the earlier drove-way, the other were mostly located at the southern edge of the site (Fig. 29). Pits 5275 and 5294 cut the earlier drove-way 5015 (Fig. 35. Section 817). No specific pit groups or alignments were identified. All were either circular or oval in plan and varied in size from 0.6m to 1.88m in diameter with depths varying from 0.17m to 1m. The shallower smaller pits (5082 and 5322) are more likely to be tree throws or animal disturbance.

The pits generally contained one or two fills with the exception of three large pits which contained three and five fills. Single fill pits contained a mid-brown, dark brown, or mid yellow orange brown silt or clayey silt with occasional or moderate charcoal flecks and occasional small flint inclusions and finds of pottery, struck flint and heat-altered flint and stone.

Pits with two fills generally contained a lower fill of either a mid-brown or mid-grey brown soft sandy silt with occasional charcoal flecks and small flint inclusions. The upper fills in these pits varied with charcoal rich dark grey brown deposits, mid orange brown sandy silt deposits and dark to mid grey brown deposits all seen. Pit 5387 was one example of these (Fig. 34. Section 855). Three pits of note were 5282 which had fired clay fragments in the upper fill (5283) and 5497 which cut pit 5500, both of which had charcoal rich possible dump deposits in the upper fills. All the pits containing two fills had finds of pottery, struck flint and animal bone predominantly from the upper fills.

Three pits displayed a more complex fill pattern. Pits 5407 and 5285 had three fills, both with a dark brown charcoal rich possible dump (5410) at the base. Pottery and animal bone was recovered from both fills.

Pit 5275 contained five fills. The fill sequence showed two separate dump deposits (fills 5277 and 5301) at the base and middle of the pit separated by natural silting bands. Pottery and animal bone was found in the top fill (5276) and dump deposit

5277. This pit shows that some pits were left open and not backfilled in a single event, utilised for multiple waste dumps and then left to silt up naturally.



Plate 67. Pit 5294 cutting drove way 5015 (foreground), looking north-east, 1x1m scale

4.3.6.4 Phase 1 Extra

This small area contained a complete ditch 11149, a partial meandering enclosure ditch 11148, two small possible pits and the end of a L-shaped enclosure 11046 that was seen in SME1 of the first phase of works (Figs. 13 and 29).

Enclosure groups 11148 and 12831

This was located at the western side of the area aligned north-west to south-east, then turning to a north-east to south-west alignment and recorded in Phase 1 extra and Phase 2 works. This ditch meandered considerably on the eastern edge but still ran on a general north-west to south-east alignment, terminating at the south-west end, and apparently breaking to respect enclosure 2634/12830, inside which it ran for another 9.3m. It is presently unclear whether the two were both functioning at the same time, although the D-shaped enclosure must have been open when this was dug.

The ditch had a varying width between 0.7m to 1.4m and depth from 0.25m to 0.6m and contained one to three fills. The basal fills seen were generally a natural silting deposit of mid-orange brown sandy or silty clay, whilst the upper fills seen were darker in colour with dark brown grey charcoal rich deposits. The terminal ends were rounded to square in plan.

Finds were sparse from these features although slots 11020 (Fig. 35. Section 2004), 11024 and 12237 did contain slightly more pottery, struck flint and occasional animal bone fragments.



Plate 68. Ditch group 11148, ditch 11024, looking north, 1x1m scale



Plate 69. Ditch group 12831, ditch terminus 12236, looking south-east, 1x1m scale

Ditch group 11149

Seven slots including slot 0272 in the evaluation stage were excavated into this feature (Figs. 13 and 29). It was located at the western side of the area aligned north-east to south-west and the complete ditch was seen in Phase 1 Extra. The ditch measured a total length of 58.1m with varying widths of 1.8m to 2.7m and depths from 0.66m to 1.02m. The ditch had steep to moderate flat sides and a flat or concave base and contained two to six fills. The fills seen varied between slots from a mid-brown, mid-orange or a mid-grey soft sandy silt or silty clay. Some slots contained a darker charcoal stained dark grey or dark brown sandy silt fill but this varied within each slot in the fill sequence.

Finds were recovered from most slots and include pottery, struck flint and sparse animal bone. 2m to 3m slots were excavated at each terminal end to look for dump deposits or placed deposits but none were found. The terminal ends of the ditch were

almost square cut in plan with moderately sloping sides and no evidence for re-cutting was seen.



Plate 70. Ditch group 11149, ditch terminus 11040 (before extension), looking south-west, 1x1m scale

The one slot of note was slot 11051 (Fig. 35. Section 2016) which was located at the east end of the ditch, one slot away from the terminal end. This slot contained six fills with two charcoal rich possible dump deposits (fills 11054 and 11057) which contained animal bone. These fills were not continuous through the ditch and may show discrete areas used to dump fire waste.

Ditch 11046

A single slot was excavated into this ditch, which was a continuation to ditch group 2090 in SME1 (Figs. 13 and 29). It was aligned north-west to south-east and either terminated or was truncated at the south-east end. Approximately 6m was seen in length, 0.6m in width with a maximum depth of 0.1m. It was heavily truncated and was unclear in this area. The single slot contained no finds and has a single fill of light orange brown soft silty clay. The terminal end was excavated but not recorded

as it was very unclear (most likely just natural disturbance) and only 0.01m in depth remained.

Pits

Two small pits were seen in this area, cuts 11030 and 11071. Both pits were located south of and may have been cut by ditch group 11148, although the relationships were not certain. They were sub-circular in plan and although no finds were recovered from them they have been included in this phase as they interact with ditch group 11148.

4.3.6.5 Phase 2

Pits

Twenty-five pits relating to this phase of activity were uncovered during the Phase 2 works (Figs. 16, 17, 19, 21 and 29). The majority of the pits were located at the south-eastern part of the excavation but the pits were also seen distributed across the whole area. The pits were mostly discrete features and were circular or oval in plan and varied in size from 0.49m to 2.8m in diameter or length with depths varying from 0.12m to 0.98m. The fill sequences within the pits differed from one to five fills most of which were mid-orange grey, mid orange-brown or mid grey-brown soft sandy silt or moderately compact silty clay or clayey silt. Some darker possible dump deposit fills were also present that were charcoal rich and contained slightly more frequent finds. In general, small quantities of finds were recovered from these features including pottery, animal bone and struck flint.

Three intercutting sequences were present along with a pit group and three pits of note; these are discussed below.

IA pit group 2

A small pit group of four pits, 12188, 12242 (Fig. 34. Section 3094), 12246 and 12249, was seen in the central area of the site (Figs. 19 and 29). These were circular or sub-circular in shape with steep near vertical sides and flat bases. They were larger than most of the other pits found in this area measuring from 1.6m to 2.1m in diameter with depths from 0.6m to 0.85m. They contained two to five fills and two of the pits (12188 and 12242) contained a charcoal rich dump deposit. Finds of pottery

and struck flint were recovered from all four pits with larger quantities of pottery seen from pits 12188 and 12242 and a large struck flint assemblage in pit 12188. Pit 12242 also contained three small finds from basal fill 12243. These were SF 5086 (hammer stone), SF 5137 (arrow head) and SF 5138 (clay bead).



Plate 71. Pit group, pit 12242 (before 100% excavation), looking south-east, 1x2m scale

Intercutting pit sequences

Pit 12082 cut 12078 in the north central area of the site. Both pits contained Middle Iron Age pottery (Figs. 19 and 29).

Pit 12177 containing Middle Iron Age pottery was cut by Roman enclosure ditch slot 12180 (Figs. 17 and 29).

A more complicated intercutting pit sequence was seen at the eastern end of the site where pits 12033 and 12035 were cut by the later pits, 12031, 12072 and 12074, although the cut relationships are difficult to ascertain in places. Pit 12031 was also cut by later Roman ditch 12037. They were generally oval and contained a similar mid grey brown or dark grey brown soft sandy silt fill with sparse finds of pottery and struck flint present. All the pits were overlain by layers 12076 and 12077 which are

likely to have formed from settling of the fills below. This sequence was also seen in the evaluation as 0506, 0509 and 0511 but was interpreted as multiple ditch cuts rather than pits. It is probable that these features represent quarrying due to the similar fills and irregular feature cuts (Figs. 21 and 29).



Plate 72. Intercutting pits 12072 and 12074, looking south, 1x1m scale

Pits of note

Pit 12058 was located at the eastern end of the site and was circular in plan with steep flat sides and a flat base, measuring 2.21m in diameter and 0.94m deep (Figs. 21 and 29). It contained five fills from which pottery, animal bone and struck flint were found. The upper fills were a dark charcoal stained grey clayey silt and top fill 12063 contained three flint tools, two scrapers and a possible hand axe fragment (SF 5077, SF 5078 and SF 5079).

Pit 12298 was located in the central area of the site (Figs. 19 and 29) and was circular in plan with steep concave sides; it measured 1m in diameter by 0.12m deep. It contained a single fill 12299, a mid-grey soft sand with occasional small flint

inclusions and charcoal flecks from which pottery and struck flint and three large flint hammerstones (SF 5088, SF 5089 and SF 5090) were recovered.

Pit 12571 was located at the western end of the site (Figs. 16 and 29) and was oval in plan with steep concave sides and a concave base. It measured 1.64m by 1.18m by 0.2m deep and contained two fills 12573 a mid-grey brown moderately compact clayey silt over 12572 which included a dump of heat-altered clay probably from a hearth or oven.



Plate 73. Pit 12571 (showing heat altered clay fill 12572), looking south-west, 1x1m scale

4.3.7 Roman

4.3.7.1 Introduction

Two large Roman enclosures were seen in FAS 056 with three additional associated ditches. A small number of pits, a single strip quarry and a single well could also be dated to this phase. Enclosure 1 was seen to the east of FAS 056, and seen in Phase 1 works (EX2), Phase 1 Extra and Phase 2. The three additional ditches were seen relating to Enclosure 1 and were located to the north, south and west of it (Fig. 30). These clearly relate to Enclosure 1 and terminate before the main enclosure ditch.

Enclosure 2 was located to the south of FAS 056 and was entirely in Phase 2 works. Two environmental samples were assessed from the main feature groups in this phase. The results showed sparse cereal grains and animal bone. Full feature and fill descriptions are in Appendix 2a.

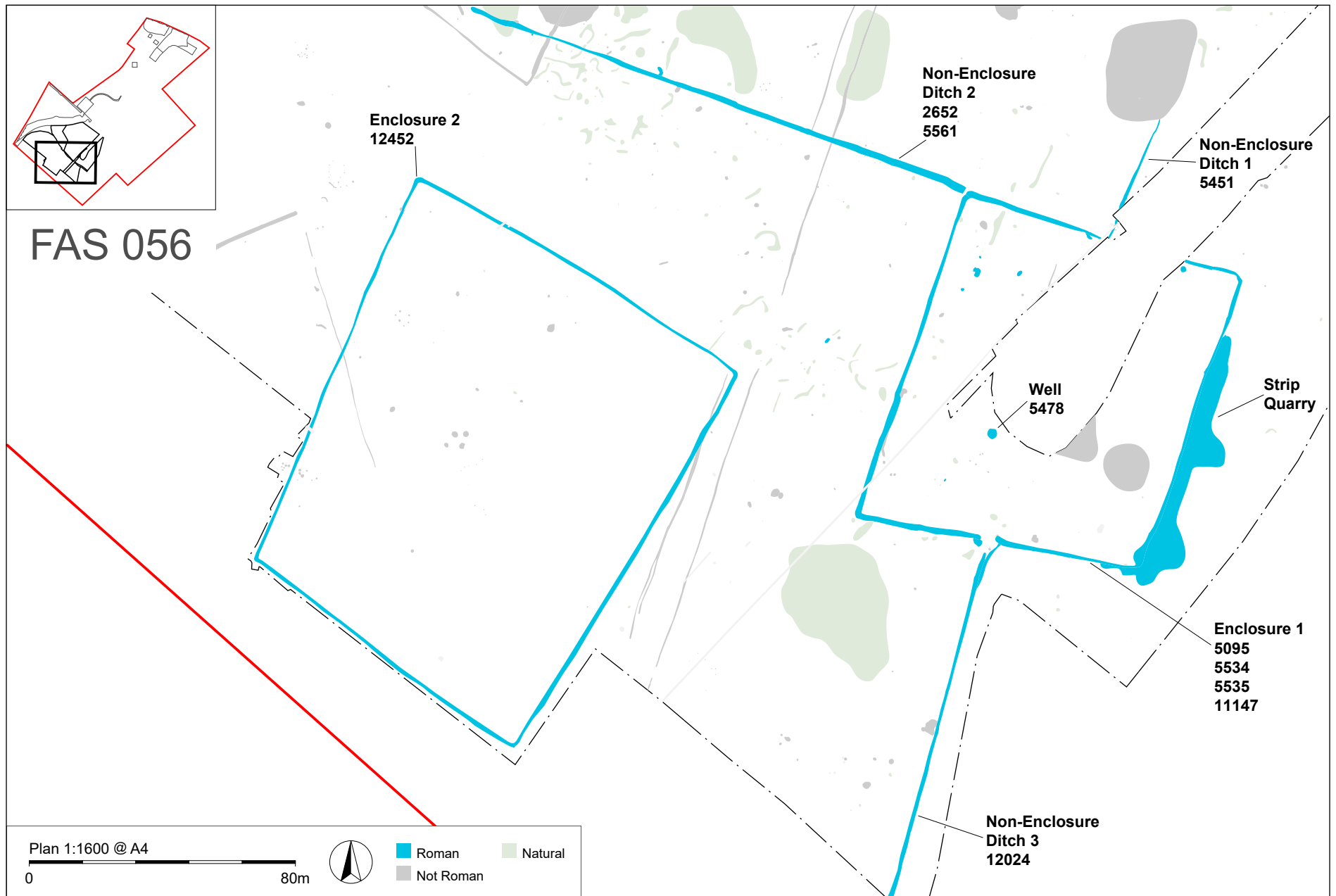


Figure 30. FAS 056 Roman phase plan

4.3.7.2 Enclosure 1

Introduction

Enclosure 1 (Fig. 30) measured 95m north to south and 88m east to west and enclosed an area of just under 1 hectare. It was sub square in shape with the enclosure ditches running on a north-north-east to south-south-west alignment on two sides and a west-north-west to east-south-east alignment on the other two sides. A possible entrance was seen on the southernmost side of the ditch in the central area (Group 5534) and later Roman quarrying cut the enclosure ditch on the eastern side. Only selected excavated slots are described below, full descriptions can be found in the Context List at Appendix 1b.

Four group numbers were given to this enclosure which contained a total of twenty-six slots.

The table below summarises the associated cut numbers.

Area	Group Numbers	Cut Numbers	Min-Max Width (m)	Min to Max depth (m)
Evaluation	-	0339, 0340, 0539	1.94m -2.3m	0.52m - 1.0m
EX2	5095	5096, 5131, 5136, 5141, 5143, 5146, 5150, 5167, 5170, 5359, 5369	1m - 3m	0.55m - 1m
EX2	5534	5495, 5529	1.54m - 1.8m	0.46m - 0.95m
EX2	5535	5503, 5508, 5512, 5517, 5519, 5521, 5523, 5526, 5538, 5540, 5544	1m - 1.82m	0.1m - 0.52m
Phase1 Extra	11147	11018, 11125	1.8m - 2.2m	0.58m - 0.95m

Table 56. FAS 056 early Romano British enclosure 1, associated cut numbers, group numbers and dimensions



Plate 74. Enclosure 1 aerial view (showing quarry, right), looking north, by flypod

Group 5534

The entrance along the southern edge was seen in Group 5534 and formed as a gap 4.5m wide in the enclosure ditch. The fills within the slots in this group were largely homogeneous with finds of pottery, animal bone and struck flint recovered from the fills near the entrance and pottery and SF2212, a corroded possible 4th century nummus from the fill along the western side. The ditch profile of both the southern western arm was steep concave sides and a flat base.

Group 5535

Slots were excavated at the southern, eastern and northern sides of the enclosure under this group number (Fig. 30). These showed that the ditch became narrower and shallower to the north. The ditch profile was consistent in all arms of the enclosure with moderately sloping concave sides and a flattish base seen within most slots, and only a single silty fill with occasion charcoal flecks and flint inclusions in most slots. Animal bone and flint was found in over half the slots excavated and pottery (2nd to 3rd century) was recovered from four slots.

A large area of Roman quarrying was seen cutting much of the eastern enclosure ditch, see below (Figs. 20 and 30).

Slot 5519 in the southern edge was notable because the top fill (5520) contained a large mixed finds assemblage including pottery (2nd to 3rd century), animal bone, CBM and struck flint (as well as some residual and intrusive finds) and may represent a small dump of rubbish into this ditch.



Plate 75. Enclosure 1 (group 5534), ditch 5495, looking east, 1x1m scale

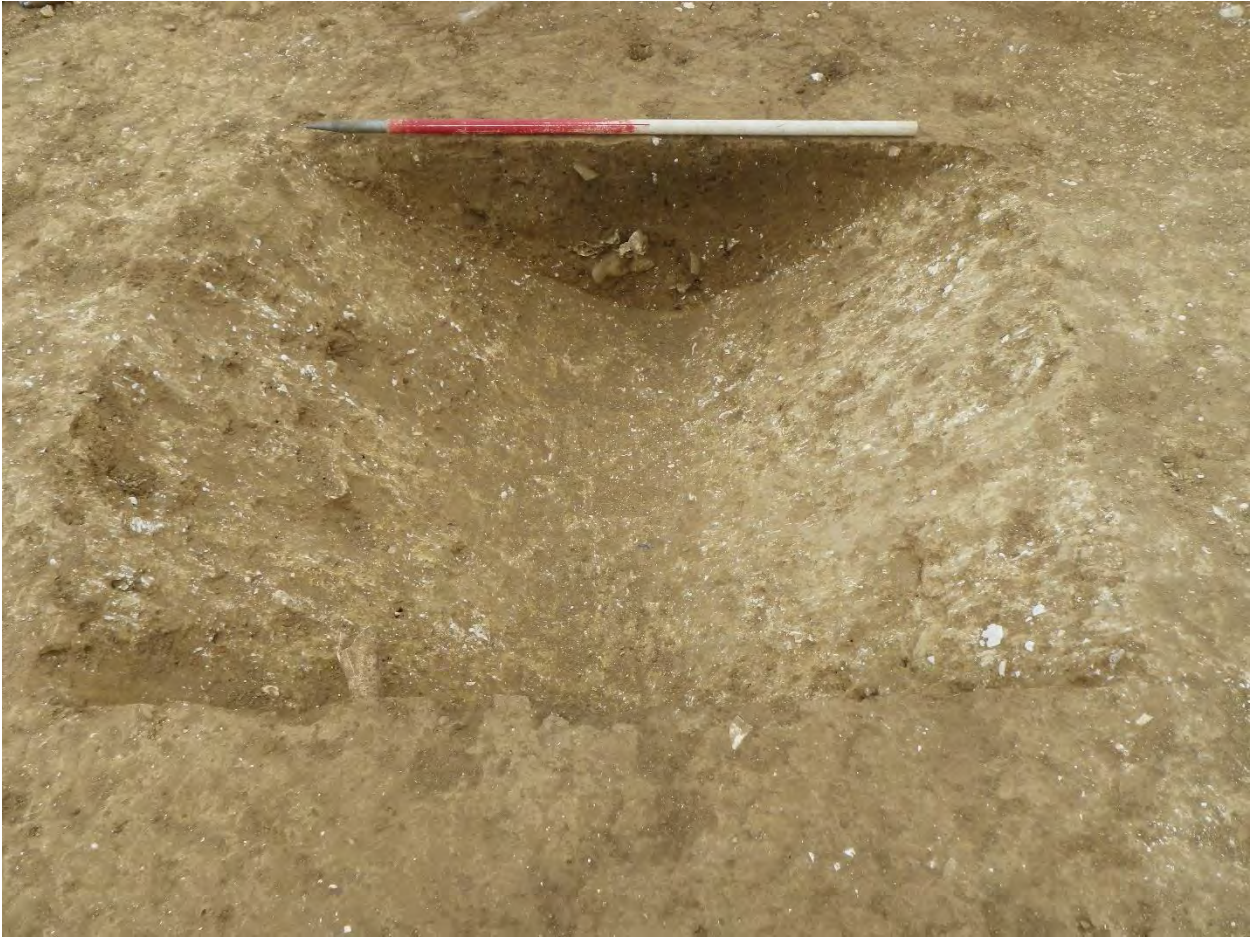


Plate 76. Enclosure 1 (group 5535), ditch 5519 (finds in section), looking west, 1x1m scale

Group 5095

This group encompassed the most substantial and best-preserved part of the enclosure with overall depths exceeding 0.6m and widths of 1m to 1.8m seen, and the profile was a bit steeper (Fig. 30). Most slots contained two fills and the fills in general were made up of a natural silting basal deposit of a pale to mid grey brown or yellow brown firm sandy silt under an upper deposit of a darker mid grey brown or brown loose sandy silt was seen. Most of the finds were recovered from the upper fills, with most some slots containing pottery (2nd to 3rd century) and most containing animal bone and struck flint.

Slots 5141, 5167 and 5170 excavated into the north-west corner of the enclosure revealed that it had been constructed of two adjacent terminating ditches subsequently linked across the corner by a separate ditch. The fill of this later ditch and the top fills of the terminal ends were the same and notably contained lead waste

as well as some pottery, flint and animal bone which may show that lead working was taking place within this enclosure.

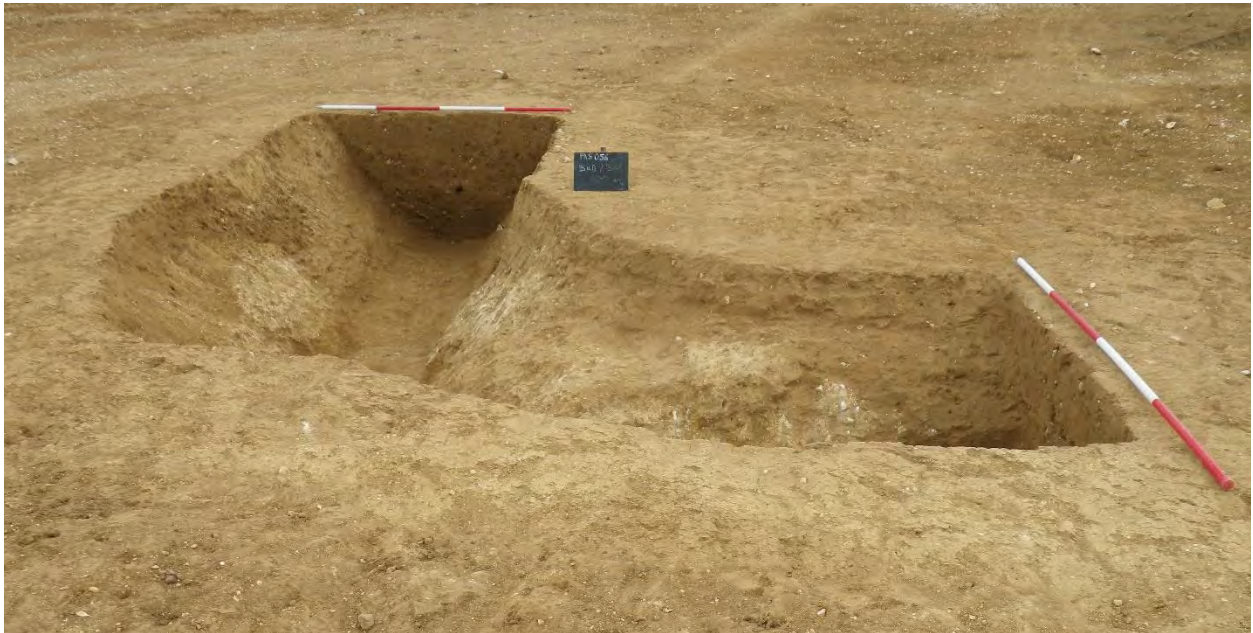


Plate 77. Enclosure 1 (group 5095), ditch corner 5141, 5167 and 5170, looking east, 2x2m scale

Slot 5146 (Fig. 34. Section 757) at the northern edge of the enclosure, near the north-west corner contained a large amount of pottery and seems to indicate another dump of rubbish. Mixed 2nd to 4th century pottery was recovered making it likely that this dump of material is re-deposited midden type waste.

Ditch slot 5150 also located on the northern edge of the enclosure ditch near to slot 5146 had a basal deposit of redeposited natural which may indicate the presence of an outer bank along this edge.

Non-enclosure ditches

Three ditches were seen relating to enclosure 1 but these all terminated near to the enclosure. They run on the same alignment as the enclosure ditches, either east-south-east to west-north-west or north-north-east to south-south-west (Fig. 30).

Ditch 1 (Group 5451)

This small poorly preserved ditch was located north of enclosure 1 in EX2 (Figs. 18 and 30). 30m was seen running on a north-north-east to south-south-west alignment

before it was cut at the north end by a post-medieval to modern quarry; it is speculated that it terminated before Enclosure 1 to the south but this area was truncated by a modern irrigation pipe trench. The ditch could not be seen continuing beyond the quarry to the north.

Three slots were excavated, (cuts 5452, 5454 and 5458) which showed that the ditch became significantly smaller to the north and measured 0.45m to 1.10m in width and 0.1m to 0.4m in depth, suggesting that it has suffered truncation and may originally have extended beyond where it could be traced. It contained a single fill of a mid to light orange to grey brown moderately compact silty sandy clay with occasional charcoal flecks and small flint inclusions. Only slot 5452 (fill 5453) contained finds of pottery, CBM and struck flint.



Plate 78. Ditch 1 (group 5451), ditch 5452, looking north-east, 1x1m scale

Ditch 2 (Group 12024)

This more substantial and well-defined ditch was located south of Enclosure 1 within Phase 2 and Phase 1 Extra works (Fig. 30). It ran for 112m on a north-north-east to

south-south-west alignment, terminating at the north end (evaluation slot 0536) and running out of the excavation area to the south. Twelve slots were excavated into this feature, three slots in the evaluation phase, eight slots in Phase 2 and a single slot in Phase 1 Extra. The results are summarised in the table below.

Area	Group Numbers	Cut Numbers	Min-Max Width (m)	Min to Max depth (m)
Evaluation	-	0506, 0548, 0536	1m - 1.3m	0.2m - 0.5m
Phase 2	12024	12004, 12022, 12025, 12037, 12039, 12043, 12047, 12056	0.96m - 1.34m	0.26m - 0.56m
Phase1 Extra		11014	1.4m	0.55m

Table 57. FAS 056 Romano British ditch group 12024, associated cut numbers and dimensions

This ditch had a moderate to steep concave side and a concave base with a possible ankle breaker seen in slot 12025. It measured a maximum of 1.4m wide and varied in depth from 0.2m to 0.55m. It contained a single fill throughout its length of a mid-orange brown or mid-yellow brown sandy silt or clayey silt. Finds of pottery, animal bone and struck flint were recovered from most of the northern slots with finds becoming sparse at the southern end. It cut pit 12031.



Plate 79. Ditch 2 (group 12024), ditch 12022, looking north, 1x1m scale

Ditch 3 (Groups 2652 and 5561)

This ditch was the most substantial and well-defined of the three ditches associated with, but not part of Enclosure 1. It was located west of Enclosure 1 and ran for 165m on an east-south-east to west-north-west alignment, terminating at the east before Enclosure 1 and terminating to the west in the Phase 2 works (Fig.30).

Seventeen slots were excavated into this feature and the results are summarised in the table below.

Area	Group Numbers	Cut Numbers	Min-Max Width (m)	Min to Max depth (m)
Evaluation	-	0313 (also terminal end seen in eval and not excavated)	1.8m	0.98m
SME2	2652	2638, 2653, 2669, 2676, 2708, 2733, 2806	1.1m - 2.08m	0.2m - 0.86
EX2	5561	5016, 5022, 5026, 5039, 5047, 5157, 5162, 5187	1m - 2.2m	0.4m - 0.96m
Phase 2	-	12231	1.54m	1.1m

Table 58. FAS 056 Romano British ditch group 2652 and 5561, associated cut numbers and dimensions

This ditch had steep sides and a flat base and measured a maximum of 2.2m wide and it varied in depth from 0.2m to 1.1m, with the terminal ends recording the greatest depth. It had a single sandy-silt fill with charcoal and stone inclusions generally more frequent at the eastern end of the ditch, towards Enclosure 1. Finds were sparse with animal bone, struck flint and only small amounts of pottery being recovered, although these were slightly more numerous towards Enclosure 1, showing along with the increase in occupation material in the fill that this was approaching the focus of activity.

Evidence from slots 5157 and 5187 located at the east end of the ditch may suggest an external bank (to the north) at this point which is consistent with the evidence from the northern-most edge of Enclosure 1 and suggests that an exterior bank was present across most of northern edge of the Roman activity.

The ditch cut drove-way 5015, Iron Age ditch group 2634 and pit/ tree throw 2731 which contained intrusive Roman finds, it was cut by tree throw or modern feature 2678.



Plate 80. Ditch 3 (group 5561), ditch 5026, looking north-west, 1x1m scale

4.3.7.3 Enclosure 2, 12452

Enclosure 2 measured 130m north to south and 118m east to west and enclosed an area of 1.42 hectares; it was almost 50% larger than Enclosure 1. It was sub-square in shape with the enclosure ditches running on a north-north-east to south-south-west alignment on two sides and a west-north-west to east-south east alignment on the other two sides. It was located wholly within Phase 2 works, south-west of Enclosure 1 (Figs. 17, 19 and 30). There was no clear evidence for an entrance and the ditch seems to be continuous around the entire enclosure. This ditch cut all features it interacted with and a possible re-cut was present on the eastern edge of the enclosure. A single group number was given to this enclosure 12452, which contained a total of fifteen slots, inclusive of a single slot (0328) excavated in the evaluation phase.

Area	Group Numbers	Cut Numbers	Min-Max Width (m)	Min to Max depth (m)
Evaluation	-	0328	1.0m	0.2m
Phase 2	12452	12139, 12141, 12146 (re-cut 12148), 12150 (re-cut 12153), 12155, 12157, 12159, 12163, 12165, 12167, 12169, 12171, 12180, 12209	0.8m - 1.37m 2m angled slot	0.27m - 0.69m

Table 59. FAS 056 Romano British enclosure 2 (group 12452), associated cut numbers and dimensions

The enclosure ditch was smaller in width and depth than the one seen for Enclosure 1 measuring 0.8m to 1.37m in width and having a maximum preserved depth of 0.69m. The ditch was either V or U shape in profile. A single fill of a mid-yellow or mid orange brown sandy silt or silty clay with occasional charcoal flecks, chalk flecks and small flint inclusions was present in most of the slots. Pottery, animal bone and struck flint were recovered from a few slots but all assemblages were small and only four sherds of pottery dating to the Roman period were recovered from it.

Slots 12148 at the south-eastern corner and 12150 (Fig. 34. Section 3054) through the eastern edge showed that this arm of the enclosure had been recut (12148). The re-cut was seen to terminate in slot 12148 and was only present along the eastern edge. The re-cuts in both slots were clear and contained a single fill similar to that of the original cut.



Plate 81. Enclosure 2 (group 12452), ditch 12146 and 12148, looking north, 1x1m scale

4.3.7.4 Well 5478

An unlined well was found within Enclosure 1 in EX2 (Fig. 34. Section 894). It was positioned opposite the possible entrance into the enclosure on the southern side (Figs. 20 and 30). It was circular in plan measuring 3.2m in diameter with a bowl-shaped upper structure, narrowing to a 1m diameter circular shaft. The upper cut had concave sides to a depth of 1.5m, then vertical edges were seen extending to a maximum excavated depth of 5.75m. The upper 1.2m portion of the well was hand excavated and recorded. Below this depth a 1m - 2m void was present and the remainder of the excavated depth was invested by machine. The base of the feature could not be seen as it was not safe to excavate past 5.75m. The upper fill sequence in the well contained possible capping/ backfilling material (5479). This upper fill was a mid-brown firm silty clay with occasional charcoal and chalk flecks and small flint inclusions. The fill contained pottery, CBM, animal bone and struck flint, all in small quantities. The lower fill (5560) was seen below the void. This was a pale-yellow brown sandy silt and contained frequent chalk flecks and lumps. This fill was seen extending to the maximum excavated depth and could faintly be seen in the base of the machine excavate box at 5.75m. The fill contained two Roman pot sherds and a fragment of animal bone.

It is likely that this well was deliberately constructed within Enclosure 1 and hints at a lost Roman structure within this enclosure.



Plate 82. Well 5478 (hand excavated), showing void, looking west, 1x2m scale



Plate 83. Well 5478 (machine excavated to 5.75m showing narrowing shaft), looking west

4.3.7.5 Quarrying

A large area of strip quarrying cut away the eastern edge of Enclosure 1 (slots 5536, 5546 and 5542). The quarrying was linear in plan with two larger undulating sub circular areas and measured 83.1m long, varying in width from 5m to 14.1m (Figs. 20 and 30). The maximum depth could not be ascertained due to safe excavation depths, but was in excess of 1.8m.

Seven slots were excavated including two machine slots and a single evaluation slot. The table below shows the excavated slot details.

Area	Cut Number	Associated numbers	fill	Cutting ditch	Max Width (m)	Max depth (m)
Evaluation	0528	0527		-	5.92m	1.23m
EX2	5536	5537		5538	2.24m	1.04m
EX2	5542	5543		5540	2.46m	0.44m
EX2	5546	5547, 5548		5544	6m	1m
EX2	5550	5551, 5552		-	5.68m	1.24m
EX2	5553 (machine slot)	5554, 5555, 5556		-	13.2m	1.8m
EX2	5557 (machine slot)	5558, 5559		-	10m	1.7m

Table 60. FAS 056 Romano British quarry, associated cut numbers and dimensions

The quarrying activity had various cut profiles with steep flat and concave sides seen on the western edge and shallower flat sides seen on the eastern edges. Where the base was revealed it was either flat or undulating. The shallower and narrower ends contained a single fill of a mid-brown to mid-orange brown silt of clayey silt and two or three fills that were either mid-brown, mid-grey brown or pale-yellow brown silts or clayey silts were seen in the wider and deeper central areas. Most fills contained small amounts of pottery, animal bone and struck flint.

It is clear that this quarrying is later than Enclosure 1 but the pottery assemblage does not provide any date later than the 2nd to 3rd centuries which may suggest that it was undertaken soon after the enclosure was filled.



Plate 84. Quarry 5546 cutting ditch 5544 (foreground), looking east, 1x2m scale

4.3.7.6 Pits

Eleven shallow pits were located within and in close proximity to Enclosure 1 (Figs. 20 and 30), five of which were excavated in the evaluation phase (two pits were excavated in both the evaluation and excavation). Most pits contained a single fill which varied from a soft pale-yellow brown silty sand to a dark grey brown soft silty sand and with occasional or moderate amounts of charcoal flecks and occasional small flint and stone inclusions. Most of these contained assemblages of pottery and CBM. Because of their irregular forms, these pits are interpreted as representing either tree throws utilised as rubbish pits or tree throws containing surviving or re-worked midden deposits that have mostly been lost due to modern ploughing.

Area	Cut Numbers	Min-Max Length (m)	Min-Max Width (m)	Min to Max depth (m)
Evaluation	0298, 0300, 0515, 0520, 0534	0.7m - 3.1m	0.7m - 3.1m	0.1m - 0.63m
EX2 (located in and around enclosure 1)	5109/ 5104, 5115, 5117, 5159, 5251, 5467, 5510, 5532	0.9m - 3m	0.5m - 2.5m	0.12m - 0.3m
EX2 and SME2 (Other)	2731, 5089	2.6m - 2.8m	1m - 1.2m	0.18m - 0.3m

Table 61. FAS 056 Romano-British pits, associated cut numbers and dimensions



Plate 85. Pits 5104 (back) and 5109 (front), looking north-east, 1x1m scale

A particularly large assemblage of mixed Roman pottery with forms dating to the 3rd and 4th centuries AD was recovered from large, shallow, oval pit 5251 which was also excavated in the evaluation as 0300. Pit 5104, which was also large, shallow and oval contained 229 small sherds of pottery, some of which similarly to pit 5251 may date to the 3rd to 4th century. These two pits may be later than the other features seen or may show a continued use of the area into the 4th century.



Plate 86. Pit 5251, looking north-east, 1x2m scale

Two additional pit-like features were seen, 2731 and 5089. These are most likely to be associated with rooting, furrows or animal burrowing in and around the Roman occupation.

4.3.7.5 Evidence for Roman structure(s)

Although no features suggestive of structural evidence were found on site, the presence of a tree belt that was being retained and a large post-medieval to modern quarry pit restricted opportunities for excavation within the centre of the enclosure; the most likely location for a structure. However, the presence of CBM and dumps of pottery and lead-working waste in some of the features suggest that this was more than merely an agricultural enclosure and with the presence of the well it may indicate the former presence of a small farmstead here.

4.3.7.8 Dating evidence

The dumped finds evidence from the enclosure ditch suggests the main period for occupation dates to the 2nd to 3rd centuries.

The quarrying activity seen on the eastern edge of Enclosure 1 and pits 5251 and 5104/5109 may relate to slightly later 3rd to 4th century activity on the site. These features have not been sub-divided into a later phase of activity as finds from most Roman features (including the enclosures) contained 2nd to 4th century pottery. The Roman phase on site shows continued use from the 2nd to 4th centuries rather than discrete separate phases.

Twenty small finds retrieved from metal detecting topsoil and subsoil deposits were broadly associated with Roman activity on site. These are fully discussed in section 5.4 and were mostly recovered from EX2. They date from the 1st to 4th centuries and include SF 2047, a near complete enamelled lobed disk brooch which is likely to date to the 1st to 2nd century AD.

4.3.8 Anglo-Saxon

Two Anglo-Saxon small finds were recovered during metal detecting surveys, SF2060 a silver strip and SF5072 a possible Saxon coin. These are fully described in section 5.4.

4.3.9 Medieval

A single quarry pit 5425, 9013m x 3.2m x 0.62m deep can be associated with this phase of activity. It contained a single fill 5426 which was a mixed mid-brown soft sandy silt with occasional small flint inclusions. Finds include a single sherd of pottery dated to the medieval to post-medieval periods, worked flint and quern stone.

Other activity on site associated with this phase includes possible night soiling which is discussed separately in 4.3.12 with the finds being discussed in section 5.4.



Plate 87. Quarry 5425, looking south, 2x2m scale

4.3.10 Post-medieval

Contributions by Cameron Bate.

Ten features were dated as post-medieval. The majority of these were found in Phase 1 works on EX2 but occurred across most areas. Most were pits or quarries with a single ditch excavated in SME1 and Phase 1 Extra. Metal detecting surveys on the topsoil and subsoil recovered many post-medieval finds. These are discussed separately in section 4.3.12 and the finds are described in section 5.4.

The table below summarises the post-medieval features and full feature descriptions can be found in Appendix 2b.



Plate 88. Animal sk. 5113 (Bovid) in pit 5112, looking north-west, 1x1m and 1x0.3m scale



Plate 89. Pit 5112, looking south-west, 1x1m scale



Plate 90. Ditch 2002, looking north, 1x1m scale

Location (area)	Type	Cut	Feature description	Fill numbers	General fill description	Length (m)	Width (m)	Depth (m)	Findings
EX 2	Pit	5061	Circular in plan with steep flat sides and a flat base	5062	Mid-brownish orange loose sandy silt with frequent small to medium stone and flint inclusions	0.43	0.2	0.28	1 pot sherd
EX 2	Furrow	5093 (same as 5091)	Irregular in plan with gently sloping sides, a gradual break of slope and a flat base	5092 (same as 5094)	Mid-orangey brown slightly loose silt with occasional flint inclusions	1.0	0.6	0.08	1 pot sherd
EX 2	Pit	5112	Circular in plan with a u-shaped profile, steep flat sides and a flat base (Plate 88 and 89)	5114, 5113, 5120, 5121	Pale to dark brown chalky silty sand fills	1.25	1.2	1.0	Articulated animal sk 5113, CBM and a single pot sherd, iron wire (SF.2121)
EX 2	Pit or post hole	5122	square in plan with steep flat sides and a flat base	5123	Mid-brown firm sandy silt with rare small pebble inclusions and abundant chalk flecks	0.6	0.6	0.2	Single Roman pot sherd, a large iron nail and struck flint
EX 2	Post hole	5233	Circular in plan with gentle sloping concave sides and a flat base	5234	Mid-greyish brown firm clayish silt with occasional very small stone and flint inclusions	0.2	0.2	0.1	Single CBM fragment
EX 2	Pit	5445	Sub-circular in plan and was elongated North to South with moderately sloping concave sides and a flat base	5446	Pale yellow moderately compact clayey silt with abundant chalk flecks and occasional small flint inclusions	3.97	2.1	0.22	Five fragments CBM
EX 2	Natural	5506	Oval in plan, elongated South-West to North-East with irregular concave sides and an irregular base	5507	Mid-orange brown soft sandy silt fill with rare mid-sized rounded and angular flints and occasional charcoal flecks	1.16	1.0	0.38	Two sherds of Roman or post-medieval pottery
SME 1	Ditch	2002	Linear in plan running North to South at the Western edge of the area, with sharp break of slope at top and base. Same as 11105 (Plate 90)	2003	Mid to dark yellowy brown slightly silty clay fill, with compact, occasional small sub angular flints	2m ex	1.84	0.74	Two post-medieval CBM fragments and residual struck flint
SME 2	Ditch	11105	Linear in plan running north-east to south-west with steep sloping concave sides and a concave base. Same as 2002	11106	Mid-brown firm silty sand with occasional small to medium flint fragments, with a diffuse horizon	20.9	2.0	0.76	Two CBM fragments and bottle glass dated to the post-medieval period
Phase 2	Quarry pit	12422	Oval in plan elongated north-west to south-east, with a U shape profile, steep flat sides and a concave base	12423	Light greyish brown soft sandy silt with rare small stone inclusions and a clear clarity	8.45	6.03	0.72	Three fragments of CBM, a single residual struck flint

Table 62. FAS 056 Post-medieval feature descriptions

4.4.11 WWII and modern

With contributions from Cameron Bate

A small series of modern features seen in FAS 056 included many associated with WWII activity. Other modern activity included quarry pitting and pits and postholes which mostly pre-date the WWII activity as well as two possible beam slot barns or more likely pigstyes which post-date the WWII activity; excavated slots recovered material dating to the 1960s. (Figs. 12-21 and 31).

Metal detecting surveys on the topsoil and subsoil recovered modern finds which are listed separately in section 4.3.12 and the finds are described in section 5.4.

The table below summarises the features associated with this phase of activity, full feature descriptions can be found in appendix 2b.



Plate 91. Posthole 2067, looking north-east, 1x0.4m scale

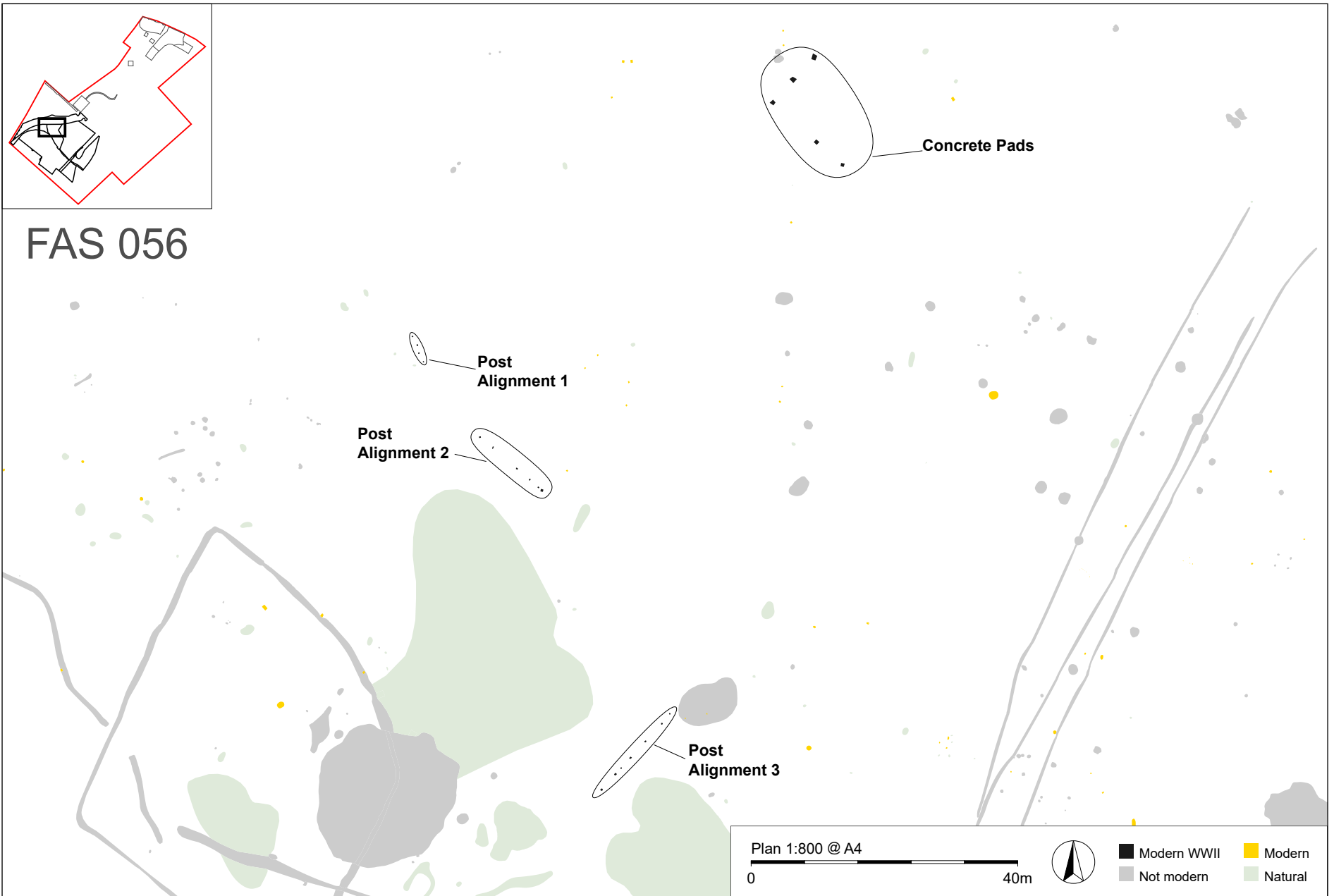


Plate 92. Pit 12514 (showing iron wire), looking north-east, 1x0.4m scale

Location (area)	Type	Cut	Feature description	Fill numbers	General fill description	Length (m)	Width (m)	Depth (m)	Finds/ comments
EX 2	Post hole	5231	Rectangular in plan aligned north to south with straight near vertical edges and a flat base	5232	Mid-brownish grey firm clayish silt with no inclusions	0.3	0.2	0.1	No finds, due to its square shape and size is likely linked with the WWII activity
SME 1	Post hole	2067	Square in plan, with vertical sides and a flat base (Plate 91)	2068	Mid-orangey brown silty clay, compact fill, with frequent chalk flecks, good horizon clarity	0.36	0.36	0.27	No finds, due to its square shape and size is likely linked with the WWII activity
SME 1	Post hole	2069	Square in plan with vertical sides and a flat base	2070	Mid-orangey brown silty clay, compacted fill, with frequent chalk flecks	0.44	0.32	0.24	No finds, due to its square shape and size is likely linked with the WWII activity
SME 1	Post hole	2084	Square in plan with vertical sides and a flat base	2085	Mid-greyish brown sandy clay with occasional flecks of chalk and occasional small flint inclusions	0.3	0.2	0.2	No finds, due to its square shape and size is likely linked with the WWII activity
SME 1	Pads	GPS only	5 square concrete pads with four steel central rods arranged in a square pattern	-	-	1.0	1.2	0.4	The five pads made an L shape on the eastern edge of the area and form part of the firing range known in this area dating to WWII, most likely target posts
SME 2	Post hole	2508	Circular in plan with vertical 90-degree sides and a flat base	2509	Loose brown silt with frequent inclusions of chalk, charcoal and small to medium sized fragments of flint and pebbles	0.44	0.4	0.4	Iron nails, residual struck flint, SF.3063, a composite small find of foil, a plastic top and a copper alloy button
SME 2	Post hole	2528	Circular in plan with a sharp break of slope, straight near vertical sides and a flat base	2529	Dark grey loose silt with frequent charcoal flecks and occasional small flint inclusions and patches of yellow sand	0.51	0.58	0.13	Three fragments of fired clay and residual struck flint. The shape and location of this feature make it likely to belong to this phase of activity.
SME 2	Trail hole?	2561	Sub-rectangular feature in plan elongated north-east to south-west, with straight steep sides to a near flat base with a sharp break of slope	2562	Dark brown clay fill with a firm compaction with infrequent small flint inclusions	0.8	0.28	0.28	No finds were recovered. The shape of this feature may suggest it is a modern geotechnical hole
SME 2	Post hole	2611	Rectangular in plan with steep flat sides, a flat base and three fills	2612, 2613, 2614	Topsoil backfill, Middle fill 2613 was a preserved wood plank or base of the post	0.6	0.4	0.3	No finds were recovered
SME 2	Post hole	2727	Rectangular in plan with vertical sides and a flat base, cut by bore hole 2729	2728	Mixed mid-brown grey sand and clay fill, with a loose compaction	0.5	0.3	0.1	Finds include residual struck flint, rotten wood and concrete (wood and concrete discarded on site)
Phase 1 Extra	Linear	11103	Rectangular in plan, elongated north-east to south-west and is	11104	Dark orange brown moderately compact clayey silt with	8.84	0.45	0.5	This is likely part of a small Barn or pig sty. Modern finds were recovered

Location (area)	Type	Cut	Feature description	Fill numbers	General fill description	Length (m)	Width (m)	Depth (m)	Finds/ comments
			most likely a modern beam slot or construction cut		moderate amounts of small flint inclusions and charcoal flecks				including a mint tin from 1965 which was later discarded.
Phase 2	Pit	12514	Sub-square in plan, with straight sides and curving BOS to a flat base (Plate 92)	12515, 12516, 12517, 12518, 12519, 12520	Mixed lenses and fills of yellow grey clay, mid brown silt and brown grey silty clay	1.06	1.02	0.6	Basal fill 12515 contained iron wire (SFs. 5098-5100, 5102 and 5104-5111). These appeared to have degraded cardboard and plastics adhered to them making the features likely to be related to modern or WWII activity

Table 63. FAS 056 Modern feature descriptions



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Figure 31. FAS 056 WWII phase plan showing firing range

4.3.11.3 WWII Firing range

Three post hole alignments were seen at the north of SME2 running into EX2 and are most likely to be linked to the firing range known to have been in this area during World War II. The three main post alignments probably make up simple timber shooting platforms or gun rests firing towards the concrete pads securing targets seen in SME1 (Table 63) (Fig. 31).

The tables below summarise the features associated with each post hole alignment; full feature descriptions can be found in Appendix 2.

Post alignment 1

Post alignment 1 is located at the north edge of the site aligned north-north-west to south-south-east and is made up of post hole cuts 2543, 2545, 2547 and one unexcavated posthole to the south of these.

Location (area)	Cut	Feature description	Fill numbers	General description	fill	Length (m)	Width (m)	Depth (m)	Finds/ comments
SME 2	2543	Square in plan with near vertical straight sides to an irregular flat base	2544	Dark brown compact silt with occasional small stone inclusions and natural yellow sand patches		0.23	0.16	0.17	No finds were recovered
SME 2	2545	Square in plan with straight near vertical sides and a flat base	2546	Dark brown loose silt fill with occasional small stone inclusions		0.22	0.26	0.09	No finds were recovered
SME 2	2547	Square in plan with straight near vertical sides and an irregular flat base	2548	Dark brown loose silt with occasional stone and flint inclusions		0.2	0.2	0.08	No finds were recovered
SME 2	Un ex	Square in plan	-	Dark brown loose silt		0.2	0.18	-	Un-excavated

Table 64. FAS 056 Post alignment 1 descriptions



Plate 93. Posthole 2545, looking north, 1x0.3m scale

Post alignment 2

Post alignment 2 is located to the south-east of post alignment 1, aligned north-west to south-east and is made up of post hole cuts 2815, 2817 and four unexcavated postholes to the north-west of these.

Location (area)	Cut	Feature description	Fill numbers	General description	fill	Length (m)	Width (m)	Depth (m)	Finds/ comments
SME 2	2815	Square in plan with moderately steep flat sides and a flat base	2816	Mid to dark grey brown firm silty sand with occasional small chalk flecks and lumps		0.24	0.2	0.1	No finds were recovered
SME 2	2817	Square in plan with moderately steep flat sides and a flat base	2818	Dark grey brown soft sandy silt with occasional chalk lumps and charcoal flecks		0.4	0.4	0.1	Three fragments of modern CBM were recovered
SME 2	Un ex	Square in plan	-	Mid to dark grey brown firm silty sand		0.2	0.2	-	Un-excavated
SME 2	Un ex	Square in plan	-	Mid to dark grey brown firm silty sand		0.23	0.2	-	Un-excavated
SME 2	Un ex	Square in plan	-	Mid to dark grey brown firm silty sand		0.34	0.2	-	Un-excavated
SME 2	Un ex	Square in plan	-	Mid to dark grey brown firm silty sand		0.25	0.24	-	Un-excavated

Table 65. FAS 056 Post alignment 2 descriptions

Post alignment 3

Post alignment 3 is located to the south-east of post alignment 2, aligned north-east to south-west and is made up of post hole cuts 2753, 2755, 2757, 2759 and 2761. It also extended into EX2 as 5427 and 5429 and these have been discussed with this post alignment.

Location (area)	Cut	Feature description	Fill numbers	General description	fill	Length (m)	Width (m)	Depth (m)	Finds/ comments
SME 2	2753	Sub circular in plan with moderately steep flat sides and a concave base	2754	Mid-grey brown loose silt with no visible inclusions		0.34	0.34	0.13	No finds were recovered
SME 2	2755	Square in plan with steep flat sides and a flat base	2756	Dark grey brown loose silt with no visible inclusions		0.34	0.34	0.12	A single piece of fired clay/ CBM was found
SME 2	2757	Oval in plan with moderately steep concave sides and a concave base	2758	Mid-grey brown loose silt with no visible inclusions		0.28	0.18	0.06	No finds were recovered

Location (area)	Cut	Feature description	Fill numbers	General description fill	Length (m)	Width (m)	Depth (m)	Finds/ comments
SME 2	2759	Square in plan with steep flat sides and a flat base	2760	Mid-grey brown loose silt with no visible inclusions	0.32	0.26	0.1	A single piece of modern CBM was found
SME 2	2761	Square in plan with steep flat sides and a flat base	2758	Mid-grey brown loose silt with no visible inclusions	0.28	0.24	0.15	No finds were recovered
EX 2	5427	Circular plan with moderately sloping concave sides and a concave base	5428	Mid-brown loose sandy silt fill with rare small flint inclusions	0.25	0.25	0.12	No finds were recovered
EX 2	5429	Circular in plan with moderately sloping concave sides and a concave base	5430	Mid-brown soft sandy silt fill with rare small flint inclusions	0.25	0.25	0.12	No finds were recovered

Table 66. FAS 056 Post alignment 3 descriptions



Plate 94. Posthole 2755, looking north, 1x0.3m scale

4.3.12 Plough soil archaeology

Metal detecting surveys of the topsoil and subsoil across the area produced a large number of metal finds. These finds mostly date to the medieval, post-medieval and modern periods and can be interpreted as chance loss items although a small number may have originated from underlying archaeological deposits disturbed by ploughing.

It was notable that the density of finds at the south-eastern edge of FAS 056 in EX2 was significantly higher than elsewhere and produced an increased number of coinage, tokens and dress items associated with the medieval to early post-medieval periods. This is likely to be indicative of a practice called night soiling, which was the practice of adding dung and general organic refuse from the streets and homes in

the local surrounding to enrich agricultural soils, depositing items that have been discarded and lost from more urban areas and incorporating them into the now modern plough soil. This part of the development is the closest to the medieval centre of Bury St Edmunds and may explain why this area appears to have been night soiled more intensively resulting in the increase in small more period specific items that were recovered from the south-east of the site during metal detecting.

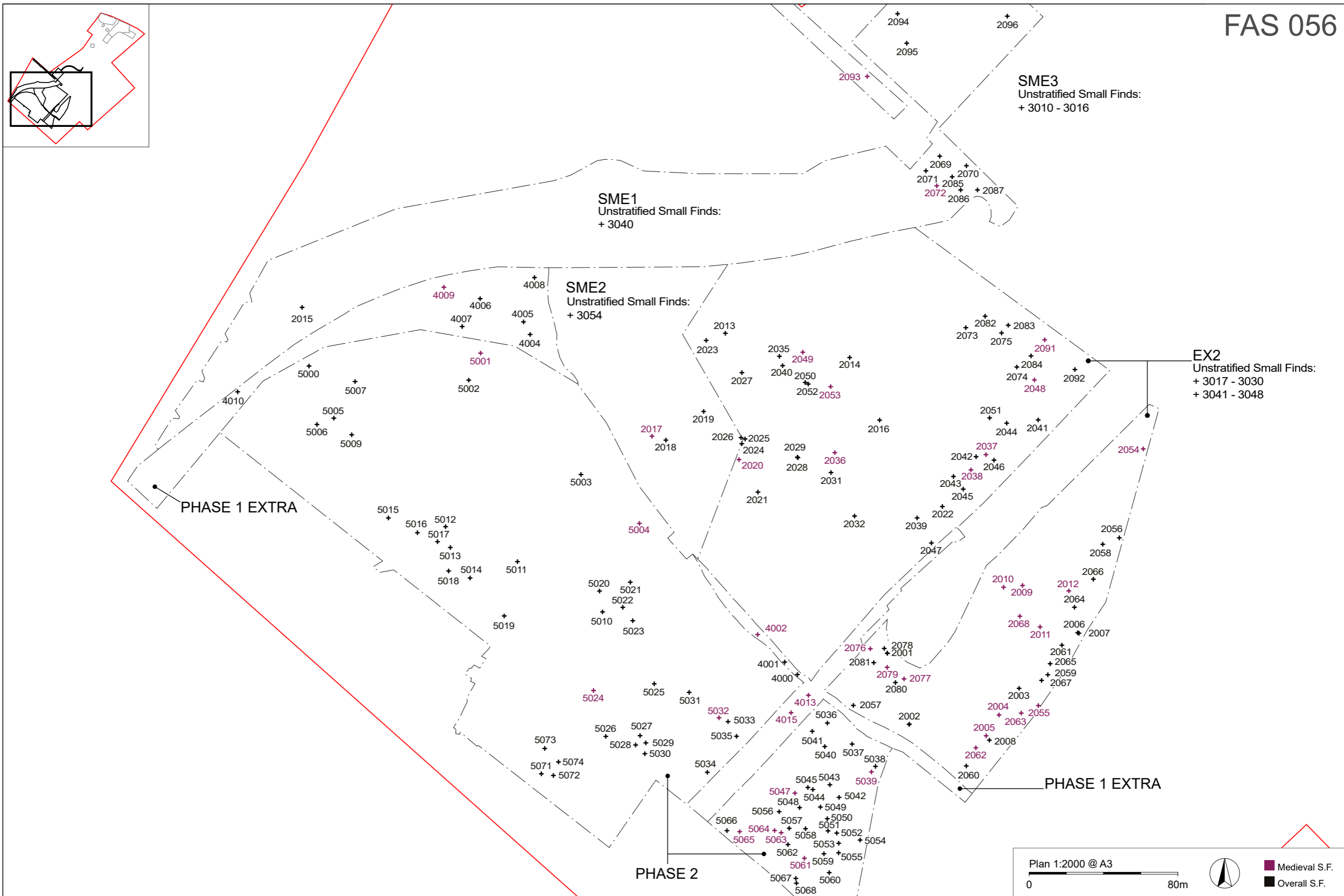
Each metallic item discovered during the metal detecting survey was issued with a unique small finds number and was located using a GPS. These are discussed fully in section 5.4. The distribution map below (Fig. 32) shows plough soil and subsoil recovered finds in FAS 056 with possible medieval night soiling finds highlighted (purple).

4.3.13 Track slot

A machine-excavated slot was placed across the existing farm track within the FAS 056 Phase 1 works. The track was made up of three layers: a modern surface layer 5129 of broken tarmac and gravel over layer 5128 containing large flint boulders and concrete in turn over 5130, a relic disturbed subsoil that contained modern finds of glass and clinker. The track penetrated the natural and truncated earlier features.



Plate 95. Machine slot through track, looking north-east, 1x1m scale



4.3.14 Excavated in the evaluation, undated and natural features

Table 68 summarises the features excavated within the evaluation phase, undated features and unrecorded natural features. Information has been added where additional investigation has occurred during the excavation phase. Four undated features have also been described separately below including three possible cremation and a possible well.

Undated and natural features were discovered in all areas of FAS 056 and most are likely to be associated with bioturbation. Tree throws, tree bowls and burrows were identified. Residual or intrusive finds were present in some features, mostly consisting of a small number of struck flints. Excavated unrecorded features were natural hollows or tree throws without finds.

Two undated possible cremation burials were found in SME 1. Cremation group 2099 contained cremated human skeletal remains while cremation group 2050 did not. They were both located on the southern end of the area and were circular in plan with irregular concave sides and concave bases. One undated possible cremation burial 5089 from EX2 contained cremated human skeletal remains within a single 5cm spit of three spits excavated. 5089 was located within Roman enclosure 1. These will need to be radiocarbon dated to establish which phase of activity they belong to.

Possible well 12564 was located at the far western edge of Phase 2 works. It was sub circular in plan with near vertical flat sides and the base was not seen. It measured 1.8m in diameter and 1.2m in depth was excavated; the possible base was identified using an auger at 1.7m depth. It contained a single fill of a dark brown moderately compact clayey silt with occasional small rounded flint inclusions. The fill contained sparse struck flint finds. It is unclear if this feature was a well or a natural sink hole.

Location (area)	Evaluation features	Notes on evaluation features	Further excavated features	Natural unrecorded feature count	Undated features
EX 2	Twenty-nine features and slots	Most features were fully excavated and recorded in the evaluation	Further slots were excavated in linear features and 2 pits were further investigated	117	54 pits, 6 postholes, 2 linear features
SME 1	Three features	All features were fully excavated and recorded in the evaluation	Further slots were excavated in linear features	7	10 pits, 3 postholes, 1 linear
SME 2	Two features	Both were natural features in the excavation stage	No further investigation was required. The backfill of a single trench was removed by hand to further investigations of burnt mound complex 1	17	40 pits, 4 postholes, 2 linear features
Phase 1 Extra	Three features	All linear features	Additional slots were placed in all linear features	6	1 pit, 10 postholes, 2 linear features
Phase 2	Twenty-two features/ slots	Most features were fully excavated and recorded in the evaluation	Two pits, one spread or hollow and all liners were further investigated in the excavation stage	11	22 pits, 5 postholes, 3 linear features, 1 possible well

Table 67. FAS 056 Evaluation excavated, undated and natural feature summery

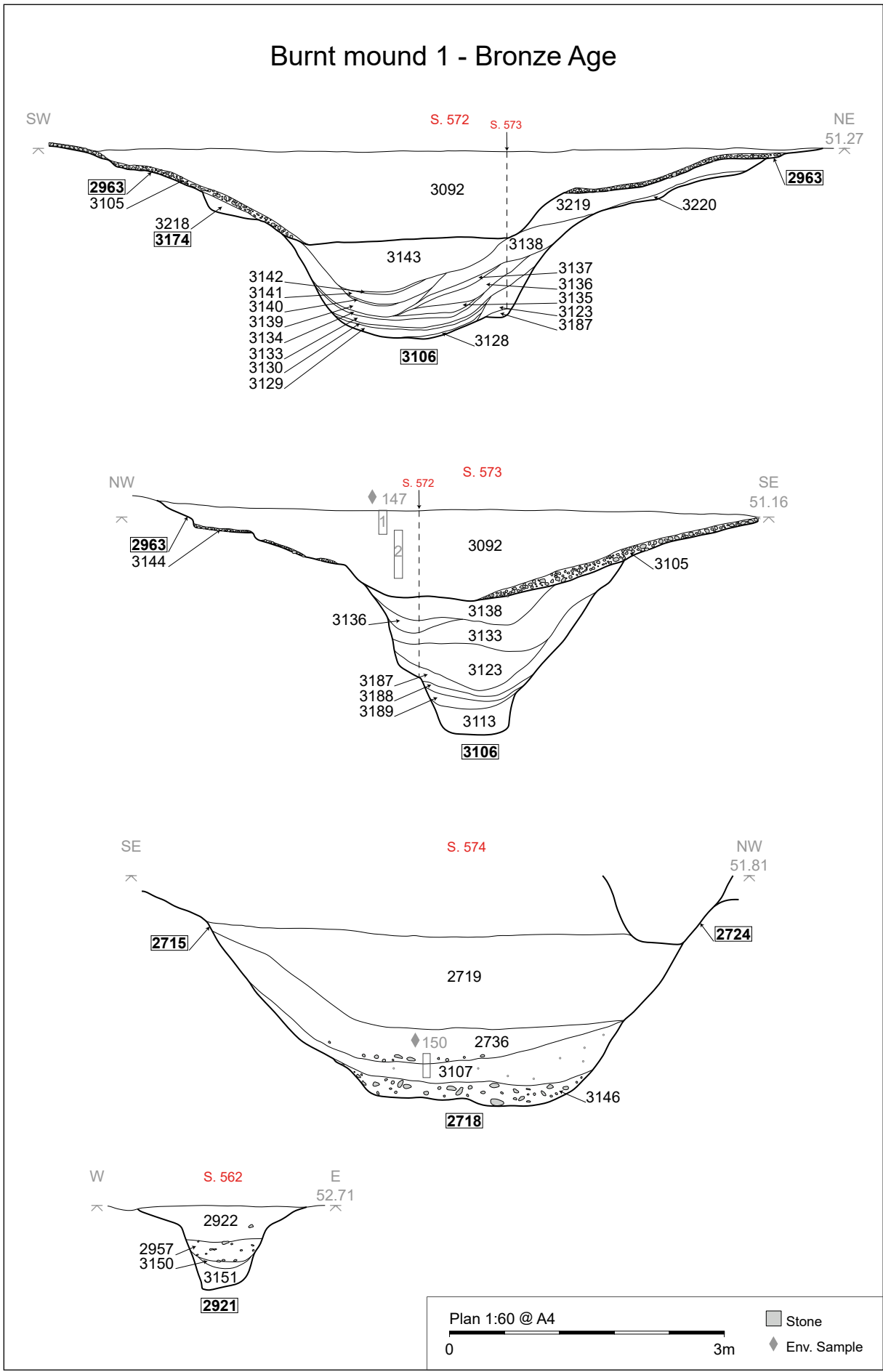


Figure 33. FAS 056 selected sections

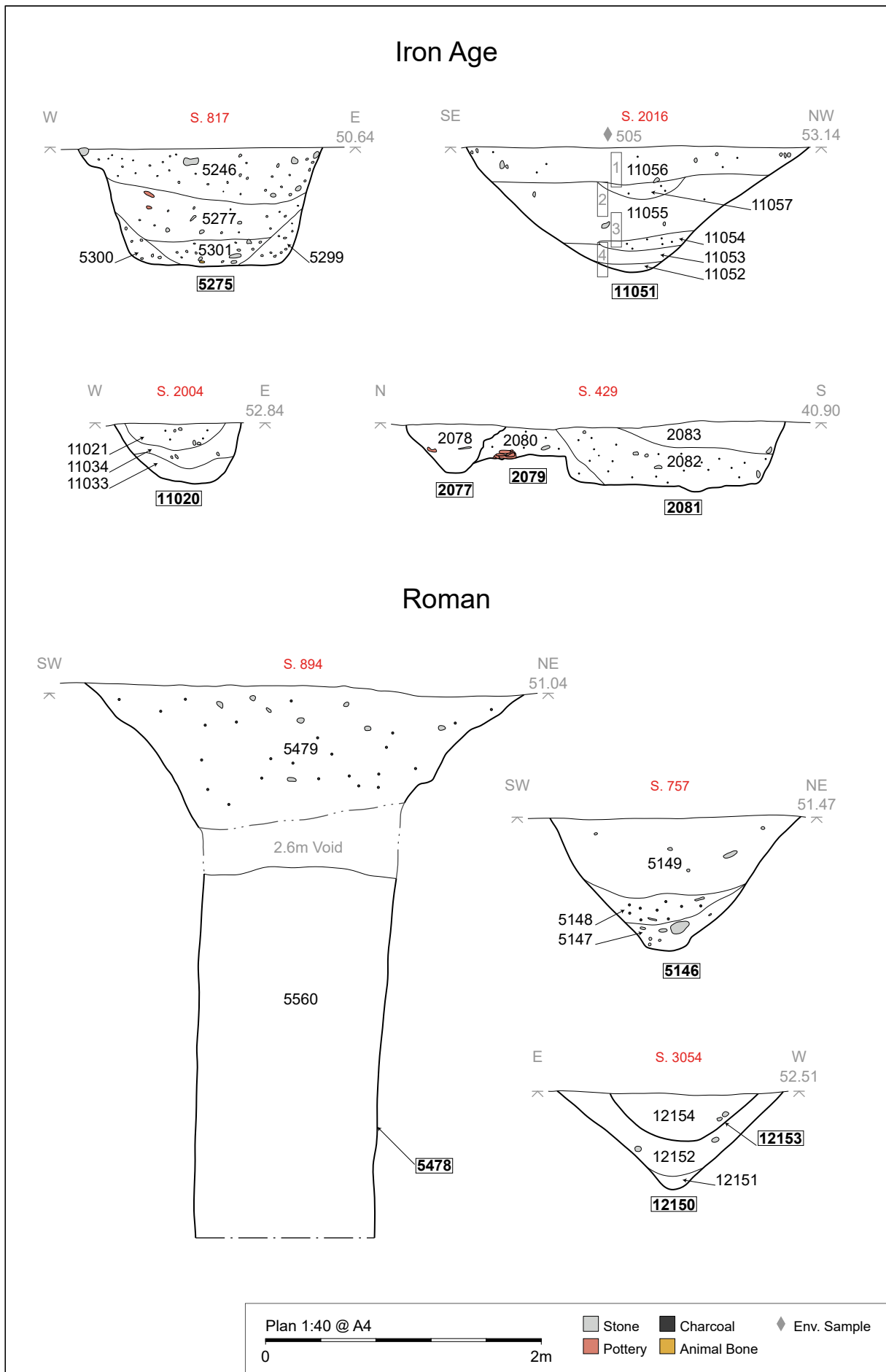


Figure 35. FAS 056 selected sections

5 Quantification and assessment

Michael Green

5.1 Post-excavation review

5.1.1 Introduction

This section covers all tasks that have been completed for this report and reviews the site data. The round-up tables below show feature types per archaeological phase present on FAS 055 and FAS 056.

FAS 055

Date	Feature type	Feature count	Running total
Neolithic	Glacial/ natural	1	1
Early Bronze Age	Pit	2	3
	Hollow	1	4
Middle to Late Bronze Age	Pit	1	5
	Spread	1	6
Late Bronze Age to early Iron Age	Pit	1	7
	Tree throw	2	9
	Posthole	1	10
Middle to late Iron Age	Pits	128	138
	Tree throw	10	148
	Structure	2	150
Romano British	Quarry pitting	1	151
Medieval	Quarry pitting	1	152
Post-medieval	Ditch	11	163
	Pit	1	164
	Quarry pitting	3	167
Modern	Trench	3	170
Undated	Posthole	1	171
	Pits/ tree throw	56	227
	Posthole	8	235
	Linear feature	7	242

Table 68. FAS 055 feature count by phase

FAS 056

Date	Feature type	Feature count	Running total
Late Neolithic to Early Bronze Age	Tree throw	3	3
Early Bronze Age	Tree throw	1	4
Early to Middle Bronze Age	Ditch	2	6
	Posthole	5	11
	Pit	56	67
	Drove way	1	68
	Burnt mound complex	2	70
	Natural/ glacial hollow	3	73
	Cremation	9	82
	Structure	3	85
Late Bronze Age to early Iron Age	Pits/ tree throw	11	96
Middle to late Iron Age	Pit	56	152

Date	Feature type	Feature count	Running total
	Ditch	2	154
	Half D shape enclosure	1	155
	L shape enclosure	1	156
	Structure	2	158
	Posthole	2	160
Romano British	Enclosure (sub square)	2	162
	Pit	11	173
	Ditch (non-enclosure)	3	176
	Quarry pitting	1	177
	Tree throw	2	179
	Well	1	180
Medieval to post-medieval	Quarry pitting	2	182
	Pit	3	185
	Furrow	1	186
	Posthole	4	190
	Ditch	1	191
Modern (WWII)	Posthole	21	212
	Concrete Pad	6	218
Post WWII	Structure	2	220
	Pit	1	221
Undated	Pit/ tree throw	73	294
	Posthole	22	316
	Linear feature	8	324
	Well	1	325

Table 69. FAS 056 feature count by phase

5.1.2 Graphics tasks

- All hand drawn sheets have been scanned to create a digital archive of hand drawings.
- All plans have been digitised and selected sections have been digitised.
- An overall site plan of both FAS 055 and FAS 056 has been created showing all excavated features with annotated cut numbers, section numbers and plan numbers.
- Selected illustration plans and phase plans created for each on site area and specific features.
- Selected sections illustration.

5.1.3 Finds and environmental tasks

- All finds recovered on site have been processed including cleaning and marking where required.
- All samples have been processed to create flots and residues for assessment. Selected samples have been retained to further analysis.
- Quantification of the entire finds assemblage has been conducted.

- Finds catalogues have been created, including small finds, ceramics, animal bone, CBM and fired clay and lithics (partial).
- Selected specialist finds assessments have been produced.
- A soil micromorphology assessment, pilot lipid assessment, pollen assessment and diatom assessment has been commissioned and the report is included within this document.

5.1.4 Site data tasks

- A full digital archive has been created, including a data base for all context numbers linking section numbers, plan numbers, digital photographs, and finds and environmental information.
- Group numbers have been issued to linear features.
- Preliminary phasing of the features seen on site has been conducted by ceramic spot dates.

5.1.5. Preliminary dissemination and publication

- Small news article created, submitted and included in British Archaeology (January/February 2017, p8).
- Note submitted to Past magazine (Prehistoric Society) and included in April 2017 edition.
- Information booklet of archaeological finds at Marham Park created for homeowners.
- Re-creation illustration created (TOR) for burnt mound complex 1 for information booklet and open days.
- Blogs and web site short articles created in house.

5.2 Quantification of the stratigraphic archive

Site code	Context numbers	Sections	Plans	Permatrace sheets	Samples	Finds boxes	Small finds	Digital photos	Databases	Other media
FAS055	833	271	173	83	113	52	88	924	1	0
FAS056	2473	701	649	192	295	94	581	2532	1	3
TOTAL	3306	972	822	275	408	146	669	3456	2	3

Table 70. Physical and digital archive totals

Other media in the table above includes two films produced from the Phase 2 works and a reconstruction illustration created for the information booklet and open days. In addition to the table above 1329 digital photographs have been taken of the site using Commissionair, Flypod, a 3m staff and working shots.

Type	Format	FAS055	FAS056
Register sheets (some double sided)	A4 paper	55	128
Context recording sheets (multi contexts on some sheets)	A4 paper	597	1437
1:20/ 1:50 scale plan and section sheets	A3 plastic drafting film	83	192
Finds Boxes (preliminary)	Long bone box	52	94
Digital images	14mp .jpeg	924	2532
Digital media, open day films	DVD+R	0	1

Table 71. Quantification of the physical archive (including digital images)

5.3 Quantification and Assessment of the Bulk Finds Archive

Ioannis Smyrnaiois

5.3.1 Introduction

The bulk find quantities from both sites are summarised in Table 72. The finds categories in this table include material from the 2013 evaluations and also from most of the soil samples; these are discussed together with the hand-collected bulk finds in this report. A full catalogue of all finds categories is presented in context order in Appendix 4a.

FAS 055			FAS 056		
Finds Type	No	Wt (g)	Finds Type	No	Wt (g)
Pottery	4349	32024	Pottery	7908	52596
CBM	3	29	CBM	80	5187
Slag	42	419	Slag	10	178
Nails	10	37	Nails	48	87
Fired clay	513	2531	Fired clay	539	2526
Worked flint	1002	-	Worked flint	10658	-
Heat-altered flint	1153	59503	Heat-altered flint	594	381589
Heat-altered stone	712	85791	Heat-altered stone	506	56826
Lava quern	71	4809	Lava quern	57	477
Stone	-	-	Stone	8	1782
Pmed glass	-	-	Pmed glass	4	464
Pmed clay pipe	-	-	Pmed clay pipe	3	13
Cremated human bone	-	-	Cremated human bone	-	488

FAS 055			FAS 056		
Animal bone	5773	18226	Animal bone	7890	23272
Shell	23	5	Shell	280	2096

Table 72. Bulk finds quantities from both sites

The different finds types in this assessment are presented by individual site within major category. The pottery is discussed by major period and within this by separate site.

5.3.2 The Pottery

Ioannis Smyrnaiois

Introduction

A total of 4,349 sherds of pottery weighing 32,024 grams was recovered from the evaluation and excavation phase of FAS 055. The material derived from a total of 242 contexts, including fifty-eight samples.

A larger quantity, 7,908 sherds of pottery weighing 52,596 grams was collected from the evaluation and subsequent excavations at FAS 056. The ceramics came from 435 contexts and unstratified deposits, including thirty-nine samples.

A breakdown of the pottery by major ceramic period from both sites is shown below:

FAS 055					FAS 056				
Period	No	% No	Wt/g	%Wt/g	Period	No	% No	Wt/g	%Wt/g
Prehistoric	4264	98.0	31345	97.9	Prehistoric	5724	72.4	33470	63.6
Roman	27	0.6	294	0.9	Roman	2165	27.4	19011	36.1
Medieval	58	1.3	385	1.2	Medieval	19	0.2	115	0.2
Totals	4349	100.0	32024	100.0	Totals	7908	100.0	52596	100.0

Table 73. Total ceramic assemblage by chronological groups (FAS 055 and FAS 056)

Table 73 presents the total ceramic assemblage quantified by sherd count and weight, divided into three major chronological periods. This shows that almost the entire assemblage from FAS 055 is prehistoric, whilst FAS 056 had more Roman pottery.

Prehistoric pottery

Introduction and methodology

The prehistoric pottery from Fornham is discussed by individual site, but the details of the recording and methodology remains the same for both and is summarised below. The pottery was quantified by fabric groups divided in broader chronological periods. Fabrics were identified through hand specimen examination, supplemented by the use of a x10 binocular microscope. The dates for the fabric groups were established based on a combination of pottery features, such as firing techniques, tempered inclusions, decoration and ceramic shapes. The total assemblages from each site are listed by context in Appendix 5a.

Prehistoric fabrics were recorded according to simplified abbreviations of the Guidelines for Analysis and Publication of the Prehistoric Ceramic Research Group (2010). When possible, prehistoric vessel forms were identified according to the typologies by Brudenell (2014, 193, table 4), and Brudenell & Hogan (2014, 212, table 3). When this was not possible due to the absence of substantial rim sherds, ceramic forms were described loosely as bowls, baggy bowls, carinated vessels, jars, bulbous jars, etc. Decorated prehistoric pottery was identified by following Gibson (2002), and some ceramic styles of the broader Iron Age were classified according to Cunliffe (2005).

Most of the identified prehistoric vessels forms consist of three major typologies: Early Bronze Age Beaker pottery with distinct combed or incised decoration; Middle to Late Bronze Age straight-sided jars, most of which associated with the Deverel-Rimbury tradition; and finally, Middle Iron Age S-shaped jars of various typologies, some of which show combined typological characteristics. For a better quantification of the last typological category, Middle Iron Age jar forms were divided in three broader groups:

Jar 1: This group of jars is characterised by slack shoulders with short or long upright necks, followed by an upright or everted rim. Such jars match Forms A, D, and E described by Brudenell & Hogan (2014, 212, table 3).

Jar 2: Such jars have pronounced rounded shoulders, primarily with short and rarely with long upright necks, ending in a constricted or slightly flared rim. Such jars match Form B described by Brudenell & Hogan (2014, 212, table 3) and also Form L, which consists of squat bulbous jars with no necks. Jars with pronounced shoulders that do not belong to any distinct typology are described as Jar 2-Bulbous.

Jar 3: This group of jars has slightly convex shoulders with long necks, followed by square and/or slightly everted rims due to finger palpation. Such jars match Form P described by Brudenell & Hogan (2014, 212, table 3), although there are occasions when Jar 3 types occur with distinct neck zones due to rim flaring.

Minimum numbers of vessels (ENVs) were estimated according to rim sherds or sherds with distinct decoration, occasionally supplemented by base sherds when these were the only ones available in specific contexts. It should be noted that ENVs are only estimates; therefore, for a better quantification of the material, estimated vessel equivalents (EVEs) were introduced alongside with minimum numbers of estimated vessels (ENVs). EVEs were calculated based on rim sherds, and as prehistoric pottery tends to be handmade and deformed, calculations were only included when the rim diameter of a sherd could be established.

Fabrics

The chronological borderline between prehistoric and Roman pottery is generally unclear. A major issue is that some prehistoric fabrics seem to extend as far as the Late Iron Age-Roman transition. In this report, the lower borderline for prehistoric pottery is set in the Late Iron Age and relates to handmade pottery, produced from fabrics that bear similarities with typical Middle Iron Age or earlier traditions (e.g. flint tempering). By contrast, Romanising wheel-finished or wheel-thrown vessels of the LIA-Roman transition are recorded under Roman pottery and are discussed in the following section.

The prehistoric pottery from FAS 055

Introduction

A total of 4,264 sherds of prehistoric pottery weighing 31,345 grams was recovered from the site. The material derived from 233 contexts including all the fifty-eight samples.

The assemblage

The prehistoric pottery from the site was divided into eighteen fabrics. A summary of the prehistoric assemblage by fabric codes and fabric groups, including a short description of each fabric, is presented in Table 74. All fabrics are in chronological order although some might include more than one date ranges. The large chronological span for some specific fabrics is because these are often encountered in sherds with distinct shapes, decoration and firing characteristics, which are attributed to different chronological periods.

Fabric	Fabric group	Brief description of fabric	Fabric date	No	% No	Wt/g	%Wt/g
F1	F early	Abundant to common coarse large to medium-sized angular flint in a dense silty matrix with moderate to sparse sand and rare organic impurities	LNE-EBA (mainly)	14	0.3	139	0.4
GF	G	Abundant grog and moderate to rare medium sized flint in a fine and dense silty matrix, often with rare larger sand grains	EBA-MBA	16	0.4	45	0.1
G	G	Abundant to moderate grog in a soft silty matrix with frequent voids from leached chalk and/or burnt organic temper, often with rare flint or large sand grains	EBA-MBA	17	0.4	19	0.1
Q1F	Q early	Moderate to rare fine small sized flint in a dense silty matrix with larger sand grains of various colours (opaque, red, yellow); often 'flint dusted' exterior but not flint-rich fabric	BA	2	0.0	10	0.0
Q2F	Q early	Abundant sand of various sizes mixed with moderate to rare fine small-sized sub-rounded flint, often silt-sized grains	LBA or later IA	4	0.1	26	0.1
Q2FV	Q early	Abundant sand of various sizes mixed with fine small-sized sub-rounded flint and sparse organic temper	LBA or later IA	20	0.5	98	0.3
F2	F late	Abundant to common mixed large to medium-sized angular flint in a dense fine to medium sandy matrix	LBA or later	111	2.6	631	2.0
F2V	F late	Common mixed large to medium-sized angular flint and organic temper in a medium sandy matrix	LBA or later	61	1.4	523	1.7
F3	F late	Moderate to rare medium to small-sized coarse and angular flint in a dense fine or medium sandy matrix (main inclusion is quartz)	MIA	79	1.9	1036	3.3

Fabric	Fabric group	Brief description of fabric	Fabric date	No	% No	Wt/g	%Wt/g
F3V	F late	Common medium to small-sized coarse and angular flint and moderate organic temper in a medium sandy matrix	MIA-LIA	46	1.1	181	0.6
V	V	Abundant to common medium coarse organic tempers in a medium sandy matrix with rare flint impurities, often micaceous	MIA-LIA	2944	69.0	19077	60.9
VF	V	Abundant coarse organic tempers and sparse coarse to medium flint, in a medium sandy matrix with larger sand grains	MIA-LIA	163	3.8	2442	7.8
VFQZ	V	Abundant coarse organic tempers, sparse coarse to medium flint and quartzite fragments, in a medium sandy matrix with larger sand grains	MIA-LIA	1	0.0	15	0.0
QVF	Q late	Moderate to sparse flint and sparse fine organic tempers in a dense sandy fabric, often micaceous	MIA-LIA	392	9.2	3369	10.7
Q	Q late	Fine and dense sandy fabric with rare inclusions other than large sized quartz, very often micaceous	MIA-LIA	116	2.7	372	1.2
QGV	Q late	Moderate grog and sparse organic temper in a dense sandy matrix, occasionally with flint impurities	MIA-LIA	2	0.0	12	0.0
QVM	Q late	Abundant to common medium coarse organic tempers in a fine sandy micaceous matrix with rare flint impurities	MIA-LIA	267	6.3	3339	10.7
QCV	unclear	Moderate chalk and organic temper in a loose sandy matrix with holes from leached chalk, occasionally with larger sand grains and flint impurities	BA or LIA	9	0.2	11	0.0
		Totals		4264	100.0	31345	100.0

Table 74. Quantification of prehistoric pottery by fabric group from FAS 055

As shown in the table, the most common prehistoric fabric is V. This fabric forms 69% of the prehistoric assemblage by sherd count or 60.9% by weight. In general, the majority of the fabrics recovered from FAS 055 are tempered with organic materials and date to the later Middle and Late Iron Age. All organic-tempered fabrics comprising the MIA-LIA Group V form 72.9% of the prehistoric assemblage by sherd count, or 68.7% by weight, which is slightly over two thirds of the pottery. Other fabrics that do not belong to this group are often encountered in organic-tempered variants, such as Q2FV, F2V, F3V, QVF, QGV and QVM. Most of these date to the Middle Iron Age and some might stretch into earlier periods, but normally not earlier than the Late Bronze Age. In general, the ceramic technologies noted for the production of later prehistoric pottery at FAS 055 show a distinct and consistent preference in the employment of organic tempers. This is the most characteristic feature of the assemblage.

Vessel numbers and shapes

According to the ENVs recorded in Appendix 5a, the prehistoric assemblage is formed by a minimum of 203 different vessels; however, according to the estimated vessel equivalents (EVEs), this number drops down to 13.26 vessels. The identification of vessel forms based on rim sherds confirms a minimum of 157 vessels, which correspond to 13.26 EVEs. The quantification of the pottery by vessel form is presented in Table 75.

Vessel form	MNV	% MNV	EVEs	% EVEs
Bowls, bowls?	8	5.1	0.14	1.1
Jars, jars?	20	12.7	1.02	7.7
Jars or bowls	12	7.6	0.56	4.2
Jar 1	93	59.2	10.04	75.7
Jar 2	21	13.4	1.39	10.5
Jar 3	3	1.9	0.11	0.8
Totals	157	100.0	13.26	100.0

Table 75. Quantification of vessel forms by ENVs and EVEs from FAS 055

According to the table, a quarter of the vessel forms by MNVs (25.5%), or 13% of the EVEs, comes from jars and/or bowls, the exact typology of which could not be identified. As it will be explained in the following paragraphs, most of these forms date to the Middle and Late Iron Age. Furthermore, the table shows that the remaining three quarters of the pottery by MNVs (74.5%), or 87% of the EVEs, belongs to Middle Iron Age Jars 1, 2 and 3. These correspond to Forms A, B, E and P of the typologies noted by Brudenell (2014, 192, fig.71) and Brudenell & Hogan (2014, 212, table 3). The shape of these pots is typically Middle Iron Age and most of them have been produced out of fabrics V, F2V, VF, QVF and QVM.

Ceramic styles and dating

Early Neolithic pottery (4th millennium BC) or LNE-EBA (3rd - early 2nd millennium BC)

This period is represented by a single small rim sherd from a highly deformed bowl recovered from pit fill 0492. It is made from fabric F1, which dates to the LNE-EBA; however, the angle of the rim's lip is likely to suggest that the original vessel was an Early Neolithic Carinated Bowl (Gibson 2002, 71, fig.34). The sherd was found

together with another rim made from fabric F2V, which is significantly later in date. In general, the date of this sherd is uncertain due to its small size.

Late Bronze Age to Middle Iron Age pottery (c. 11th - 3rd century BC)

As explained in the fabrics discussion, the identification of Late Bronze and Early Iron Age pottery is relatively problematic due to the overlapping of several fabrics with those noted in Middle Iron Age vessel forms. In the present assemblage, a total of five rims from subsoil layer 0006 and pit fills 0101, 0511/8072 and 0549, were produced from three LBA or later fabrics: Q2FV, F2 and F2V. Again, three of these rims belong to Jar 1 forms, dating to the Middle Iron Age; one could not be identified; and the one produced from fabric Q2FV carries distinct nailmark decoration running along the tip of its rim. Such decoration is typical of Early Iron Age forms of the Ivinghoe-Sandy Group of the 8th to 6th centuries BC (Cunliffe 2005, 618, fig.A7), and of the contemporary West Harling Style (Elsdon 1989, 16, fig.3); however, it is also encountered in various Middle Iron Age ceramic traditions across East Anglia (Brudenell 2014).

Middle to Late Iron Age pottery (c. 4th - 1st century BC, and possibly early 1st century AD)

This period is represented by a minimum of 151 vessels (MNVs), relating to 13.18 EVEs. Such vessels belong to Jar Groups 1, 2 and 3, the forms of which correspond to already known Middle Iron Age typologies from Capel St Mary and Ipswich (Brudenell 2014; Brudenell & Hogan 2014). This number of vessels derived from ninety-one contexts, which correspond to 38% of the excavated features. Twenty-three of these vessels, equal to 5.21 EVEs, belong to the Breedon-Ancaster Style (Cunliffe 2005, 635, fig. A5). These are mainly slack-shouldered jars of Form A or high round-shouldered jars of Form E (Brudenell 2014, 193), which carry scratched decoration running across various directions on the vessels' walls and nailmarks running along the top of their rims. Such pottery dates between the 4th and 1st centuries BC, although Cunliffe (2005) suggests that the Breedon-Ancaster style is also likely to have been produced a century earlier.

Distribution of pottery by features

Table 76 presents the distribution of prehistoric pottery by feature types. This shows that 95.6% of the pottery by sherd count, or 97.9% by weight, derived from pits. This is followed by significantly less prehistoric pottery recovered from ditch fills, which only represents 1.7% of the assemblage by sherd count, or 1.2% by weight.

Feature type	No	% No	Wt/g	% Wt/g
Bioturbation	9	0.2	29	0.1
Ditch	72	1.7	390	1.2
Evaluation trench	2	0.0	4	0.0
Gully	37	0.9	73	0.2
Hollow	10	0.2	33	0.1
Layer	1	0.0	15	0.0
Pit	4075	95.6	30686	97.9
Posthole	38	0.9	31	0.1
Root-disturbed	1	0.0	1	0.0
Spread	6	0.1	12	0.0
Subsoil	5	0.1	40	0.1
Tree throw	8	0.2	31	0.1
Totals	4264	100.0	31345	100.0

Table 76. Distribution of prehistoric pottery by feature type for FAS 055

The prehistoric pottery from FAS 056

Introduction

The prehistoric pottery consists of 5,727 sherds weighing 33,470 grams. The material derived from 372 contexts and unstratified deposits, including thirty-seven samples.

The assemblage

The prehistoric pottery from the site was separated into twenty-two fabrics. A summary of the prehistoric assemblage by fabric codes and fabric groups, including a short description of each fabric, is presented in Table 77. All fabrics are in chronological order although some might include more than one date ranges. The large chronological span for some specific fabrics is because these are often encountered in sherds with distinct shapes, decoration and firing characteristics, which are attributed to different chronological periods.

Fabric	Fabric group	Affiliated fabrics	Brief description of fabric	Fabric date	No	% No	Wt/g	%Wt/g
F1	F early		Abundant to common coarse large to medium-sized angular flint in a dense silty matrix with moderate to sparse sand and rare organic impurities	ENEO, LNE-EBA, MBA-LBA	652	11.4	4496	13.4
F1G	F early	F1,	Common coarse large to medium sized flint and moderate to sparse fine grog in a dense sandy matrix, often with rare large rounded sand grains	LNE-EBA?, EBA-MBA	118	2.1	535	1.6
F1QCV	F early	F1	Abundant to common coarse to medium angular flint in a dense silty matrix with sparse coarse sand grains, chalk and organic impurities	NEO-BA or LNE-EBA	9	0.2	47	0.1
GF	G	G	Abundant grog and moderate to rare medium sized flint in a fine and dense silty matrix, often with rare larger sand grains	EBA-MBA (mainly)	1463	25.6	5139	15.4
G	G	GF	Abundant to moderate grog in a soft silty matrix with frequent voids from leached chalk and/or burnt organic temper, often with rare flint or large sand grains	EBA-MBA (mainly)	855	14.9	3716	11.1
SHC	S		Abundant shell in a medium chalky matrix, often with round voids or large rounded shell grains	BA?	3	0.1	29	0.1
Q1F	Q early		Moderate to rare fine small sized flint in a dense silty matrix with larger sand grains of various colours (opaque, red, yellow); often 'flint dusted' exterior but not flint-rich fabric	BA	84	1.5	317	0.9
Q2F	Q early	F2, F3	Abundant sand of various sizes mixed with moderate to rare fine small-sized sub-rounded flint, often silt-sized grains	LBA or later IA	114	2.0	593	1.8
Q2FV	Q early	F2V	Abundant sand of various sizes mixed with fine small-sized sub-rounded flint and sparse organic temper	LBA or later IA	188	3.3	1524	4.6
F2	F late	Q2F, F3	Abundant to common mixed large to medium-sized angular flint in a dense fine to medium sandy matrix	MBA-LBA, LBA and/or later	391	6.8	2247	6.7
F2V	F late	VF, Q2FV	Common mixed large to medium-sized angular flint and organic temper in a medium sandy matrix	MBA-LBA, LBA and/or later	658	11.5	5061	15.1
F3	F late	F2, Q2F	Moderate to rare medium to small-sized coarse and angular flint in a dense fine or medium sandy matrix (main inclusion is quartz)	MIA	79	1.4	301	0.9

Fabric	Fabric group	Affiliated fabrics	Brief description of fabric	Fabric date	No	% No	Wt/g	%Wt/g
F3V	F late	QVF	Common medium to small-sized coarse and angular flint and moderate organic temper in a medium sandy matrix	MIA-LIA	20	0.3	169	0.5
F3VC	F late	F3V, QVF	Common medium to small-sized coarse angular flint, moderate organic temper and moderate chalk in a medium sandy matrix	MIA-LIA	7	0.1	345	1.0
V	V		Abundant to common medium coarse organic tempers in a medium sandy matrix with rare flint impurities, often micaceous	MIA-LIA	311	5.4	2789	8.3
VF	V	F2V	Abundant coarse organic tempers and sparse coarse to medium flint, is a medium sandy matrix with larger sand grains	MIA-LIA	226	3.9	3509	10.5
VFQZ	V	F2V, VF	Abundant coarse organic tempers, sparse coarse to medium flint and quartzite fragments, is a medium sandy matrix with larger sand grains	MIA-LIA	3	0.1	15	0.0
QVF	Q late	F3V	Moderate to sparse flint and sparse fine organic tempers in a dense sandy fabric, often micaceous	MIA-LIA	264	4.6	1444	4.3
Q	Q late		Fine and dense sandy fabric with rare inclusions other than quartz	MIA-LIA	199	3.5	860	2.6
QVM	Q late	V	Abundant to common medium coarse organic tempers in a fine sandy micaceous matrix with rare flint impurities	MIA-LIA	5	0.1	19	0.1
QGV	Q late		Moderate grog and sparse organic temper in a dense sandy matrix, occasionally with flint impurities or micaceous	LIA	28	0.5	218	0.7
QCV	unclear		Moderate chalk and organic temper in a loose sandy matrix with holes from leached chalk, occasionally with larger sand grains and flint impurities	BA or LIA?	47	0.8	97	0.3
			Totals		5724	100.0	33470	100.0

Table 77. Quantification of prehistoric pottery by fabric group for FAS 056

By contrast to FAS 055, where most of the pottery is associated with MIA-LIA fabrics, the pottery from FAS 056 includes a larger variety of fabrics and dates. Furthermore, none of each individual fabric from FAS 056 exceeds 20% of the total assemblage by weight.

Two of the fabrics that are represented by the largest sherd-count and weight percentages, GF and G, belong to the grog-tempered Group G, which mainly dates between the Early and Middle Bronze Age. In total, Group G forms 40.5% of the prehistoric assemblage by sherd count, or 26.5% by weight. It is important to note that Group G is formed by light grog-tempered sherds, the weight of which still forms over a quarter of the assemblage's total weight.

Vessel numbers and shapes

According to the ENVs recorded in Appendix 5b, the prehistoric assemblage is formed by a minimum of 274 different vessels; however, when considered by estimated vessel equivalents (EVEs), this number drops down to 14.5 vessels. The identification of vessel forms based on rim sherds confirms a minimum of 188 vessels, which correspond to 14.5 EVEs. The quantification of the pottery by vessel form is presented in Table 78.

Ceramic form	MNV	% MNV	EVEs	% EVEs
Baggy Bowls	9	4.8	0.53	3.7
Beakers, Beakers?	50	26.6	1.87	12.9
Beaker/Jar, DR?	3	1.6	0.16	1.1
Biconical/Carinated (?) vessels	4	2.1	0.1	0.7
Bowls, bowls? (plain + shallow)	12	6.4	1.23	8.5
Bowls or jar	1	0.5	0	0.0
Food Vessel	1	0.5	0.04	0.3
Grooved Wares, Grooved Wares?	4	2.1	0.22	1.5
Jars, jars?	15	8.0	0.76	5.2
Jar 1, Jar 1?	40	21.3	4.63	31.9
Jar 2, Jar 2?	19	10.1	1.34	9.2
Jar 2 - 3?	1	0.5	0.07	0.5
Jar 3, Jar 3?	4	2.1	0.24	1.7
Jars or bowls	3	1.6	0.26	1.8
Straight-sides jars, DR and DR?	20	10.6	2.47	17.0
Urn, urn?	2	1.1	0.58	4.0
Totals	188	100.0	14.5	100.0

Table 78. Quantification of vessel forms by ENVs and EVEs from FAS 056

According to the table, 26.6% of the vessel forms by MNVs, or 12.9% of the EVEs, comes from Beakers and possible Beakers, all of which dating to the Early Bronze Age (c. 2500/2000-1700 BC); however, as explained in the previous section, the decoration and fabrics of such Beakers suggests that their production could have also expanded into the Middle Bronze Age (after 1700 BC).

Grog-tempered Beaker pottery is usually lighter compared to flint-tempered pottery of later periods and tends to break in smaller pieces. In Table 84 Beakers show a higher percentage of MNVs compared to EVEs, which is probably due to the significant absence of rim sherds. By contrast, the second and third most popular ceramic forms from FAS 056, which are Jar Types 1 and 2, show lower MNVs compare to EVEs. Such sherds are made from harder fabrics and their rims tend to survive in greater numbers compared to earlier forms. In total, Middle Iron Age Jars 1, 2 and 3 add up to 34% of the total ENVs and 43.3% of the assemblage's EVEs.

Ceramic styles and dating

Early Neolithic pottery (c. 4000-3000 BC)

This period is represented by two Carinated bowls (e.g. Gibson 2002, 71, fig.34) recovered from tree throw fill 12332 and another seven early Neolithic baggy bowls recovered from tree throw fill 12333. They are all made from fabric F1 and the latter can be paralleled with contemporary Neolithic bowls from Norfolk (Healy 1996, 139, fig.186, P195).

Late Neolithic to Early Bronze Age pottery (c. 2900-2000 BC)

This period is represented by four Grooved ware or possible Grooved ware rims recovered from posthole fill 2013, pit fills 5184 and 12287, and boundary ditch 12149. Additionally, natural hollow fill 2418 produced an elaborately decorated rim with chevrons on its interior surface, which is most likely to have come from a Food Vessel. Despite that this phase is characterised as Later Neolithic to Early Bronze Age, the fabrics of the above vessels suggest that the date of this pottery must be placed closer to the Early Bronze Age. Such vessels are most likely contemporary with the Beaker pottery discussed in the following section.

Early Bronze Age Beaker pottery (c. 2500/2000-1700 BC)

Sherds of decorated Beaker or possible Beaker pottery derived from thirty-four contexts. They can be attributed to a minimum of fifty vessels, representing 1.87 EVEs. This pottery is primarily made of grog-tempered fabrics (G and GF), followed by early flint-tempered fabrics (F1 and F1G). The continuity of such fabrics into the Middle Bronze Age is likely to suggest that the production of such Beakers was for some time contemporary with the production of Deverel-Rimbury pottery that is

discussed further below. A possible burial urn from cremation fill 70220 probably stands between the Beaker and Deverel-Rimbury traditions.

Middle Bronze Age pottery (c. 1700-1100 BC)

Middle Bronze Age pottery from FAS 056 is difficult to distinguish. It is represented by sherds that are normally made from grog-tempered and early flint-tempered fabrics, same as those noted in Beakers. In terms of their decoration, instead of combing, Middle Bronze Age vessels are densely covered with nailmarks. When rims are present, these come from straight-sided jars of the Deverel-Rimbury tradition (also known as bucket-shaped jars), which are normally decorated with strips of clay running vertically along the walls and dense pinching or impressed nailmarks. Of course, one cannot exclude the possibility that similar nailmark decoration might have associated Beaker pottery too. Posthole fill 2013 produced a variety of Middle Bronze Age rims, which are likely to associate with mixed traditions. The fill included a typical Deverel-Rimbury straight-sided jar; a biconical vessel of the same tradition with a T-shaped rim, carrying nailmarks directly under its exterior lip; and finally, two thin rims with narrow diameters, decorated with fine nailmarks in horizontal alignment, which could either come from Beakers or Deverel-Rimbury jars. In total, there are seventeen rims that have been clearly identified as decorated Deverel-Rimbury jars, deriving from an equal number of fills and relating to 2.25 EVEs.

Late Bronze Age to Early Iron Age pottery (c.1100-600 BC)

As with the Deverel-Rimbury pottery from the site, post Deverel-Rimbury traditions of the Late Bronze Age and Early Iron Age are hard to identify. Such traditions relate to straight-sided (bucket-shaped) jars, biconical jars and bowls, which are usually undecorated. Distinct post Deverel-Rimbury rims derived from burnt mound fill 3214, posthole fill 12479 and pit fill 12573. Although two rims were made from late flint-tempered fabrics of Group F, which confirm a LBA or later date, the sherd from posthole fill 12479 was produced from fabric G, which is EBA-MBA. This observation is likely to challenge the date of this sherd, which could also come from a Middle Bronze Age vessel that happened to have an undecorated rim (e.g. undecorated Deverel-Rimbury style). Rims from another three vessels, which are likely to date to the post Deverel-Rimbury phase, were recovered from pit fills 2766 and 2794. All of them are made from fabric F2V, which coincides with the phase; however; the rim

from pit fill 2794 comes from an early MIA Form A jar, which is likely to suggest that such pottery could have extend well into the 5th and 6th centuries BC. Unlike FAS 055, which produced pottery that is clearly associated with the Ivinghoe-Sandy Group of the 8th to 6th centuries BC (Cunliffe 2005, 618, fig. A7), and of the contemporary West Harling Style (Elsdon 1989, 16, fig.3), distinct LBA-EIA pottery from these groups is only occasionally present in FAS 056.

Middle to Late Iron Age pottery (c. 400/350-100 BC)

This period is represented by a minimum of ninety-five vessels (MNVs), relating to 8.53 EVEs. Such vessels mainly belong to Jar Groups 1, 2 and 3, the forms of which correspond to already known Middle Iron Age typologies from Capel St Mary and Ipswich (Brudenell 2014; Brudenell & Hogan 2014). Such pottery is identical to the forms recovered from FAS 055. Pottery of this phase derived from ninety-four contexts, which correspond to 25.5% of the excavated prehistoric features. Unlike FAS 055, which produced large quantities of pottery belonging to the Breedon-Ancaster Style (Cunliffe 2005, 635, fig. A5), FAS 056 only produced two similar vessels, which derived from pit fill 2055 and 2082. As with FAS 055, the MIA-LIA assemblage from FAS 056 is dominated by Jar 1 types, and more particularly those of Forms A and E (Brudenell 2014, 193).

Distribution of pottery by features

Table 79 presents the distribution of the prehistoric pottery by feature types. According to the table, 53.3% of the pottery by sherd count, or 69% by weight, derived from pits. This is followed by prehistoric pottery recovered from tree throws, which represents 11.4% of the assemblage by sherd count, or 10.5% by weight. Finally, significant quantities of pottery derived from the burnt mounds; these assemblages will be discussed elsewhere.

Feature type	No	% No	Wt/g	% Wt/g
?Hedgeline	5	0.1	43	0.1
Bioturbation	32	0.6	260	0.8
Boundary ditch	11	0.2	61	0.2
Burnt mound	560	9.8	1755	5.2
Cremation	555	9.7	749	2.2
Ditch	214	3.7	891	2.7
Ditch driveway	4	0.1	16	0.0
Ditch terminus	44	0.8	207	0.6
Evaluation trench	2	0.0	1	0.0

Feature type	No	% No	Wt/g	% Wt/g
Fired clay dump	1	0.0	6	0.0
Grave	6	0.1	6	0.0
Gully terminus	4	0.1	8	0.0
Hollow	6	0.1	13	0.0
Layer	1	0.0	8	0.0
Linear	1	0.0	1	0.0
Natural	26	0.5	115	0.3
Pit	3052	53.3	23110	69.0
Pit or posthole	115	2.0	355	1.1
Posthole	365	6.4	2106	6.3
Quarry	4	0.1	10	0.0
Subdivisions (other)	43	0.8	91	0.3
Subsoil	6	0.1	21	0.1
Tree throw/bowl	650	11.4	3512	10.5
Unstratified	5	0.1	15	0.0
Well	12	0.2	110	0.3
Totals	5724	100.0	33470	100.0

Table 79. Distribution of prehistoric pottery by feature type

Roman pottery

Introduction and methodology

Like the prehistoric pottery assemblage, the Roman pottery is discussed by separate site, but a common recording methodology was used for both assemblages as outlined below.

The Roman pottery was quantified by fabrics, which were identified through hand specimen examination, supplemented by the use of a x10 binocular microscope. The total assemblage is listed by context in Appendix 6a.

Roman fabrics were identified based on the National Roman Fabric Reference Collection (Tomber & Dore 1998), but were recorded based on the abbreviations of the Suffolk/Essex fabric series (unpublished). Roman ceramic forms were recorded by following the Suffolk typological series (unpublished), and when this was not possible, vessels were recorded according to broader categories, such as jars, bowls, platters, etc. Late Iron Age and transitional early Roman forms were identified based on the typologies of grog-tempered 'Belgic' pottery by Thompson (1982).

Minimum numbers of vessels (ENVs) were estimated according to rim sherds only, or base sherds when these were the only ones available in specific contexts. No decorated sherds were considered for the quantification of Roman ENVs. Estimated vessel equivalents (EVEs) were calculated when this was possible.

The Roman pottery from FAS 055

Twenty-seven sherds of Roman pottery weighing 294 grams were recovered from ten contexts from the site.

Fabrics and chronology

The Roman pottery from the site is divided into five fabrics, as shown in Table 80.

Fabric	Brief description of fabric	Fabric date	No	% No	Wt/g	%Wt/g
BSW	Black-surfaced ware	LIA-Rom	8	29.6	206	70.1
GROG	Grog-tempered ware	LIA-Rom	1	3.7	13	4.4
GMB	Grey micaceous ware with grey surfaces	Rom	2	7.4	10	3.4
GMG	Grey micaceous ware with black surfaces	Rom	6	22.2	45	15.3
GX	Miscellaneous grey wares	Rom	10	37.0	20	6.8
	Totals		27	100.0	294	100.0

Table 80. Quantification of Roman pottery by fabric from FAS 055

As shown in the table above, the majority of the pottery comes from typical Roman grey wares, which are either micaceous (GMG and GMB) or non-micaceous (GX). In total, Roman grey wares form two thirds of the assemblage by sherd count (66.7%), or a quarter by weight (25.5%). Such fabrics cannot be precisely dated, as these are encountered throughout of the Roman period.

The remaining assemblage is formed by typical Late Iron Age – early Roman transitional fabrics (BSW and GROG). Although these sherds form a third of the assemblage by sherd count (33.3%), they are significantly heavier than Roman grey wares and represent three quarters of the Roman assemblage by weight (74.5%).

Vessel numbers and ceramic forms

According to the ENVs recorded in Appendix 6a, the Roman assemblage is formed by a minimum of six vessels, representing 1.31 EVEs. This number comes from five rim sherds and a base. The quantification of the rims by vessel form is presented in Table 81. The table below shows that the Roman assemblage consists of domestic forms, such as bowls and jars, with a possible castor box recovered from pit fill 0097.

Vessel form	MNV	% MNV	EVEs	% EVEs
Castor box?	1	20.0	0.11	8.4
Jars or bowls	2	40.0	1.08	82.4
Jars, jars?	2	40.0	0.12	9.2
Totals	5	100.0	1.31	100.0

Table 81. Quantification of Roman vessel forms from FAS 055 by ENVs and EVEs

Distribution of pottery by features

Table 82 presents the distribution of Roman pottery by feature types. According to the table, 81.5% of the pottery by sherd count, or 97.3% by weight, derived from pits. A context comparison of Appendices 5a and 6a shows that pit 0078 was the only feature that produced clearly LIA-Roman pottery. The rest of the Roman material was recovered from fills that produced prehistoric pottery too; therefore, the Roman material at the site is likely to be intrusive and associated with later activities in the area.

Feature type	No	% No	Wt/g	% Wt/g
Eval. trench	4	14.8	6	2.0
Pit	22	81.5	286	97.3
Subsoil	1	3.7	2	0.7
Totals	27	100.0	294	100.0

Table 82. Distribution of Roman pottery from FAS 055 by feature type

The Roman pottery from FAS 056

Introduction

The Roman pottery assemblage from the site numbers 2,165 sherds weighing 19,011 grams. By contrast to FAS 055, which produced little Roman pottery, the material from FAS 056 exceeds 35% of the total pottery by weight. This material was recovered from eighty-five contexts, including two soil samples and other unstratified deposits.

Fabrics and chronology

The assemblage was separated into eighteen fabrics, as shown in Table 83.

Fabric	Brief description of fabric	Fabric date	No	% No	Wt/g	%Wt/g
BSW	Black-surfaced wares	LIA-Rom	288	13.3	1530	8.0
GROG	Grog-tempered wares	LIA-Rom	14	0.6	112	0.6
SACG, SACG?	Central Gaulish Samian wares	Hadr.-Ant.	10	0.5	185	1.0
BB2, BB2?	Black burnished wares 2	2nd c. +	7	0.3	112	0.6
HOG, HOG?	Horningsea wares	m. 2nd c.+	64	3.0	1967	10.3
HOGB	Horningsea black-surfaced wares	m. 2nd c.+	3	0.1	48	0.3
COLBM	Colchester buff mortaria	2nd-e. 3rd c.	6	0.3	313	1.6

Fabric	Brief description of fabric	Fabric date	No	% No	Wt/g	%Wt/g
STOR	Storage jars	Rom	8	0.4	140	0.7
BUF	Miscellaneous buff wares	Rom	46	2.1	225	1.2
GMB	Grey micaceous wares with black surface	Rom	58	2.7	398	2.1
GMG	Grey micaceous wares with grey surface	Rom	715	33.0	5485	28.9
GMO	Grey micaceous wares, oxidised	Rom	20	0.9	290	1.5
GX	Miscellaneous grey wares	Rom	746	34.5	6072	31.9
RX	Miscellaneous red wares	Rom	85	3.9	491	2.6
UCC	Unidentified colour-coated ware	Rom	1	0.0	1	0.0
SAEG	East Gaulish Samian wares	I. 2nd-m. 3rd c.	12	0.6	127	0.7
LSH	Late shell-tempered wares	I. 3rd-4th c.	49	2.3	1225	6.4
NVC	Nene Valley colour-coated wares	I. 3rd-4th c.	33	1.5	290	1.5
	Totals		2165	100.0	19011	100.0

Table 83. Quantification of Roman pottery from FAS 056 by fabric

The table shows that the majority of the pottery comes from typical Roman grey wares, which are either micaceous (GMG, GMB and GMO) or non-micaceous (GX). In total, Roman grey wares form 71.1% of the assemblage by sherd count or 64.4% by weight. Such fabrics cannot be precisely dated, as these are encountered throughout the Roman period.

The pottery from the site not only shows continuity between the later Iron Age and the Roman period, but it also shows that human activities carried on until the 4th century AD. The pottery bearing diagnostic features that allow clear dating is relatively limited; however, the material suggests continuity, which can be divided in three phases.

Late Iron Age to Early Roman pottery (late 1st century BC – 1st century AD)

This period is represented by wheel-made or wheel-finished black-surfaced wares (BSW) and grog-tempered wares (GROG). In total, such pottery forms 13.9% of the Roman assemblage by sherd count or 8.6% by weight. Both fabrics derived from nineteen contexts and unstratified deposits, although the vast majority was from ditch fill 5251/70301.

Middle Roman pottery (c. AD 200-350)

This period is relatively long and had the pottery been allowing it, it would have been subdivided further. Based on the existing ceramic evidence, the middle Roman period is characterised by distinct local and imported fine wares, and distinct Romano-British coarse wares. The earliest pottery from this period associates with

the production of Black Burnished 2 wares (BB2) and Horningsea wares (HOG). The former date to the broader 2nd century AD and were recovered from ditch fills 5361, 5371 and 5524. The latter appeared after the middle of the 2nd century AD and derived from ditch fills 5539, 5251/70301 and 70527. Horningsea pottery includes two black-surfaced variants. Imported fine wares from the earliest phase include Central Gaulish Samian wares, dating to the Hadrianic-Antonine period. Such wares were recovered from ditch fills 5151, 5524 and 5251/70301, pit fill 5252, quarry fill 5549 and subsoil layer 11013. Central Gaulish samian pottery includes bowls and platters of types Dr.27, Dr.18/31, Dr.33 and Ludovici Tf', some of which made in Lezoux fabrics. Fragments of Colchester buff mortaria (COLBM), dating to the 2nd and early 3rd centuries AD, derived from ditch fill 5151 and quarry fill 5549. The former mortarium is a variant of Cam.504/5 (Symonds & Wade 1999, fig.4.13, n.225) and the latter is a typical Cam.497 type (Hawkes & Hull 1947; Hull 1963, 120, fig.65). The end of this phase is marked by East Gaulish samian imports dating between the late 2nd and middle 3rd century AD. Such wares were recovered solely from ditch fills, and more specifically 5145, 5148, 5361, 5371, 5496, 5520, 5530 and 5251/70301. East Gaulish samian pottery includes bowls of types Dr.18/31, Dr.33 and Dr.38, some of which made in Trier fabrics.

Late Roman Pottery (c. AD 350-410)

The pottery from the final Roman phase cannot be clearly distinguished from that of the previous phases, with exception of two ware types. Late shell-tempered wares (LSH), dating to the late 3rd and 4th centuries AD, derived from ditch fills 5514, 5520 and 0520/70519. The latter fill produced a Type 4.5 jar with limescale on its interior, suggesting that it was used as a kettle. The final Roman phase is also characterised by Nene Valley colour coated wares (NVC), dating to the same period as the late shell-tempered wares (LSH). Nene Valley pottery from the site includes elaborate shapes, such as three beakers from pit fill 5111 and ditch fills 5148 and 5371, a Type 6.2.1 lid from ditch fill 5251/70301, and a castor box with rouletting from pit fill 5252.

Vessel numbers and ceramic forms

The ENVs recorded in Appendix 6b show that the Roman assemblage is formed by a minimum of 193 vessels, representing 21.11 EVEs by an average rim diameter of 16.7cm. This number comes from various rim sherds and a few bases or other

angular sherds. The minimum number of vessels based on rim sherds only is 153, which coincides with 21.11 EVEs. The quantification of the rims by vessel form is presented in Table 84. This shows that the Roman assemblage primarily consists of domestic forms, such as jars and bowls, including a few specialised wares, such as mortaria, beakers and a castor box.

Ceramic form	MNV	% MNV	EVEs	% EVEs
Beakers, beakers?	10	6.5	1.82	8.6
Bowls, bowls	34	22.2	3.95	18.7
Bowls or platter	3	2.0	0.06	0.3
Castor box	1	0.7	0	0.0
Samian bowls	11	7.2	1.06	5.0
Narrow-mouthed jars	6	3.9	0.91	4.3
Jars or bowls	3	2.0	0.19	0.9
Jars, jars?	76	49.7	12.81	60.7
Lid	1	0.7	0.07	0.3
Mortaria	2	1.3	0.07	0.3
Platters	2	1.3	0	0.0
Storage jars	4	2.6	0.17	0.8
Totals	153	100.0	21.11	100.0

Table 84. Quantification of vessel forms from FAS 056 by ENVs and EVEs

Distribution of pottery by features

Table 85 presents the distribution of Roman pottery by feature types. According to the table, 54.7% of the pottery by sherd count, or 64.6% by weight, derived from ditches, followed by significantly less quantities that derived from quarry fills and pit fills. The distribution of the Roman pottery is distinctively different compared to that of the prehistoric pottery from the same site. The prehistoric sherds were primarily recovered from pits and burnt mounds; whilst by contrast the Roman pottery was primarily recovered from ditches. This distribution is likely to suggest that the Roman phases of the site were tied to distinct settlement functions.

Feature type	No	% No	Wt/g	% Wt/g
Boundary ditch	3	0.1	6	0.0
Burnt mound	7	0.3	23	0.1
Ditch	1185	54.7	12286	64.6
Ditch driveway	3	0.1	15	0.1
Gully	1	0.0	2	0.0
Natural	10	0.5	21	0.1
Pit	340	15.7	2495	13.1
Posthole	2	0.1	30	0.2
Pot fill	37	1.7	1172	6.2
Quarry	523	24.2	2558	13.5
Subsoil	13	0.6	84	0.4

Feature type	No	% No	Wt/g	% Wt/g
Topsoil	2	0.1	18	0.1
Unstratified	17	0.8	123	0.6
Well	22	1.0	178	0.9
Totals	2165	100.0	19011	100.0

Table 85. Distribution of Roman pottery from FAS 056 by feature type

Post-Roman pottery

Sue Anderson

Introduction and methodology

Post-Roman pottery was recovered from both sites as listed in Tables 86 and 87. The tables also show that pottery of this date forms only a small percentage of the total ceramic assemblage.

The pottery from both sites was recorded following MPRG Guidelines (MPRG 2001). A summary catalogue is included in Appendix 7a and 7b and a full catalogue is available in the archive as an MS Access database.

The post-Roman pottery from FAS 055

Fifty-eight sherds of post-Roman pottery were collected from seven contexts during the evaluation and excavation. The fragments represented a minimum (MNV) of 21 vessels with an estimated vessel equivalent (EVE) of 0.38. Table 86 shows the quantification by fabric.

Fabric	Code	Date range	No	Wt/g	eve	MNV
Medieval coarseware 1	MCW1	12th-14th c.	23	114	0.16	7
Medieval coarseware 2	MCW2	12th-14th c.	22	195	0.15	6
Bury medieval coarseware	BMCW	L.12th-14th c.	1	9		1
Grimston-type ware	GRIM	L.12th-14th c.	3	32		2
Colchester Ware	COLC	L.13th-M.16th c.	1	2		1
Hedingham Ware	HFW1	M.12th-M.13th c.	6	16	0.07	2
Waveney Valley glazed wares	WVGW	13th-14th c.?	1	3		1
Late medieval and transitional wares	LMT	15th-16th c.	1	14		1
Totals			58	385	0.38	21

Table 86. Post-Roman pottery quantities from FAS 056 by fabric

Sandy grey wares are the most frequent type in the assemblage. The majority were in two main fabric groups, as follows:

MCW1: Grey ware, varying from light grey to black, sometimes with oxidised margins. Moderate white/uncoloured fine sand, common mica, occasional rounded haematite.

MCW2: Grey ware, sometimes with oxidised margins and/or core. Sparse fine sand in a softish fine silty matrix, moderate to abundant mica, sparse rounded red clay pellets.

Several fragments of a large bowl with a flat-topped everted rim in MCW2 were recovered from ditch fills 60561–60563. Also found in these contexts were fragments of an unusual vessel with an undulating shoulder profile, again in MCW2. Fourteen sherds of an MCW1 jar with a flat-topped beaded rim were recovered from ditch fill 60566, and an MCW1 handle came from ditch fill 60554. One body sherd of Bury-type medieval coarseware was found in pit fill 9005.

Glazed wares of medieval date comprised sherds of two Grimston-type ware vessels, one of which had brown slip line decoration (in linear fill 60554 and ditch fill 60561) and one of which was plain green glazed (in ditch fill 60563), six sherds of two Hedingham glazed ware vessels (jug rim and body in ditch fill 60565, body sherds in ditch fill 60562), and a Waveney Valley-type glazed ware (or possibly LMT) in ditch fill 60562. An unglazed Colchester-type ware body sherd was recovered from ditch fill 60562. A sherd of LMT was recovered from pit fill 9005.

The majority of this assemblage was recovered during the evaluation and has been reported on in more detail previously (Goffin 2013). Only pit fill 9005 in the excavation contained pottery of this date, and the pottery recovered suggests a date no earlier than the late 14th century for this feature.

The post-Roman pottery from FAS 056

Nineteen sherds of post-Roman pottery were collected from fifteen contexts during the evaluation and excavation. The fragments represented a minimum (MNV) of seventeen vessels with an estimated vessel equivalent (eve) of 0.11. Table 87 shows

the quantification by fabric. A summary catalogue is included in Appendix 7b and a full catalogue is available in the archive as an MS Access database.

Fabric	Code	Date range	No	Wt/g	eve	MNV
Hollesley-type coarseware	HOLL	L.13th-14th c.	4	12		3
Hedingham Ware	HFW1	M.12th-M.13th c.	1	3		1
Grimston-type ware	GRIM	L.12th-14th c.	2	5		2
Late medieval and transitional	LMT	15th-16th c.	1	12		1
Iron-glazed blackwares	IGBW	16th-18th c.	1	9		1
Glazed red earthenware	GRE	16th-18th c.	7	49	0.05	6
Post-medieval whitewares	PMWW	16th-18th c.	1	7	0.06	1
Late post-medieval unglazed earthenwares	LPME	18th-20th c.	2	18		2
Totals			19	115	0.11	17

Table 87. Post-Roman pottery quantities from FAS 056 by fabric

All medieval coarseware in this small assemblage was of Hollesley type, in contrast to the more local wares identified at FAS 055. One small sherd of Hedingham glazed ware and two small sherds of Grimston ware were also recovered (one decorated with lines of fingernail impressions), and there was a body sherd of LMT. Medieval sherds were generally small and abraded, and likely to be residual.

The majority of this assemblage was of post-medieval date and comprised fragments of glazed red earthenware, including a dish/plate rim, an iron-glazed blackware handle fragment from a mug, a post-medieval whiteware rim fragment and two pieces of plantpot.

Table 88 shows the distribution by context. Most sherds were recovered from the EX2 area.

Area	Feature	Context	Type	No	Fabrics	Spotdate
EX 2	-	5002	Subsoil	1	IGBW	16th-18th c.
EX 2	5061	5062	Pit	1	GRE	16th-18th c.
EX 2	5076	5077	Tree throw	1	HOLL	L.13th-14th c.
EX 2	5112	5121	Pit	1	GRE	16th-18th c.
EX 2	5122	5123	Pit	1	HOLL	L.13th-14th c.
EX 2	5357	5358	Pit	1	GRIM	L.12th-14th c.
EX 2	5425	5426	Quarry	1	HFW1	M.12th-E.14th c.
EX 2	5431	5432	Pit	1	GRIM	L.12th-14th c.
EX 2	5506	5507	Tree throw	2	GRE	16th-18th c.
FAS 050 EVAL		70318	Finds	1	LMT	L.14h-16th c.
FAS 050 EVAL	70202	70202	Deposit	1	GRE	16th-18th c.
P1 EX	11012	11012	Topsoil	1	GRE	16th-18th c.
P1 EX	11103	11104	Ditch	1	PMWW?	16th-18th c.?
P2		12000	Topsoil	3	GRE LPME	19th c.+
P2	12025	12026	Ditch	2	HOLL	L.13th-14th c.

Table 88. Post-Roman pottery distribution and spotdates from FAS 056

Much of this assemblage probably represents material scattered on the field during manuring activity and is unlikely to represent occupation on the site in these periods.

5.3.3 Ceramic Building Material

Sue Anderson

Introduction and methodology

Ceramic building material was recovered from both the sites, although only in very small quantities from FAS 055. The assemblage was quantified by context, fabric and type, using fragment count and weight in grams. Fabrics are based on coarseness of sand within the matrix and major inclusions, but for smaller fragments this may mean classification simply on the basis of the sand content. Roman forms were identified with the aid of Brodrigg (1987), and post-medieval forms are based on Drury (1993). The presence of burning, combing, finger marks, mortar and other surface treatments was recorded. Roman tile thicknesses were measured. Data were input into an MS Access database, which forms the archive catalogue.

The Ceramic building material from FAS 055

Three fragments of CBM (29 grams) were recovered from two contexts in this area (Appendix 8a). A fragment of post-medieval plain roof tile in a fine sandy micaceous fabric was recovered from post-hole fill 1014 (Sample 24). Two fragments of a medieval plain roof tile in an estuarine clay fabric were found in ditch fill 60566.

The Ceramic building material from FAS 056

CBM totalling 80 fragments (5,187 grams) was recovered from forty-three contexts (Appendix 8b). The assemblage is generally in poor condition with a high proportion of abraded material, some of which could not be positively identified to form. Table 90 shows the basic fabric types identified in this assemblage, and the total quantities of CBM forms for each (uncertain forms are merged with more certain).

Fabric	Description	RBT	RTM	RTP	RT?	RID	PAN	LB	VOUS	FB	UN
est	estuarine clay		4								
est(cs)	estuarine clay and coarse sand		1								
fs	fine sandy, no obvious inclusions	1	1	12			1	10			2

Fabric	Description	RBT	RTM	RTP	RT?	RID	PAN	LB	VOUS	FB	UN
ms	medium sandy, no obvious inclusions			2							1
fsc	fine sandy with chalk	3									
fsv	fine sandy with voids (leached chalk)	5									
fscp	fine sandy with clay pellets	4								1	
fsf	fine sandy with flint			1				7		1	
msf	medium sandy with flint			4				6			
fsfe	fine sandy with ferrous inclusions			3							
msfe	medium sandy with ferrous inclusions			4				1			
fsgfe	fsfe with grog			1							
msg	medium sandy with grog						1				
fsm	fine sandy micaceous				1						
fsx	fine sandy poorly mixed					1					
wfsf	white-firing fine sandy with flint								1		
Totals		13	6	27	1	1	2	24	1	2	3
Total weight (g)		1178	35	387	81	62	113	425	1806	1088	12

Table 89. CBM fabric descriptions and quantities (fragment count) from FAS 056

Thirteen fragments of twelve Roman tiles were recovered, all of uncertain type (RBT). They were in fine sandy fabrics, mostly with chalk or clay pellet inclusions. Nine thicknesses were measurable, varying between 23–35mm, suggesting that both roof tiles and wall/floor tiles may be present in the assemblage. Most fragments had reduced cores and were in both soft and harder fabrics. Several pieces had been burnt after firing and had one reduced surface. All fragments were recovered from ditch fills (5514, 5520, 5533 and 70538) located at the south end of ditch enclosure group 5535 in Area EX2.

There were six fragments of medieval roof tile (RTM), recovered from pit fill 5446 (EX 2) and ditch fill 12026 (P2). Most were in estuarine clay, but there was one fine sandy fragment with a reduced core.

All other CBM recovered from this site was post-medieval and was in a range of fabrics typical of the region. Twenty-four fragments of late brick (LB) were recovered. Most pieces were small and abraded, with only one fragment from quarry fill 12423 being measurable (60mm thick). There was also a near-complete white-firing arch brick (VOUS) with measured 200+mm long, 59mm thick and tapered from 100–110mm wide, recovered from ditch fill 2003. Two fragments of floor bricks (FB) with

worn surfaces measured 43mm thick (ditch fill 11104) and 120mm wide by 45mm thick (ditch fill 70341).

Post-medieval plain roof tile (RTP) was the most frequent CBM type, but fragments were generally small and unremarkable. A piece from quarry fill 12423 had a circular peg hole, and fragments from this context and N-Quad hollow fill 12551 had thick patches of white lime mortar adhering. Other post-medieval roofing material included a small fragment of ridge tile (RID; topsoil 12000) and two pieces of pantile (PAN; ditch 2596, ditch fill 11106), one of which was black-glazed.

Two fragments were unidentified (UN) due to their small size or lack of diagnostic features. One fragment was a possible roof tile (RT?) of uncertain date.

Table 90 shows the quantities and types of CBM by area.

Form	EX2	P1 EX	P2	SME1	SME2	EVAL
RBT	12					1
RTM	5		1			
LB	11	1	1			
LB?	5	1			5	
VOUS				1		
FB		1				1
RTP	2	10	4	1	5	
RTP?	2				3	
RT?		1				
PAN		1			1	
RID			1			
UN	2				1	
Totals	39	15	7	2	15	2

Table 90. Distribution of CBM (fragment count) by area from FAS 056

The majority of fragments were recovered from ditches, pits and subsoil/topsoil layers. A few fragments of post-medieval date were presumably intrusive in the burnt mound 2812. There was a small concentration of Roman CBM at the southern limit of EX2, which may indicate the presence of a building of this period somewhere close by. The small quantities of post-Roman CBM spread thinly across the site and as a whole do not indicate that any major buildings of the medieval and post-medieval periods were present. Small fragments of CBM probably reached the site through manuring and other agricultural activity from the Roman period onwards.

5.3.4 Fired Clay

Sue Anderson

Introduction and methodology

Fired clay was recovered from both sites. The assemblages were fully catalogued and quantified by context, fabric and type, using fragment count and weight in grams. The presence and form of surface fragments and impressions were recorded, and wattle dimensions measured where possible. Data were input into an MS Access database which forms the archive catalogue.

The fired clay from FAS 055

A total of 513 fragments of fired clay (2,531 grams) was recovered from fifty-seven contexts (Appendix 9a). This quantity includes eleven 'objects' (thirty-two fragments) which had previously been separated for inclusion with the small finds (SF) assemblage. The small finds group was included in the assessment of the main fired clay assemblage, but only for the purposes of comparison of fabrics and to aid in identification of further fragments of loomweights and other objects. As a result, a further sixty-eight fragments (445 grams) were identified as possible or probable loomweights and these have been extracted for inclusion with the small finds analysis. The following report comprises an assessment of the remainder of the fired clay (413 fragments weighing 854 grams).

Table 91 shows the basic fabric types identified in this assemblage, and the total quantities of fired clay for each. Quantities of loomweight fragments are also included for comparison.

Fabric	Types Description	Misc		Loomweights	
		No	Wt/g	No	Wt/g
fs/ms	fine/medium sandy with few other inclusions, usually soft and oxidised	91	101	9	45
fsv/fsc	fine sandy with voids which are probably the result of leaching of chalk inclusions, or fine sandy with chalk (often some chalk is present in fsv)	130	374	45	726
fsf/msf	fine/medium sandy with moderate to common coarse flint/quartz inclusions, often hard and red	94	270	36	856
fsfc	fine sandy with chalk and coarse flint inclusions	24	61		
fso	medium sandy with voids representing sparse organic inclusions	73	43		
fsffe	fine sandy with flint and haematite			10	50
fsm	fine sandy micaceous	1	5		
Totals		413	854	100	1677

Table 91. Fired clay fabrics and quantities from FAS 055

None of the pieces in the bulk fired clay were diagnostic for function. Many fragments were small, abraded, amorphous lumps. Fine sandy fabrics with chalk (or more commonly voids) are the most common type, although pieces tempered only with sand, or sand and occasional flint, are also common. Loomweights from this site are also commonly in fabrics fsc/fsv and msf. Where surfaces were present, these were generally slightly convex or flattish and it seems likely that most of this material was used to form objects, particularly loomweights, rather than being used for structural purposes. Fragments of structural daub are identified by the presence of impressions of withies, either running parallel to each other or at right-angles. There were no examples of this in the current assemblage, nor were there any pieces which could be attributed to hearth lining.

Fragments of red fired clay with narrow voids, which seemed to indicate that they contained abundant grass, were recovered from seven contexts, although only pit fill 0064 contained more than 10 grams of this material. The use of grass as a temper is a trait commonly seen in salt-making briquetage. This material is occasionally found on inland sites and may represent vessels in which the salt was transported from the red hill sites on the coast. Normally some traces of vitrification might be expected and none of the fragments from Fornham showed evidence for this, but none had any surviving original surfaces.

The majority of fired clay was recovered from pits (402 fragments weighing 846 grams), with eleven fragments (8 grams) from post-holes. Loomweight fragments were also largely from pits, with only a few fragments recovered from ditches. As contexts are currently undated, no further comments are possible on distribution of the material across the site or through time.

The fired clay from FAS 056

A total of 539 fragments of fired clay (2,526 grams) was recovered from 65 contexts (Appendix 9b). This quantity includes five 'objects' (seventeen fragments) which had previously been separated for inclusion with the small finds (SF) assemblage. The SF group was included in the assessment of the main fired clay assemblage, but only for the purposes of comparison of fabrics and to aid in identification of further fragments of loomweights and other objects. As a result, a further 64 fragments

(1107 grams) were identified as possible or probable loomweights, and these have been extracted for inclusion with the SF analysis. Six fragments were collected as SF5113, one of which is an uncertain object and two are in other fabrics; the latter two have been included in the bulk finds assessment. The following report comprises an assessment of the non-SF fired clay (460 fragments; 1,355 grams).

Table 92 shows the basic fabric types identified in this assemblage, and the total quantities of fired clay for each. Quantities of loomweight fragments are also included for comparison.

Fabric	Description	Misc		Small finds	
		No	Wt/g	No	Wt/g
fs/ms	fine/medium sandy with few other inclusions, usually soft and oxidised	99	161		
fsv/fsc/ msc	fine/medium sandy with voids which are probably the result of leaching of chalk inclusions, or fine sandy with chalk (often some chalk is present in fsv)	242	436	59	984
fsf/msf	fine/medium sandy with moderate to common coarse flint/quartz inclusions, often hard and red	112	435	20	492
fsfv	fine sandy with voids (chalk) and coarse flint inclusions	1	3		
fso	medium sandy with voids representing sparse organic inclusions	2	7		
shelly	abundant limestone shell inclusions	4	8		
Totals		460	1050	79	1476

Table 92. Fired clay fabrics and quantities

This assemblage is very similar to that from FAS 055, with similar proportions of fabrics. Again, much of the unidentified material seems likely to be fragments of loomweights or other objects. There was no evidence for structural material in the form of daub, and no hearth linings were identified. Fourteen fragments of red clay in 'msf' fabric from pit fill 12247 appeared to have combed lines on the surface, possibly indicating that they were part of a mould or object of unknown function, but the pieces were too small and fragmentary to be certain. The limestone shell-tempered clay is an unusual find in this area, but the fragments could possibly be pieces of Roman CBM; like the other Roman tile, they were found in boundary ditch 5535.

Table 93 shows the distribution of fired clay across the site by area and feature type. Most of the bulk fired clay was recovered from pits and ditch fills in areas EX2 and P2. The large quantity from the evaluation includes 188 pieces recovered from bulk

samples of ditch 5251. The majority of small finds and other loomweight fragments were recovered from pits and a post-hole in Area P2, with thirteen fragments from a ditch in Area EX2.

Feature Type	EX 2	P1 EX	P2	SME1	SME2	EVAL
Pit	58	1	67	7	7	58
Posthole	2		11	1	4	
Ditch	35				1	188
Boundary ditch			1			
Quarry	1					
Well			1			
Burnt mound					4	
Tree throw	1					
Natural hollow					2	
N Quad Fill			1			
2m Subdiv			9			
Totals	97	1	90	8	18	246

Table 93. Fired clay distribution (fabric count) by area and feature type

5.3.5 Worked Flint

Sarah Bates

Introduction and methodology

A single Access database has been created for all of the flint from the Marham Park sites and contexts subject to assessment. The flint is recorded by site code and context. Flint from the evaluation of the site, previously recorded as FAS 050, has been included in the database where the contexts are within or near the subsequently excavated sites. These context numbers have been assigned pre-fixes 6(0000) and 7(0000) where associated, respectively, with sites FAS 055 and FAS 056. Flint from the evaluation has not been re-examined at assessment but it is summarised under its previous site code below. Appendix 10a includes all the FAS 055 material and its associated contexts from the FAS050 evaluation. Appendix 10b includes all the FAS 056 material and its associated contexts from the FAS050 evaluation.

For ease of referral and locating flints (during assessment and analysis), boxes of flint from the excavations have been numbered 1-42 (Table 94). Box numbers have been recorded on each box (in pencil), and along with relevant context numbers, in a table in the flint database where the progress of work at assessment is also noted.

Seven boxes of bulk-found flint have been fully catalogued at assessment. These boxes include material suggested by the Project Officer, including contexts of particular potential interest, and material providing potential for possible basic comparison of different context types. All other boxes have been scanned; some notes have been made, which may help during analysis, and summary comments are included below.

According to the Suffolk Archaeology context database, totals of 11,660 bulk-found flints and 435 flint small finds came from the Marham sites (Table 95). Sixty non-struck fragments were discarded from the bulk flint during assessment and some others are likely to be discarded during cataloguing at analysis. The material is assessed below separately by site codes (FAS 055 and FAS 056). The descriptions of small finds are those used in the small finds register. Small finds have not been examined (except summarily) at assessment.

Site	Box no.	Content
FAS 055	1-3	Bulk finds
FAS 055	4	Small finds
FAS 056	5-39	Bulk finds
FAS 056	40-42	Small finds

Table 94. Boxed flint catalogue

Original site code	Bulk flints	Flint small finds	Non-struck/discarded (at assessment)
FAS 055	1002	19	34
FAS 056	10658	416	26
Total	11660	435	60

Table 95. Totals of flint from both sites

Flint from FAS 050

Flint from the evaluation of the site has been reported on previously (Bates 2013a; 2013b). A small number of pieces of possible Mesolithic or earlier Neolithic date, a later Neolithic arrowhead and a scraper, which was probably of the same date were included. Most of the material, however, was thought likely to be of later Bronze Age or Iron Age date. Pottery from the site was not closely dated at the time of the evaluation reporting. Flint was mainly recovered from pits with some coming from other excavated contexts and the topsoil.

Flint from FAS 055

EX1 East

No flint from this area has been catalogued at assessment (Box 1, Contexts 0001-0151). Flint came from two adjacent pits, one Bronze Age, the other undated by ceramics, with thirty-four pieces from pit 0012. The flint from these two features includes some neater thinner pieces, which are consistent in nature with being of an earlier date than most of the flint from the site. They include a small narrow piece with retouched/batter all along its pronounced dorsal ridge, possibly a platform edge rejuvenation piece or 'crested' blade. It is also notable that some thin blade-like flints came from an otherwise undated gully 0033. Small numbers of flints came from Iron Age pit group 0654, mostly single pieces but with one pit including sixteen flints. The pits are interpreted as storage pits, suggesting that the flint may be redeposited, but it is possible that the material represents contemporary knapping. Struck flint was found in a few other features in this area, mostly pits and including some tree holes, some of which were of likely prehistoric date or were undated. Some flint also came from later features and from the subsoil. No small finds were recovered from this area.

EX1 West

No flint from this area has been catalogued at assessment (Boxes 1-3). Small numbers of undiagnostic flakes were found in tree hole 0225 which may date to the later Bronze Age (or later), and from the later Bronze Age-Iron Age pit 0491. By far, the majority of flint from the area was from Iron Age pits, most of which are thought to be storage pits. A range of flint is present with thicker flakes and fragments in some features and smaller flakes predominating in others. Generally, the flint is irregular in nature and much of it could be of Iron Age date. Twelve hammerstones, a barbed and tanged arrowhead, a 'thumbnail' type scraper and a retouched flake are recorded as small finds. The arrowhead and, probably, the scraper are residual but the prevalence of hammerstones may be significant. Fifteen flints were found in a curvilinear gully which was probably associated with one Iron Age pit group; no flint came from any of the postholes of a possible four-post grain store. Other flint was found in undated pits, tree holes and a posthole. Of possible note are two hammerstone fragments from one pit which may be significant, considering that others were found in the dated Iron Age pits (see above). Very small numbers of flints came from various post-medieval ditch fills.

EX1 West volunteer project

No flint from this area has been catalogued at assessment (Box 3). The flint was almost all recovered by volunteers, from the remaining 50% of the fills of the Iron Age pits excavated in EX1 West. Most of the flint appears to be quite irregular (flakes and fragments) and consistent with a later prehistoric date. A few thinner and slightly abraded flakes were noted from pit fill 8047 and elsewhere, and may represent a residual element. Three small finds were recovered from this area; two hammerstones and an incomplete barbed and tanged arrowhead.

EX4

No flint from this area has been catalogued at assessment (Box 2). Flints were recovered in small numbers from some Iron Age pits, interpreted as possible extraction pits, and some of which were part of pit group 1546. A few more were found in a nearby hollow which also included Iron Age pottery. A few quite neat thin pieces were included in those from the pits; the very small feature assemblages (mostly one or two pieces) make interpretation difficult but at least one, a patinated blade, is probably residual. The material from the hollow comprises more irregular flakes. Small numbers of flints, including some irregular chunky cortical fragments, also came from three natural hollows. No small finds were recovered from this area.

SME4

No flint from this area has been catalogued at assessment (Box 2). A total of only seven flints were recovered from three contexts; two post-medieval ditches and a possible modern trench cutting through/across a natural hollow. No small finds were recovered.

SME5

No flint from this area has been catalogued at assessment (Box 3). A total of seventeen flints came from only two contexts; a medieval quarry pit and the subsoil. No small finds were recovered from this area.

Flint from FAS 056

Ex2

Some flint from this area has been catalogued at assessment (Box 28, contexts 5307-5408), other flint is as yet uncatalogued (Boxes 26, 27, 29 and 30). Forty-six flints came from pit 5403 near the north edge of this area. They include shatter, flakes, a couple of blade type pieces and three scrapers. Of particular note is a thin bifacially flaked tool SF 2181, incomplete and patinated, possibly part of a dagger. Early Bronze Age pottery from the pit includes Beaker sherds.

Flint from the gullies of a Bronze Age drove-way appears to include a range of flakes, although only a small number of pieces have been catalogued. Almost forty flints in total, including two scrapers, SF 2112 and SF 2150, came from Bronze Age pit group 5186 and flints also came from Bronze Age pits/postholes near the north edge of the area. A large Bronze Age hollow in the central/east of the area also included flint in its fills, mostly bulk material uncatalogued at assessment but also two small finds: a scraper and part of a barbed and tanged arrowhead.

Flint was recovered mostly in quite small amounts from Iron Age pits near the drove-way in the northern area (some catalogued at assessment) and one or two residual blades were present. Also included were SF 2115 and SF 2162, a possible denticulated blade and a scraper. A larger number of flakes and other pieces, not catalogued at assessment, came from pit 5043 further to the south. The material appears to be quite similar in nature and flint type; refits may exist.

No flint was found in the fills of the Iron Age four-post structure 5324 but a few pieces came from nearby and from the contemporary five-post structure 5355; these were mostly spalls, but also including flakes and blade-type pieces, one of the latter utilised or serrated.

Flint was also present in various other contexts; many dated to the Bronze Age or Iron Age at assessment, but the material is mostly uncatalogued. Flint also came from features which were part of, or associated with, a ditched enclosure of Roman date as well as in a fair number of undated features, including a few tree holes. Arrowhead SF 2219 and two scrapers, SF 2200 and SF 2273, were found in Roman contexts.

Flint was the largest category of finds from this area. It was recovered from features dating from different prehistoric periods and was also found residually in later features.

SME1

No flint from this area has been catalogued at assessment (Box 5). Flint came from each of five Bronze Age pits in Group 2018, just over forty pieces in total. The flints were mostly quite small flakes; a few slightly larger pieces were present. A few other flints were found in two isolated pits of the same likely date and more flint came from various fills of Bronze Age ditch group 2103. Flint came from a small number of Iron Age pits at the north end of the area where it mostly occurred in small amounts. Only three pieces came from fills of an Iron Age enclosure to the south-west. A few other flints were found in undated features and in a post-medieval ditch. The only flint small find from the area is scraper SF 2394 from an undated pit.

SME2

A very large amount of flint came from the work in this area which included the excavation of Bronze Age Burnt Mound 1 and associated features/deposits as well as few other features (Boxes 5-25). Four boxes have been fully catalogued at assessment; they include Box 17, which contained flint from mound-related contexts, and Boxes 23-25, which included flint from some other features; mostly, the flint is from the burnt mound deposit and associated contexts. Much of the flint from the burnt mound and other associated features was recorded by sub-contexts such as quadrants and grid squares as well as stratigraphically. Flint debitage, which was not catalogued at assessment, possibly including other modified pieces and weighing 3024 grams, came from pit 2921 along with twenty-three small finds (see below).

Within the catalogued element of the area assemblage, cores and core fragments, struck and shatter fragments, flakes, some blade type pieces and relatively small numbers of spalls and chips were included, as well as miscellaneous retouched and utilised flakes, fragments and a few 'formal' tools. Many other tools were recorded as small finds and have not been closely examined/catalogued at assessment (see below). Debitage was often quite similar in nature with thickish and cortical flakes,

and fragments being most common. Some flint, notably some from the mound and related features, was edge-damaged but miscellaneous retouched/utilised pieces were also present. In a couple of cases burnt blade type pieces were present and might have been residual. In two or three different context refits were identified and others almost certainly occurred. Two refitting flakes were identified from pit 12161.

Nearly 260 flints in total came from Iron Age ditched enclosure 2634; they included three small found scrapers. The likelihood of residual Bronze Age material is high since the ditch cut across the area of the earlier burnt mound. A lesser number of flints, including one small found scraper, came from a Roman ditch which crossed area SME2 immediately to the south of the mound.

Some flints were also found in fills of natural features and a few undated features. Numerous flints from SME2 were recorded as small finds, more than 330 pieces in total and the majority of these recovered from contexts associated with the burnt mound. Scrapers were by far the most common type although these were often rather irregular or with minimal retouch; some other tools were also found including an unusual elongate possible adze, up to four arrowheads, a hammerstone and a few other tools not classified in the provisional small finds database and not examined at assessment. Summary assessment of the flint small finds from pit 2921 within Burnt Mound 1 suggests that these pieces may be smaller and somewhat more carefully made than many of the others from the site; other feature groups have not been looked at in detail.

Phase 1 Extra

This comprised two separate areas; one to the NW of area P2 and the other an X-shaped area at the south end of P2. No flint from these areas was been catalogued at assessment (Box 31, contexts 11001-11142).

Small to medium sized assemblages came from each of three Bronze Age pits in the southern area, including one small-found scraper, and another Bronze Age pit to the NW. Some flint from a Roman ditch in the southern area possibly derived from activity relating to the nearby earlier pits. The rest of the flint from the area, however, was mostly recovered from fills of two related/parallel Iron Age ditches in the NW

area. A hammerstone and another small find, described in the provisional small finds register as a spearhead, were included. It was noted during assessment that the flint from area P1 Extra comprised a range of material with some sharp debitage and a few contexts including abraded or edge-damaged pieces.

Phase 2

A large amount of flint came from the work in this area which included the excavation of Bronze Age Burnt Mound 2 and associated features/deposits, as well as many other features (Boxes 32-39). Only Box 33 has been catalogued at assessment. This includes some flint found with Neolithic/Earlier Bronze Age pottery in tree hole 12225, mostly sharp and quite small flakes, and also a crude 'serrated' blade with abraded platform edge. Sharp flint, mostly flakes, but also a small slightly edge-utilised neat blade, came from another tree hole, 12211, along with early Bronze Age pottery.

A relatively large number of flints were found with Neolithic/Early Bronze Age pottery in tree hole 12331. Similar-looking flakes and shatter fragments appeared to be present (possibly some pieces refit), but this material has not been catalogued at assessment. It was noted that an occasional patinated neater blade-type piece was present.

Most of the flint from this area was from and associated with burnt mound 2 (Boxes 36-39); it has not yet been catalogued or assessed in detail. Much of it was recorded by sub-contexts such as quadrants and grid squares, as well as stratigraphically. Smaller amounts of flint were found in other Bronze Age features including pits, postholes of structures 12208, 12338, 12458 and in ditches; in Iron Age ditches and pits; Roman ditches and in some undated features.

Forty-five flints from the area were recorded as small finds. Scrapers were the most common type and these were mainly from Bronze Age contexts, although also present in Iron Age and Roman contexts. Two burins and three arrow-heads of various types were also recorded in the provisional small finds database table. A number of hammer-stones were, notably, from Iron Age pits.

5.3.6 Heat-altered Flint and Heat-altered Stone

Ioannis Smyrnaiois

Introduction and methodology

Both sites produced large quantities of heat-altered flint and stone, as listed in Appendix 11a and 11b. This assemblage was quickly scanned to assess the basic characteristics and potential of the material. Both artefact categories are recorded by number (piece count) and weight in grams in Appendix 11a, and the condition of the material is described in the comments column. Piece counts for heat-altered flint are not always included as much of the material, particularly that deriving from soil samples, consists of numerous tiny fragments in poor condition. Furthermore, the material includes pieces that are clearly heat-altered and heavily cracked after contact with high temperatures; low-fired and partly-fired pieces; and finally, unfired pieces with patination or natural frost alteration on their surfaces, which were mistakenly collected as heat-altered material. The latter material was not separated for the needs of this assessment and future work should include a better re-quantification of heat-altered flint. The heat-altered stone from the site consists of larger and heavier fragments compared to the heat-altered flint; therefore, the identification of this material is easier and its quantification in Appendix 11a and 11b is accurate, including both fragment counts and weights in grams.

As fragment counts were not consistently recorded during the quantification of both artefact categories, it was decided that heat-altered flint and heat-altered stone should be discussed in relation to weight only. For this reason, Appendix 11a and 11b includes columns that present the quantification of both artefact categories by weight percentage per context. Such quantification offers information on the features that produced the largest percentages of the same material.

Heat-altered flint and heat-altered stone from FAS 055

The site produced 59.5 kilograms of heat-altered flint and 85.8 kilograms of heat-altered stone, primarily quartzite/sandstone. The heat-altered flint derived from 226 contexts including sixty-eight samples; the heat-altered stone was collected from 135 contexts including twenty-seven samples.

Quantification

Table 96 presents the quantification of the material by feature type. According to the table, 96.7% of the total heat-altered flint derived from pit fills, followed by a significantly smaller percentage that derived from tree throws. Pit fills also produced 95.6% of the total heat-altered stone, followed by ditch fills and tree throws, which produced significantly less material.

Feature type	HAF Wt/g	% HAF Wt/g	HAS Wt/g	% HAS Wt/g
Bioturbation	11	0.018	0	0.000
Ditch	348	0.585	1599	1.864
Glacial hollow	40	0.067	0	0.000
Grave	77	0.129	0	0.000
Gully	120	0.202	682	0.795
Hollow	17	0.029	0	0.000
Pit	57548	96.714	81979	95.557
Posthole	38	0.064	0	0.000
Root disturbance	11	0.018	0	0.000
Tree throw	1293	2.173	1531	1.785
Totals	59503	100.000	85791	100.000

Table 96. Quantification of heat-altered flint, heat-altered and plain stone from FAS 055

As noted in Appendix 11a, the largest percentages of heat-altered flint derived from pit fills 0380, 8012, 8033 and 8057. Each of these fills produced over four kilograms of material, exceeding 7% in relation to the total heat-altered flint weight per context. Pit fill 0380 in particular, produced 11.3% of the total heat-altered flint assemblage from the entire site. By contrast, the largest quantity of heat-altered stone derived from pit fill 0428, which produced 11.9 kilograms of material representing 13.8% of the assemblage's weight. Pit fills 8033, 0314 and 8072 produced significantly smaller quantities of heat-altered stone, weighing between three and four kilograms, and ranging between 4% and 4.5% of the total weight.

Heat-altered flint and heat-altered stone from FAS 056

The site produced 381.6 kilograms of burnt flint and 56.8 kilograms of heat-altered stone, primarily quartzite/sandstone. The heat-altered flint derived from 382 contexts including 114 samples whilst the heat-altered stone was recovered from 110 contexts including eighteen samples.

Quantification

Table 97 presents the quantification of the material by feature type. According to the table, 55.1% of the total heat-altered flint derived from pit fills, and 37.2% derived from burnt mounds. Pit fills also produced 79.7% of the total heat-altered stone, followed by ditch fills and burnt mounds, which produced significantly less material.

Feature type	HAF Wt/g	% HAF Wt/g	HAS Wt/g	% HAS Wt/g
Bioturbation	15	0.004	289	0.509
Boundary ditch	328	0.086	0	0.000
Burnt mound	141837	37.169	1384	2.436
Burnt pit	1291	0.338	0	0.000
Cremation	21	0.006	20	0.035
Deposit layer	0	0.000	274	0.482
Ditch	9728	2.549	4513	7.942
Ditch recut	243	0.064	98	0.172
Ditch terminus	1327	0.348	541	0.952
Ditch/droeway	28	0.007	0	0.000
Fired clay dump	40	0.010	247	0.435
Gully	224	0.059	0	0.000
Gully terminus	101	0.026	286	0.503
Hollow	747	0.196	143	0.252
Natural feature	772	0.202	0	0.000
Pit	210440	55.147	45299	79.715
?Hedgeline	155	0.041	0	0.000
Posthole	13471	3.530	2554	4.494
Quarry	32	0.008	486	0.855
Tree throw	785	0.206	692	1.218
Well	4	0.001	0	0.000
Totals	381598	100.000	56826	100.000

Table 97. Quantification of heat-altered flint and heat-altered stone from FAS 056

As noted in Appendix 11b, the largest percentages of heat-altered flint derived from burnt mound fills 2912 and 2887, and pit fills 2924, 2933, 2920 and 2927. Each of these fills produced over fifteen kilograms of material, exceeding 4% in relation to the total heat-altered flint weight per context. Burnt mound fill 2887 and pit fill 2927 produced the largest quantities of heat-altered flint from the site, each of which representing 6.1% of the total heat-altered flint assemblage. By contrast, the largest quantity of heat-altered stone derived from pit fill 12215, which produced 12.2 kilograms of material representing 21.5% of the assemblage's weight. Pit fills 12244 and 12251 produced significantly smaller quantities of heat-altered stone, weighing between six and seven kilograms, and ranging between 10% and 12% of the total weight.

Discussion

The presence of heat-altered flint and heat-altered stone is usually associated with prehistoric or even later domestic activities, and more specifically with the use of fire and the preparation of food. In the present assemblage, the majority of the contexts that produced heat-altered material, also produced prehistoric pottery fragments. Large pieces of heat-altered flint with smoothed surfaces and shield cracks, which derived from pit fills 0198, 0282, 0293 and 8010, and from tree throw 0336, are likely to have been used as pot boilers from FAS 055, although they were not identified in the assessment for the FAS 056 assemblage. For the latter site too, a large percentage of the burnt flint and stone material derived from burnt mounds, which are likely to be associated with small-scale workshop practices (e.g. the processing of hides). Finally, by contrast to FAS 055, flint and sandstone were the only rocks used and none of the contexts from FAS 056 produced erratic material or heat-altered stones other than sandstone/quartzite.

Other activities are likely to have been associated with the heat-altered flint and heat altered stone on these sites. For example, the tempering of pottery with crushed flint or sandstone in prehistoric production could have been practised with fragments deriving from larger heat-altered pieces, which were easily accessible next to domestic hearths. Furthermore, large stones could have been used to control open bonfires, which were lit up for domestic purposes or other production related activities (e.g. agriculture, metal and textile processing, etc.). Flint and sandstone were not the only rocks used for such purposes. The recovery of 1,189 grams of heat-altered ironstone and possible mudstone from five contexts, and the presence of heat-altered erratic quartz in sixteen contexts, show that other types of rocks might have been used over open fires.

5.3.7 Lavastone

Ioannis Smyrnaiois

Introduction and methodology

Fragments of lavastone were recovered from both sites, with overall quantities shown in Tables 98 and 99. The assemblage was examined for typological features and signs of wear and re-use, although the overall condition of the material was poor.

Lavastone fragments from FAS 055

The site produced seventy-one fragments of lava quern weighing 4,809 grams. The material derived from six contexts as shown in Table 98 below. Most of the lava quern consists of small fragments in poor condition, which derived from ditches and other linear features during the evaluation of the site. Pit fill 9004 produced some medium-sized pieces in good condition, which possibly come from the same rotary quern. Most of the features that produced lava quern contained medieval pottery; so it is likely that the material is associated with contemporary medieval domestic activities.

Context No	Feature No	Feature Type	Lava Quern No	Lava quern Wt/g	Notes	Ceramic spotdate
60554	60553	Linear	5	29	small, abraded	Med
60556	60555	Linear	3	1	small, abraded	
60562	9002	Ditch	6	520	includes small, abraded fragments	Med
60565	60564	Ditch	1	1	small, abraded	Med
60566	60564	Ditch	1	1	small, abraded	Med
9004	9002	Pit	55	4257	medium-sized pieces in good condition	Med

Table 98. Quantification of quern from FAS 055

Lavastone fragments from FAS 056

The site produced fifty-seven fragments of lavastone weighing 477 grams. The material derived from five contexts as shown in Table 99 below. The entire assemblage consists of small fragments in poor condition. The features that produced lava quern contained pottery of different dates; therefore, the material cannot be closely dated. Unlike FAS 055, where most of the lava quern derived from features that produced medieval sherds, in the present assemblage the only case is quarry fill 5426.

Context No	Feature No	Feature Type	Lava Quern No	Lava Quern Wt/g	Notes	Ceramic Spotdate
2082	2081	Pit	1	1	small chip	MIA-LIA
5426	5425	Quarry	43	164	small, abraded fragments	Med
5556	5553	Quarry	1	22	small, porous	
11128	11125	Ditch	9	289	small, porous	Rom
70525	70520	Pit	3	1	small, abraded	

Table 99. Quantification of quern from FAS 056

5.3.8 Slag

Ioannis Smyrnaiois

Introduction

Fragments of slag were recovered from both sites, with total quantities listed in Tables 100 and 101. The assemblages were examined and catalogued and their site provenance and dating considered.

Slag from FAS 055

The site produced forty-two pieces of slag weighing 419 grams. The material, which is primarily fuel ash slag, derived from thirteen contexts including five soil samples. A summary of the slag with comments on its condition is presented in Table 100 below.

Ctxt	Assoc. feature	Ctxt details	Samp	Description	No.	Wt/g	Comments	Ceramic spotdate
0194	0192	Pit		fuel ash slag	2	12	small, abraded, with flint conglomeration	
0297	0296	Pit		fuel ash slag	1	17	small, abraded, with flint conglomeration	MIA-LIA
0298	0296	Pit		fuel ash slag	1	44		MIA-LIA
0413	0412	Pit		fuel ash slag	7	14	very small, heavily abraded	MIA-LIA and (LBA or later?)
0437	0436	Pit	20	fuel ash slag	1	1		MIA-LIA
0468	0466	Gully		fuel ash slag	2	120	large pieces, with flint conglomeration	MIA-LIA
0558	0556	Pit		fuel ash slag	1	32	large piece with lime conglomeration	MIA-LIA
1014	1013	Posthole	24	fuel ash slag	2	3	small pieces	
1534	1533	Pit		slag	1	87		MIA-LIA
6057	6056	pit	2	fuel ash slag	1	7	small flat piece	MIA-LIA
8007	0296	Pit		fuel ash slag	5	41	small, abraded, with flint conglomeration	MIA-LIA
8054	0570	Pit	186	fuel ash slag	7	19	small pieces	MIA-LIA
8060	0458	Pit	184	fuel ash slag	11	22	small pieces	MIA-LIA

Table 100. Quantification of slag from FAS 055

With exception of two pieces deriving from pit fill 0194, the remaining assemblage was recovered from features that produced Middle to Late Iron Age pottery. In general, such small pieces, bearing no distinct features, could only verify the presence of temporary small-scale metallurgy activities taking place in the area.

Slag from FAS 056

The site produced ten pieces of slag weighing 178 grams. The material, which is primarily fuel ash slag, derived from six contexts including three soil samples. A summary of the slag with comments on its condition is presented in Table 101 below.

Ctxt	Assoc. feature	Ctxt details	Samp	Description	No.	Wt/g	Comments	Spotdate
2043	2038	Pit		slag	1	19	large solid lump	EBA-MBA
5148	5146	Ditch	78	fuel ash slag	1	1	vitreous	Rom
5514	5512	Ditch		slag	1	142	large solid lump	Rom
5522	5521	Ditch	327	fuel ash slag, Magnetic res.	1	14	porous, abraded, conglomerated	
5549	5546	Quarry	326	fuel ash slag	2		conglomerates with flint	Rom
12240	12239	Ditch		fuel ash slag	4	2	small fragments, abraded	Pre, Rom

Table 101. Quantification of slag from FAS 056

With the exception of two small fragments deriving from pit fill 2043 and ditch fill 5522, the remaining assemblage was recovered from features that produced Roman pottery. In general, as with FAS 055, such small pieces, bearing no distinct features, could only verify the presence of temporary small-scale metallurgy activities taking place in the area.

5.3.9 Iron Nails

Ioannis Smyrnaiois

Iron nails and fragments of possible nails were recovered from both excavations. These are described briefly in the paragraph below. For FAS 055 the site produced ten iron nail fragments weighing 37 grams, which have been quantified by context in Appendix 4a. All nails were found together with medieval pottery, dating between the 12th and 14th centuries AD (Tester 2013, 23); therefore, they are likely to be

contemporary. The site of FAS 056 produced forty-two metal artefacts, mainly iron nails, weighing 87 grams. The material derived from fourteen contexts, including six soil samples. Most of the iron nails derived from ditch fill 11104, which produced medieval and post-medieval pottery together with modern finds. Pit fills 2749, 5087, 5088 and ditch fill 5522 produced small magnetic residues, which could be abraded fragments from iron nails.

5.3.10 Post-medieval Glass

Ioannis Smyrnaiois

Four fragments of post-medieval bottle glass weighing 464 grams were recovered from FAS 056, and two pieces of post-medieval window glass weighing 2 grams. The material is presented in Table 102 below. All of the pieces are associated with 20th century activities and derived from features that also produced post-medieval pottery.

Context No	Feature No	Feature Type	Bottle glass No	Bottle glass Wt/g	Window glass No	Window glass Wt/g	Notes	Ceramic spotdate
2030	2029	Posthole	1	1			green bottle glass	Pmed
11104	11103	Ditch	1	422			intact rectangular modern bottle, possibly from olive oil, with metal top still attached, yet heavily abraded	Pmed
11106	11105	Ditch	1	38			shoulder from green bottle glass	Pmed
12441	12440	Pit			1	1	flat greenish window glass	Pmed
12519	12514	Pit	1	3			translucent bottle glass	Pmed
12551	12550	N-Quad Hollow			1	1	flat, scratched and abraded window glass	Pmed

Table 102. Quantification of post-medieval glass from FAS 056

5.3.11 Post-medieval Clay Tobacco Pipe

Ioannis Smyrnaiois

The site of FAS 056 produced three small fragments of post-medieval clay pipe, weighing 13 grams. The material is presented in Table 103 below. The pieces were recovered from topsoil and subsoil deposits, two of which during the evaluation of the

site. The only surviving part of the clay pipes is the stem and no other distinct feature has survived. All of the pieces date broadly between the 16th and 19th centuries AD.

Context Number	Feature Number	Feature Type	No	Wt/g	Stem length (mm)	Perfor. Diam. (mm)	Comments	Date
11001	11001	Subsoil	1	7	4.2	4	part of stem with attachment	16th-18th c.
70202	70202	Topsoil	1	3	35	3	part of stem, surface abraded	16th-18th c.
70202	70202	Topsoil	1	3	20	2	part of stem	16th-18th c.

Table 103. Quantification of clay pipe

5.4 Quantification and Assessment of the Small Finds

Ruth Beveridge

Introduction

A large number of small finds were recorded from both sites; some of these are flint tools and ceramic loomweights, which are considered in sections 5.3.5 and 5.4.1 below. The remaining objects have been fully recorded and catalogued on the database with the assistance of low-powered magnification. Selected items were chosen for radiography and have been further examined using the x-rays, which will be included in the archive. A complete listing is provided as Appendix 13a and 13b. The assemblage from each site is considered separately below with only key finds being described.

The small finds from FAS 055

Ninety-nine small finds numbers were allocated to objects or groups of objects from this excavation. Of those, sixty-nine were for objects other than flint tools and ceramic loom weights. The ceramic loomweights and the flint objects are considered in sections 5.3.5 and 5.4.1. The remaining objects are listed by major period and material in Table 104 below. They have been fully recorded and catalogued on the database with the assistance of low powered magnification. Selected items were chosen for radiography and have been further examined using the x-rays. The x-ray plates will be included in the archive. A complete listing is provided as Appendix 13a. The objects were found in a total of fourteen stratified contexts, predominantly from the fills of Iron Age pits.

Period	Silver	Copper alloy	Iron	Lead	Other metals	Antler/bone	Ceramic	Stone
Prehistoric	1		10			1	1	6
Roman	1	3		2				
Saxon		1						
Medieval	3	6		1				
Post medieval		21	2	11				
Modern		102		30	6			
Uncertain		2		14				
Total	5	135	12	58	6	1	1	6

Table 104. Breakdown of small finds by date and material type

Overall condition

The metalwork, particularly the objects of iron, is generally in poor condition, with the corrosion products evident. A number of the copper alloy objects of medieval date are in good condition such as the buckle SF 1010. The silver Iron Age coin is very fragile and requires consolidation.

The assemblage

Iron Age

Nineteen objects have been dated to the late Iron Age period, all of which were retrieved from the fills of iron age pits except SF 1006 and SF 1014. The assemblage is dominated by domestic, utilitarian objects. Of note is an iron involute La Tene II type brooch; this is the only object of personal adornment recovered from this phase of the site.

Antler

A single piece of worked antler tine was retrieved from one of the Iron Age pits, alongside a large quantity of animal bone. This could be a completed object, or may be an example of antler-working in progress.

Piece of worked red antler tine. The tip of the tine has been sawn off and polished. The surface of the beam has been retained, presumably to assist with gripping; the remaining surfaces are worked and smoothed. Three parallel cut marks remain on one side. Where the tine tapers towards the point of original attachment there is a possibility of a deliberate perforation or remnants of socket. This object may have been used as a handle for a tool; similar items have been recovered from Danebury with this interpretation also suggested (Cunliffe 1984, 393, fig. 7.39, no. 3.215).

Comparative antler objects that still retain the tang of the knife were found at Gussage All Saints (Wainwright 1979, 116, fig. 90, no. 5117). The item measured 134mm in length, 17mm in diameter and 19mm in depth.

SF1062, fill 0495 of pit 0493.

Ceramic

In addition to the ceramic loomweights, a further ceramic object was recovered. Its exact function is uncertain as it could have been used as either a spindle whorl or bead.

Complete annular bead or spindle whorl. Broadly spherical with flattened ends. It has a central circular perforation measuring 3 mm in diameter. The fabric is sandy and has a dark red/orange colour, possibly burnt. It was found during the processing of environmental Sample 180. It weighs 5.35g and measures 19 mm in diameter and 14mm in height. It is very similar to a ceramic object, SF1159, recovered from Flixton quarry (Beveridge forthcoming). Ceramic beads and other spherical ceramic objects have been found at Danebury (Poole 1984, 398; Poole 1991, fig.7.42, no. 7.85), Cadbury (Poole 2000, 188) and Gussage All Saints (Wainwright 1979, 101-3, figs.77, no. 4013). In her Cadbury report, Poole (2000, 188) arbitrarily separated clay beads from spindle whorls by weight, with 5g being the dividing point. The increase in the diameter of the central perforation in the Fornham example could be due to wear, possibly lending more weight to the object having been used as a spindle whorl. However, if this was the case, it would have been for the spinning of very fine thread. SF1070, fill 8047 of pit 0454.

Iron

The assemblage of iron objects includes a small number of fixtures and fittings of unknown function, found within the Iron Age pits. In addition is SF 1033, an iron involute brooch, which is the only object of personal adornment of this date. It was found alongside loomweights and flint tools. Three of the iron objects, SF1044, SF 1063 and SF 1072 were recovered by the volunteers during the process of 100% excavating of the pits.

A complete, decorative ring ornament, possibly a lipped terret. The faces are corroded and encrusted but appear flat; the ring is rectangular in cross section. The x-ray reveals additional detail that shows the outer edge of the ring is scalloped/lipped. A similar object, slightly larger in size, is illustrated in the Danebury

catalogue (Cunliffe & Poole 1991, 351, fig. 7.26, no. 2.372). The item measured 6mm in width, 23mm in diameter and 4mm in depth.

SF1016, fill of 0372 of tree throw 0371.

An incomplete Involute, La Tene II type brooch. The bow and pin curve downwards forming an involuted tight curve that is short. The bow and pin are possibly circular in section, though heavily corroded, so difficult to determine at this stage. The head is circular; from it the integral pin extends, tapering in diameter to a worn point that sits behind the remains of the foot plate. Involute brooches are commonly made of iron, sometimes copper alloy, and are frequently associated with the Arras Culture in the region of the East Riding and Humberside such as the example found in the Wetwang Chariot Burial (British Museum catalogue number: 2001,0401.21). It is Iron Age in date, c. 2nd and 1st century BC (Cool, undated publication), Hull type 2Cb (Haselgrove 1987, 62). An example is also illustrated in Hattatt (2007, 289, no.229). The item measured 43mm in length, 13mm in width and 6mm in depth.

SF1033, fill 0511 of pit 0510.

Nails

Three small finds numbers, SF 1047, SF 1048 and SF 1049, were allocated to three groups of nails or nail fragments, all of which were recovered from fill 0616 of pit 0615. Whilst nails are usually difficult to date, having altered little over time, these examples were recovered from contexts that allow them to be identified as late Iron Age.

Silver

During the metal detecting of the subsoil on the west side of the track, a single Iron Age coin was collected.

Complete, dished, silver Iron Age coin; the edges and faces are worn; the surfaces flaking. Obv: boar figurine with I_I shape below. Rev: very poor condition - visible X at one edge. It may have had two crescents back to back. Possibly an Iceni coin c. AD 10-61.

SF1006, layer 0004, subsoil on west side of track. Separated for finds purposes.

Stone

The stone assemblage is dominated by domestic objects that could be utilised in food production and preparation, including saddle querns and whetstones. The

whetstones are made from river pebbles, with their forms being naturally occurring rather than created through use.

Near complete quartzite saddle quern, probably burnt. Roughly rectangular in plan but curved terminals. Plano-convex in section. Smooth upper surface that is slightly concave both latitudinally and longitudinally; the underneath is convex and also smooth. That the stone is concave both latitudinally and longitudinally would suggest that it is a lower stone (Bellamy 2000, 206). The item measured 260mm in length, 187mm in width and 46mm in depth.

SF1014, subsoil layer 0006. Subsoil on east side of track. Separated for finds purposes.

Near complete saddle quern made from a coastal conglomerate of sand and shell (lime formation). Roughly rectangular in plan with rounded terminals. Plano-convex in section. The upper surface is smooth and worn concave longitudinally; convex underneath and rougher. The upper surface was, therefore, the one utilised for grinding; comparable to examples from Danebury (Cunliffe & Poole 1991, 394, fig.7.59). The item measured 325mm in length, 132mm in width and 56mm in depth. SF1036, upper fill 0543 of pit 0540.

Roman

Six objects have been dated to the Roman period, all of which are topsoil or subsoil finds recovered during the metal detecting. They include three coins, a brooch fragment and two lead weights.

Silver

Complete silver denarius of Augustus (27BC-AD14). Obv: bare head of Augustus facing right. No inscription. Rev: Capricorn facing right, bearing cornucopiae on back and holding globe and rudder. Inscription: AVGVSTVS beneath rudder. It was minted in Spain at 'uncertain mint 2'. Coin likely dates to 18BC-17/16BC. The RIC reference is RIC No.125 (Sutherland 1984, 50). It is denoted as an R2 type in frequency with approximately fifteen similar examples known. An example is illustrated in Sear (1988, 96, no.477).

SF1001, layer 0005, topsoil on east side of track. Separated for finds purposes.

Copper alloy

A single brooch fragment and two coins were recovered from the ploughsoil; the brooch has yet to be allocated a Mackreth form.

Fragment of wings, bow and spring of a brooch. The wings form a cylindrical cover around the eight coils of the spring. The bow is flat backed and reeded. Part of the pin survives. It is a Langton Down form similar to an example retrieved during the Hacheston excavations (Blagg *et al.* 2004, 92, fig.62, no.38). It dates between AD25-AD60. Langton Down brooches are a continental type that frequently occur in pre-conquest contexts, though are also known to continue to be recovered in post-conquest contexts (Plouviez 2004, 91).

SF 1011, layer 0004, subsoil on west side of track. Separated for finds purposes.

Lead

Cast, plano-convex counter or weight. The underside is flat. The upper surface is decorated with raised radiating lines. As a weight it would fall into Tyrrell's Type C group which has no visible signs of suspension, so if used as weight, it would have been on pan balances (Tyrrell 2015, fig.527). The item measured 18mm in width and 7mm in depth and weighed 12g.

SF3050, layer 9001, subsoil for area SME 6.

Saxon

Copper alloy

A single object was recovered from the Late Saxon period. It was recovered during the metal detecting survey.

Complete hooked tag of Read's class A, type 2 (Read 2008, 16, no. 66). It is circular in plan and is possibly decorated on the front with a linear design; this is now worn. It has two circular perforations near the top edge. The hook extends from the lower edge and curves rearwards. The tip is missing. It falls into Lewis & Naylor's (2013) type A1.cii, dating to between c. 7th-12th century AD. A similar example was found during the Bull Wharf excavations in London (Ayre & Wroe-Brown 2015, 154, illust.21, A1645).

SF3052, layer 0003, topsoil on west side of track. Separated for finds purposes.

Medieval

Ten objects have been identified as being of medieval date; all of them were retrieved during the metal detecting of topsoil and subsoil across the site. Eight are

plotted on Figure 11; one is an item that was identified from amongst the bulk bags of metalwork. They include lost coinage and items of personal adornment.

Silver

A complete hammered voided long cross penny of Henry III (1216-1272); class Vg (1251-1272). Obv: crowned bust facing with sceptre (though much of this is worn). Inscription commences above the sceptre [HEN]RICVS REX III. Rev: voided long cross, worn as are the pellets. Inscription reads STE/PHE/[NEON/B]ERI. The moneyer is Stephane and the mint is Bury St Edmunds (Wren 1993, 27 and 63). SF1005, layer 0004, subsoil on west side of track. Separated for finds purposes. SF1024, layer 0422, Topsoil SME4.

Copper alloy

A complete cast anthropomorphic mount in the form of a human head. The face is forward and crowned, narrowing towards the chin. The eyes, mouth and cheeks are denoted by triangles. The reverse of the mount is hollow with an integral attachment stud. It is a king's head stud type whose overall style suggests a later medieval date of 13th to 14th century. This type of stud could relate to kings' head clasps of the period (Whitehead 2003, 42-3, nos.242-244). The item measured 14mm in length, 9mm in width and 4mm in depth and weighed 1g.

SF1010, layer 0004, subsoil on west side of track. Separated for finds purposes.

Lead

Complete conical lead weight, circular in plan. It has a central, straight sided perforation. The base is grooved. A similar example was recovered from Norfolk (Margeson 1993, 138, fig.103, no.937). It is likely that this type of weight had a household use, or was utilised as a net weight (Margeson 1993, 138). The item measured 22mm in diameter and 12.5mm in depth and weighed 26.7g.

SF1009, layer 0004, subsoil on west side of track. Separated for finds purposes.

Post-medieval

The metal detecting across the topsoil and subsoil of areas EX1, 4 and SME4-5 recovered thirty-four objects of post-medieval date. They include items that reflect different activities within post-medieval life, including commerce, agriculture and

personal adornment. They were found widely spread across the areas and are not associated with any archaeological feature on the site, but rather, are present through the activity of night soiling. All the objects have been detailed within the catalogue; selected items have been highlighted below.

In the catalogue, several types of lead shot were recorded: SFs 3002, 3006, 3031, 3034, 3038, 3051 and 3059. The shot varied in size and weight, reflecting a range of weapons fired; two were probably musket balls fired from either muskets or carbines; five are smaller pellets that may be buckshot (Harding 2012).

Four cast, copper alloy buckles were recovered: a fragment of an 18th century shoe buckle SF 3004; a small rectangular shoe buckle of 16th–17th century date SF 3007 (Whitehead 1996, 75, no.459); a single loop sub-rectangular buckle with expanded splayed feet and narrowed, recessed strap bar dating to c. 1500–1650 (Whitehead 1983, 28, no.151) SF3057; and a rectangular frame, single loop buckle of 14th-17th century AD date, SF 3058.

One cast clapper bell, SF 3022, and two crotal bells were recovered, SF 1007 and 3009. SF1007 is of interest as it is of a 'white metal' type; made from a high tin copper alloy which gives the bell a grey/silvered appearance. This dates the bell to 17th century or earlier (Blunt 2005).

Additional items that may be of this date include a lead pot mend, SF 3056, of the plug type illustrated in Egan (1998, 241, fig.188, no.741) and several structural pieces of ironwork including a large rectangular headed stud, SF3065. Studs were used for strengthening doors and chests; examples were found in Norwich and are illustrated in (Margeson 1993, 147, fig.108, no.1090).

Copper alloy

Items worthy of detailing from the plough soil include objects associated with commerce and items of personal adornment.

A complete copper alloy 'shield of France' jetton dating to late 15th-early 16th century (Mitchiner 1988, 230), c. AD 1478-1521. Obv: shield with three lis within, surrounded by an inscription that is masked by dirt. Rev: triple stranded cross fleuretty within a border of four arches.

SF1003, layer 0005, topsoil on east side of track. Separated for finds purposes.

A complete lead/copper alloy square, bi-face coin weight. Obv: relief stamped bust facing right, crowned and draped. Letters XVI to the left and a floral motif to the right. Within, a beaded circle. Rev: within a beaded circle is a shield decorated with a sun above waves. Probably a coin weight of James I dating to the 17th century.

SF1004, layer 0006, subsoil on east side of track. Separated for finds purposes.

Complete hooked tag with trapezoidal loop. It has a circular, hollow-backed plate decorated in relief with a floral pattern consisting of two wavy lines around a central pellet. It has a complete triangular sectioned hook. It is of 16th to 17th century date and is very similar to examples found in Norfolk. In her reference work on hooked tags (Read 2008, 87) classifies this type as early post-medieval, Class E, Type 3, c. 1500-1550.

SF1008, layer 0006, subsoil on east side of track. Separated for finds purposes.

Complete Nuremberg jetton of rose/orb type; minted by Hanns Krauwinkel II (c. 1586-1635). Obverse: three crowns and lis around a rose, surrounded by the legend rosette HANN.S.K[RAVWINKE]LL.NV Reverse: rose/orb surmounted by cross pattee with double stranded trefoil. Legend unreadable. Jetton type of late 1500s or early 1600's.

SF1025, layer 0002, subsoil exposed in temporary compound.

Spherical pin head made from two cast hemispheres. The join between the two halves is poor. Each half is decorated with circumferential rows of raised stars. Shaft missing. Possibly a pin of 15th–16th century date comparable to the group from London illustrated in Egan & Forsyth (1997, 223, fig.15.7).

SF3033, layer 0006, subsoil on east side of track. Separated for finds purposes.

Lead

Complete boy bishop token, very worn in places with dirt obscuring detail. Obverse: no detail visible. Reverse: long cross and pellets, legend: AVE/REX/GEN/TIS. Date: c.1470-1539.

SF3060, layer 0008, subsoil in stockpile strip. Separated for finds purposes.

Modern

One hundred and thirty-eight objects are of modern date. This material was retrieved during the metal detecting of the topsoil and subsoil layers; they are summarised here with only selected items being highlighted of interest.

Predominantly the objects in this section include debris of 18th century to 20th century date that has been discarded or lost during agricultural activities on the site. It includes quantities of lead, copper alloy and tin offcuts or waste from industrial activities or roofing from beyond the vicinity of the site (SF 3000, SF 3003, SF 3005, SF 30031 and SF 3038). Amongst this modern assemblage are a range of buttons (SF 3000, SF 3005, SF 30039, SF 3059 and SF 3062) including two livery buttons (SF 3032). One of the livery buttons features a standing soldier in civil war apparel, with the makers name of Firnin & Sons; London on the reverse. It is similar to livery buttons of Marshall's of London, Nottinghamshire and Yorkshire; the second is a service livery button with BV below a crown on the front.

In addition to the buttons, 19th century dress accessories include copper alloy corset fasteners (SF 3000) and fragments of decorative buckles (SF 3032). Household objects include machine made copper alloy thimbles (SF 3001 and SF 3039); a copper alloy stair rod (SF 3005); clock winder (SF 3000) and a monogrammed fitting (SF 3032).

There are also lost Georgian coins (SF 3053) and selected spent bullet cartridges (SF 3000, SF 3005 and SF 3039) that are likely to relate to the use of the site in WW2 as practice ranges.

Overall, the post-18th century assemblage does not relate to the archaeology on the site and warrants no further study.

Copper alloy

Complete copper alloy German coin. Obv: German imperial crown with inscription DEUTSCH OSTAFRIKA and date 1906. Rev: value written within a wreath 1 HELLER A.

It is a German coin from the East African colony also known as the Tanganyika territory. Minted in Berlin (as denoted by the A).

SF1002, layer 0005, topsoil on east side of track. Separated for finds purposes.

Uncertain date

Three objects were recovered of uncertain function and date; these include two iron nails, SF1017 and SF3056, and a piece of lead waste, SF3056.

The small finds from FAS 056

Introduction

Six hundred and ninety small finds numbers were allocated to objects or groups of objects from the excavation. Of those, two hundred and seventy were for objects other than flint tools and ceramic loomweights. The ceramic loomweights and the flint objects are considered in sections 5.3.5 and 5.4.1. The remaining objects are listed by major period and material in Table 105 below. They have been fully recorded and catalogued on the database with the assistance of low powered magnification. Selected items were chosen for radiography and have been further examined using the x-rays. The x-ray plates will be included in the archive. A complete listing is provided as Appendix 13b and only select items are detailed below. The objects were found in a total of thirty-two stratified contexts, predominantly from the fills of pits and ditches.

Period	Silver	Copper alloy	Iron	Lead	Antler/bone	Glass	Ceramic	Stone
Prehistoric		2	5		3		1	5
Roman		16	10	9				1
Saxon	1	1						
Medieval	23	27		2		1		
Post medieval	2	58	2	36				
Modern (Victorian onwards)	4	176	155	81		1		
Uncertain		10	1	12				
Total	30	290	172	139	3	2	1	6

Table 105. Breakdown of small finds by date and material type

Overall condition

The metalwork is generally in poor condition, with the corrosion products evident.

The ironwork is particularly unstable.

The assemblage

Iron Age

Sixteen objects have been recovered from contexts dating between the Middle to Late Iron Age period; predominantly, they were retrieved from the fills of Iron Age pits. Two pieces of saddle quern, SF 2116 and SF 2119 were recovered from a post hole and a ditch fill respectively; and an iron tool, SF 2122 was also from the fill of a ditch.

The assemblage is dominated by domestic, utilitarian objects, associated with food preparation. There is also evidence for industry with antler waste and possible recycling of copper alloy offcuts. Of note is an iron hooked shaped blade, SF 2033, which may reflect a more ritual side of the occupants' lives.

Antler

A perforated antler disc, SF 2030, and two pieces of antler beam were retrieved from the fills of pits. The disc could be part of a counter, or may be an example of antler working in progress. The pieces of antler beam are likely to be indicative of industrial activity.

Incomplete, disc shaped object. The upper surface is worked but worn. Underneath is rough; unworked. It has a central perforation. There are the remains of a prong on one side. Rectangular in section. It is possibly a piece of waste from antler working, though it may have been a counter. A range of antler waste is illustrated from Danebury and this is similar to no.3.379 (Cunliffe & Poole 1991, 367, fig.7.39). The item measured 26mm in diameter and 14mm in depth.

SF2030, single fill 2076 of pit 2075, SME1.

Ceramic

In addition to the ceramic loomweights, a further ceramic object was recovered. Its exact function is uncertain as it could have been used as either a spindle whorl or bead.

Incomplete fired clay bead. It may have been spherical or barrel shaped, now worn and looks 'squared'. It has a central circular perforation and is comparable to Iron Age beads from Gussage All Saints and Danebury. It was recovered from Sample 619. Ceramic beads and other spherical ceramic objects have been found at Danebury (Poole 1984, 398; Poole 1991, fig.7.42, no.7.85), Cadbury (Poole 2000, 188) and Gussage All Saints (Wainwright 1979, 101-3, figs.77, no.4013). In her Cadbury report, Poole (2000, 188) arbitrarily separated clay beads from spindle whorls by weight, with 5g being the dividing point. The increase in the diameter of the central perforation in the Fornham example could be due to wear, possibly lending more weight to the object having been used as a spindle whorl. However, if this was the case, it would have been for the spinning of very fine threads. The item measured 10mm in length, 12mm in width and weighed 1g. SF5138, basal fill 12243 of pit 12242, P2.

Copper alloy

Two pieces of copper alloy sheet, SF 2034 and SF 2152 were recovered from contexts alongside Iron Age pottery. Whilst not distinctive they may originally have been part of decorative attachments such as those recovered from Danebury (Cunliffe 1984, 346 and fig.7.7 nos.1.54-1.70) or offcuts collected for recycling.

Iron

The small assemblage of iron objects includes a hooked-shaped implement that is of note due to its positioning.

Section of a blade from a hooked-shaped cutting tool. The blade tapers and curves towards the tip. In cross section, the blade is lenticular, with the cutting edge being on the concave inner side. It would originally have been attached to a wooden handle but neither a tang nor socket survives. Sellwood (1984, 346) refrains from classifying this type of object by function such as reaping and pruning hooks, bill-hook or sickle as pre-judging the function does not reflect the range of uses a single tool could be utilised for; a conclusion that Rees (1979) acknowledged in her detailed study of prehistoric agricultural tools. Comparable examples can be seen from Danebury (Cunliffe 1984, 348, fig.7.9, no.2.20; Barrett *et al.* 2000, 82, fig.38, no.4). This blade may have been placed within the pit with some ritual purpose; something that was also seen at Cadbury castle (Barrett 2000, 59), where a bill-hook was wrapped in straw and deliberately placed in a pit as part of the ritual of boundary definition (Barrett 2000, 83).

SF2033, fill 2080 of pit 2079.

Nails

Two small find numbers, SF 2429 and SF 2432, were allocated to groups of nails or nail fragments, all of which were recovered from pits associated with prehistoric pottery. Whilst nails are usually difficult to date, having altered little over time, these examples were recovered from contexts that allow them to be identified as Late Iron Age based on the pottery they were found associated with.

Stone

The stone assemblage is dominated by domestic objects that could be utilised in food production and preparation, including saddle querns and whetstones and a chalk object that could be a spindle whorl.

Near complete sandstone saddle quern. It is tear-drop shaped in plan and roughly plano-convex in section. The upper surface is slightly concave and smooth; the underside is convex and rough. The item measured 350mm in length, 185mm in width and 93mm in depth.

SF2119, middle fill 5361 of ditch 5359, EX2.

Roman

Thirty-six objects have been dated to the Roman period; of these nineteen were recovered from stratified contexts, predominantly from the fills of Roman ditches. The remainder are topsoil or subsoil finds recovered during the metal detecting of the plough-soil. Twenty of the thirty-six were recovered from area EX2. The Roman finds include objects of personal adornment, domestic items, as well as currency in the form of twelve copper alloy coins.

Copper alloy

Amongst the copper alloy objects two brooches were recovered from the excavation and have been assigned Mackreth's forms. Additionally, a small bell and a mount were retrieved; only the latter is from a stratified context.

Incomplete cast, disc brooch that has eight lobes around the circumference of a circular plate. The body of the plate is decorated with an enamel pattern of an eight-petal flower (stylised) head with a ring shape setting in the centre. Within each petal is a dot of contrasting enamel. The flower petals are red, bordered with blue, the

centre yellow. Around, the flower is white. Each lobe has a blob of blue enamel in it. The hinge and the catchplate are located at opposing ends of the plate, both perforated. Remains of the spring coil are visible in the hinge. It is very similar to an example from Hacheston (Blagg *et al.* 2004, 102, fig.67, no.173). In Mackreth's typology (2011a), this brooch is described as Type 2g7, an applied white metal trim plate brooch. In Mackreth (2011b, pl.106, no.10771) is an exact match. There is no specific dating for Type 2g7, but overall this type of plate brooch is AD 80-250. SF2047, layer 5002, subsoil for EX 2.

Coins

Complete Tetrachic nummus of Constantius I, dating to AD 303-305. Obverse: bust facing right, with laureate, also draped and cuirassed. Legend reads CONSTANIVS NOB C. Reverse: Genius standing left with towered head and chlamys, holding patera in right and cornucopia in left. Legend: GENIO POPVLI ROMANI. Mint mark is SF PTR, so from Trier at the time when only one *officina* existed. Coin is AE1 size, Reece period 15. It is/was possibly silver washed. RIC No. 603 (Sutherland 1967, 199 and 201). This type is not uncommon. SF2001, layer 5001, topsoil for EX 2.

Complete nummus of 4th century AD - worn on both faces. Obverse: bust facing right, very worn. Reverse: single standard with soldier either side of GLORIA EXERCITVS type. Mint mark ?TR, Trier. House of Constantine. Date: 335-337. Reece period 17, size A4. Contemporary copy. SF2078, layer 5002, subsoil for EX 2.

Iron

Two pieces of a strip of iron. Corroded and encrusted. The radiograph shows the presence of a square rivet hole at one end. In profile it curves at a 45-degree angle at one terminal. Possibly a strip fitting for a box or hinge fitting for a structure. The item measured 128mm in length, 24mm in width and 5mm in depth.

SF2123, fill 5138 of ditch 5136, that is part of the early Romano British enclosure 1, EX 2.

Elongated object with remains of a socket at one end. Plano-convex in section; corroded.

SF4018, fill 11015 of ditch 11014, P1 EX.

Co-joining fragments of a strip of iron. Both longitudinal edges are straight with a slight upward curve at the end of one. In cross section it is rectilinear; in profile it curves lengthwise. Possibly part of a fitting. The item measured 93mm in length, 25mm in width and 5mm in depth.

SF5046, single fill 12005 of Roman ditch 12004, P2.

Nails

Whilst nails are usually difficult to date, having altered little over time, seven of those recovered from the excavation are of forms or from contexts that allow them to be identified as Roman. Four are identifiable as Manning's Type 10. The Type 10 hobnails, either with a domed or pyramidal head, were used on the soles of Roman footwear.

Three hobnails from a shoe. The heads are sub-square in plan; domed in profile (possibly worn pyramidal, Manning type 10). Shanks are square in section and complete.

SF 2120, single fill 5108 of feature 5107, EX2.

Lead

Nine pieces of lead have been identified as being of Roman date. Eight pieces, SF2125 - 2130, SF2132 and SF2133, were recovered from the top fill 5142 of ditch 5141 in EX 2. This is the corner terminal of an enclosure ditch. Pottery recovered from the middle fill 5165 of this ditch dates to the Roman period. Three of the lead pieces are amorphous and could be waste from lead working; five pieces are of a more structural nature and could represent objects being collected for recycling or simply discarded debris. An iron nail, SF2131, was found in the same fill.

Large piece of lead sheet of heavy gauge. It is rectangular in plan with one edge folded up and in on itself. It is possibly structural, maybe drainage lining. Both faces are rough with irregular edges. The item measured 65mm in length, 24mm in width and 24mm in depth and weighed 4.63g.

SF2125, fill 5142 of ditch 5141, EX 2.

Incomplete cast, fitting. Trapezoidal in plan, thin rectangle in section. Broken at widest end. It has two perforations along the central length (attachment holes). It could be part of the same object as SF 2127. The item measured 25mm in length, 18mm in width and 3mm in depth and weighed 12g.

SF2126, fill 5142 of ditch 5141, EX 2.

Incomplete, cast fitting. Trapezoidal in plan; widest section broken. In profile it is curved at both ends, more pronounced at the complete terminal. At the broken end there is an incomplete attachment hole. Probably part of the same object as SF 2126. The item measured 26.5mm in length, 23mm in width and 3mm in depth and weighed 12g.

SF2127, fill 5142 of ditch 5141, EX 2.

Piece of lead, roughly triangular in plan. The underside is flat and rough (cast, pushed up against sand). On the opposite side, running along the length is a V-shaped groove. It would have held something in place. The item measured 24mm in length, 13mm in width and 9mm in depth and weighed 9g.

SF2129, fill 5142 of ditch 5141, EX 2.

Piece of sheet lead waste, curved in profile; elongate in plan. The inner surface is smoother. Binding. The item measured 34mm in length, 20mm in width and 1mm in depth and weighed 4g.

SF2132, fill 5142 of ditch 5141, EX 2.

In addition to the lead objects recovered from ditch fill 5142, a single object was recovered from the plough soil.

Stone

Fragment of a schist hone, rectangular in plan, thin rectangle in cross section. The item measured 32mm in length, 15mm in width and 5mm in depth and weighed 5g.

SF5135, recovered from cut 12159 at the NE corner of Roman enclosure ditch 12452, P2

Saxon

Few objects of Saxon date have been recovered from the site. Two were found during the metal detecting of the plough soil. They are detailed here.

Copper alloy

Complete worn, possible early medieval coin/styca. Obverse: forward facing bust with crown and side curls. Inscription, worn. Rev: long cross with pellets in each quarter. Inscription around the circumference looks more like beading.

SF5072, layer 12001, subsoil P2

Silver

An incomplete silver strip, rectangular in plan. The outer face is decorated along its length with three moulded lines. The reverse is plain. One short edge has two equally-spaced square notches. The opposite edge may also be notched but it is damaged. It is possibly a decorative strip from a wooden drinking cup of early Anglo-Saxon date. Comparable examples are known from Sutton Hoo (Carver 1987).

SF2060, layer 5002, subsoil for EX2.

Medieval

Fifty-three objects have been identified as being of medieval date; all of them, with the exception of two, were retrieved during the metal detecting of topsoil and subsoil across the site, with a particular concentration of objects in area EX 2. The medieval objects have been geolocated and are plotted on Table 103. They include lost coinage, items reflecting commerce, household objects and items of personal adornment.

The two exceptions are SF 2433, a small piece of window glass from fill 5035 of post hole 5034, and SF 2220, a copper alloy composite strap end, recovered from fill 5520 of ditch 5519.

Silver

Twenty-three silver coins were recovered from the topsoil and subsoil. Twelve of these were found on the east side of the trackway in areas EX2 and P2. Of these twelve, nine are likely to be coinage of Henry III, dating between 1247 and 1279. Two are possibly King John issues between 1199 and 1217; with the last one being an Irish issue for King John dating to between 1207 and 1211. The relative proximity in date of these twelve coins and their distribution in a linear north-east spread suggests that originally, they may have been the contents of a purse that have been dispersed along the field through ploughing. The eleven coins found to the west of

the trackway in the EX2, SME1, SME3, P1 EX and P2 areas are more scattered both spatially and in date; they more likely represent casual coin losses.

Copper alloy

Twenty copper alloy objects were recovered; fourteen are objects of personal adornment and two are items of commerce. Household items are represented by a decorative strap mount, SF 2012, that may have been used either on a casket or book, and a small casket key, SF 2038, that has a simple bit with wards projecting at each corner; similar keys were recovered from Norwich (Margeson 1993, 162, 1313) and 12th-14th century examples come from Winchester (Biddle 1990, 1024-1036). A complete hilt plate of late medieval date, 1400-1550, was found. Additionally, a hilt plate, SF 2017, for a whittle tang knife was recovered, which is of late medieval date, possibly 15th century, as after this, knives were made with a bolster.

A range of mounts were used throughout the medieval period for decorating and strengthening belts. Of the fourteen items of personal adornment, seven were mounts. Four bar mounts were retrieved, SF 2072, SF 3010, SF 3015 and SF 5032. SF 2072 and SF 3010 are lobed mounts that date between c. 1350-1400. They can be paralleled to examples from London (Egan & Pritchard 1991, 214, fig.134, nos.1160 and 1161). SF 3015 is a bar mount with square perforated front plate that has a strip extending from the base and curving to form a loop. This strip ends in a perforated lobe. The lobe and square plate would have been connected by a rivet. It is similar to an example from London (Egan & Pritchard 1993, 223, fig.140, no.1194) that dates to between c. 1270 and c. 1350 AD. SF 5032 is an elongate mount that could have been used as a belt or casket mount (Read 2016, 24, no.165-68).

Sheet stamped mounts were also recovered: SF 3011, a complete sexfoil mount, stamped out to the shape of the lobes, that dates to the mid-14th - late 15th century (Egan & Pritchard 1993, 187). SF 3023 is a square, sheet belt mount, pyramidal in profile with a front that is decorated with ridges radiating out from a central circle. It dates from the late 14th- early 15th century AD. SF 5063 is a slightly different form of mount; it is ovoid with an open frame with central bar. On the reverse are two prongs extending from opposing ends. It is possibly a strap fitting or harness mount.

Three cast buckle frames and two buckle plates, SF 5061 and SF 5062, were collected. Of the buckle frames, SF 2079 is a near complete folding strap clasp with quatrefoil mount on the folding end. It is of late 13th- early 15th century in date. It is comparable to an example from London (Egan & Pritchard 1991, 119, fig.78, no.567). SF 3019 is a cast double loop sub-oval buckle with separate strap and pin bars. It is thought to be for securing sword or dagger belts and dates between c. 1350-1450 AD (Whitehead 1996, 87, no.538/539). SF 4002 is of a similar date, c.1350-1400 and is a single loop, rectangular buckle frame decorated with oblique notches. Further buckle plates and associated rivets were found in the bulk bags of metal detected material collected from the topsoil of EX2, SF 3029 and SF 3028.

Four examples of strap ends have been recorded from the excavation: SF 2220, SF 3021, SF 4015 and SF 5004. SF 2220 and SF 4015 are composite examples with the former being similar to a London example that dates between c. 1350-1400 (Egan & Pritchard 1991, 142, fig.93, no.659). SF 5004 is formed from a single sheet of copper alloy folded width-ways and is of 14th century date. A similar example from London is illustrated in Egan & Pritchard (1991,126-27, nos.578-588).

Of note amongst the medieval objects is a balance that would have been utilised in commerce; a lead weight and a lead stylus.

Incomplete, cast, hinged folding balance. It has one tapering circular-sectioned arm, damaged at the end. This arm slots into the hinge at the end of a central bar. The arm still has movement. Where the arm slots into the bar it narrows/flattens and becomes rectangular in section. The remains of the hinge and rivet of the second arm are still present at the other end of the bar. There is a circular hole under the bar which would have held the pointer/suspension mechanism. It is similar to an example recovered in London (Egan 1998, 327, fig.243, no.1055). Dates between 12th and 14th century. SF2004, layer 5001, topsoil for EX2.

Lead

Cast lead rod, two joining sections. One end is moulded to a tapering point, the other end is smooth and rounded. The object is bent. It has a series of deliberate horizontal grooves above the tapered point. There are more grooves by the bend. A comparable example has been recorded from Lincolnshire on the Portable Antiquities database (Foreman 2014, PAS REF: NLM-3744B0). SF2032, layer 5002, subsoil for EX2.

Post-medieval

The metal detecting across the topsoil and subsoil recovered ninety-eight objects of post-medieval date. They include items that reflect different activities within post-medieval life, including commerce, household and agriculture, as well as items of personal adornment. They were found spread widely across the areas of the site and are not associated with any archaeological features. They are likely to be present through the activity of night-soiling. All the objects have been detailed within the catalogue; selected items have been highlighted below.

Silver

Two silver coins of post-medieval date were retrieved; one is a worn penny of Elisabeth I, minted in London with the date 1572, SF 2096. The second, SF 3013, is a disc shaped object that is very worn and folded over along the edges. It is possibly a coin that has been utilised as a 'love' token. It is likely to be 16th century in date.

Copper alloy

The objects of copper alloy are dominated by household objects, items of personal adornment and objects used in commerce, be them coins or tokens. A total of six jettons were recovered: SF 2002, SF 2048, SF 2050, SF 2075, SF 4010 and SF 5042. All of them are Nuremberg jettons of the rose and orb type, with three being minted by Hanns Krauwinckel II (master AD 1586-1635). On the reverse of SF 4010 the rosette initial mark is followed by the legend GOTTE[S GAB]E[N] SOL [MA]N LOB (one should praise God's gifts) (Mitchiner 1988, 440, ref.1535).

Three complete rose farthings of Charles I (1625-1649) were retrieved, SF 2016, SF2020 and SF2039. The latter was the better preserved, with crowned sceptres on the obverse and the inscription CAROLV DG MAG BR. On the reverse there is a crowned rose and inscription FRA ET HYB REX (Reeds & Mitchell 1990, 214, no.3201 and 3207).

During the 17th and 18th centuries, when there was an acute shortage of small change, industrialists and shopkeepers issued trading tokens to meet the shortfall. Tokens of this type were found during the plough-soil metal detecting: SF 2014, SF 2043, SF 4006, SF 5059 and SF 5060; SF 5059 was a Thomas Bull pub token from

Bury St Edmunds. A heart shaped token, heavily corroded, was from area SME3 collected in bulk, SF 3037.

Coinage from the Georgian period was retrieved, including one coin, SF 2085, of George III that is pierced at the 5 o'clock position and may have been worn as an item of jewellery.

Objects of personal adornment included numerous finds of buttons; these are fully listed in the catalogue; many are 18th to 19th century buttons with discoidal heads and integral wire attachment loops. Some are decorated such as SF 5002, some gilded such as SF 5007. One example, SF 2389, is larger than usual, has four central attachment perforations and a decorative front. A range of livery buttons were also retrieved such as SF 5006 from the P2 area; it has a rampant lion facing a post on the front. Small, ball-shaped tombac buttons were also recovered such as the one from the bulk bag SF 3037; this is similar to illustrated examples in Bailey (2004, 43).

An array of buckles, fasteners, fittings and pins were also amongst the debris lost in the plough-soil that may have been associated with personal attire. In addition to pieces of decorative 18th century shoe buckles, there was also a near complete cast, asymmetrical buckle frame, SF 4001, comparable to no.572 in Whitehead (1996), that is most likely a spur buckle dating to between AD 1575 and 1700. SF 5041 is a silvered spectacle buckle dating to between AD 1500 and 1650 (Whitehead 1996, 55, no.315).

One buckle fragment was recovered from the fill of a pit. SF 2431 is a T-shaped piece of copper alloy that was retrieved from fill 5120 of pit 5122 in area EX2. It is likely to be 18th or 19th century in date.

Two hooked tags, SF 2040 and SF 5065 are fasteners of Read's (2008) Class E, Type 3. SF 2040 has a raised central motif, possibly floral. SF 5065 has a central area of openwork divided into quarters by a cross in moulded relief that is similar to no.370 in Read (2008, 99), dating to c. 1500-1550 AD.

A plate, trefoil mount with fleur de lis shaped terminals, SF 5073, is a decorative strap fitting or belt mount. Stylistically, it is similar to some book mounts of 14th century date (e.g. Read 2016, 21, no.115 and 116). It is also similar to mount no.367 of 17th century date (Read 2016, 47).

Domestic activities within the household are reflected in the finds of thimbles, SF 2003 and SF 3014; vessel fragments, SF 5010, and fluted vessel feet, SF 5003, such as an example dating from c. 1200-1600 recovered from Somerset (Butler *et al.* 2009, 6, fig.4, no.C). SF3014 is of interest as the machine-made stamped thimble is very small in size, most likely belonging to a child. A comparable example was found in London and is illustrated in Egan (2005, 132, fig.126, no.638); it dates to between c. 1630-1650 AD.

Remnants of very few copper alloy vessels were recovered, demonstrating their value; often lead pot mends are found, such as one in the bulk bag, SF 3027.

SF 3016 is a possible casket or harness mount, with two loop terminals.

Several items reflect the use of animals; these include crotal bells, strap mounts and possible pendants such as SF 5001. The crotal bells were attached to the harness of animals and were in use from c. 1500 to 1700; SF3017 is a complete example with a possible worn makers stamp on the underside.

SF 2022, SF 2023, SF 2042 and SF 5074 are all elongate strap mounts. SF 5074 is a decorative 17th century example (Read 2001, 32); the three others are simpler and comparable to examples from London. Egan suggests that the two prongs on the reverse of these mounts are an indicator of the mount being used for horse harness (Egan 2005, 40).

Iron

Few objects of iron were recovered; amongst those is SF 3064, a fragment of a horseshoe with square nail holes and narrow web. It was recovered from fill 2956 which was the backfill of evaluation Trench 214 where it cut burnt mound 2658. There is also an iron strip fitting, SF 2427. This is an elongated, flat strip of iron,

rectangular in plan with curved terminal and has a possible rivet through the terminal; it is from fill 5120 of pit 5122, and likely to be 18th or 19th century date.

Lead

Eleven boy bishop tokens were recovered from the metal detecting; six from area EX2.

Six of the tokens, SF 2007, SF 2015, SF 2025, SF 2059, SF 2083 and SF 2094 are of penny size and belong within Rigold's Bury Series 1 that dates between c. 1470 and 1539 (Rigold 1978). More specifically, SF2015 belongs within Series 1G (Rigold 1978, 95); SF2059 to Series 1C and SF2083 to Series 1F (Rigold 1978, 94). The obverse often has the legend SANCTE NICOLAVS around a mitre; the reverse has the legend AVE/REX/GEN/TIS (behold the king). One of the tokens, SF 2021, belongs to Rigold's Series X. The remains of casting spurs are visible on SF 2015 and SF 2059. Two are in poor condition, SF 2092 and SF 4014, and cannot be allocated to a series. In addition to the penny sized boy bishop tokens, two larger ones were retrieved. SF 2008 is a groat-sized, boy bishop token; on the obverse is a mitred bust facing forward (slightly left) with crozier on the left, an 'n' in the field on the right. The legend is clipped off the edge in places and masked by dirt. On the reverse is a double circle for legend and small cross and pellets in the central roundel. Within the Inner circle is a legend that is broken but clear, punctuated with a series of dots ORA PRO NOBIS. SF 2058 is of comparable size but poorly executed with the obverse legend being illegible and the reverse off centre.

Boy Bishop tokens were produced and commonly handed out by abbeys during the 16th century. Those distributing the tokens were elected boy bishops; a boy from the choir would be chosen to act as a bishop around the time of St Nicholas' Day in the month of December. This practise was ended by Henry VIII with attempts to revive it by later monarchs.

As well as the boy bishop tokens, seven uniface lead traders' tokens were recovered. Four have the same H monogram on the front, SF 2045, SF 4000, SF 5053 and SF 5054. Monograms are likely merchant marks of the 17th century. Other marks on the front of the tokens include a four oval-shaped petal and stem motif, SF 2041, and a moulded cross with pellets motif, SF 5035.

Thirteen cloth or bag seals were also recovered during the metal detecting: SF 2046, SF 2052, SF 2066, SF 2067, SF 2069, SF 2074, SF 2082, SF 3042, SF 3044, SF 4021, SF 5011, SF 5016 and SF 5043. They are predominantly of the two-disc alnage types and date from the 16th century onwards. SF 2046 is of note in that on one face of the surviving disc is the lettering XXXVX, which possibly relates to the dimensions of the cloth. The opposite face is undecorated except for the central rivet that appears to be marked with one larger X and two smaller x at its side; these could represent a portcullis that would indicate a county seal. Possibly a Norwich one of the 17th century. There is also one example of a four-disc alnage type seal, SF 2066. The first disc bears a heraldic device with the letters CG. The reverse is stamped with a boxed F shape. The remaining two discs are undecorated, though one has a central perforation through which is a rivet. The 'F' was used from 1474 to indicate textile with minor faults.

A range of cast lead shot was recovered from the topsoil and subsoils. Seven pieces of shot were from layer 12000 in P2: SF 5018, SF 5020, SF 5030, SF 5038, SF 5051, SF 5052, SF 5056; and seven from layer 5002 in EX2, bulk SF3027. The weight of the lead shot suggests it was predominantly musket balls fired from either muskets or carbines (Harding 2012). Several of the musket balls, for example SF 5052, have a flattened patch 7mm in diameter either caused from use of a ramrod or from being included in a multiple load.

Other lead finds include pot mends used for repairing pottery and copper alloy vessels, such as the ones in the bulk bag SF 3027 and SF 5017; lead window comes in bulk SF 3027 and a lead button in bulk SF 3027.

Modern

(Defined for the purposes of this summary as objects dating from the Victorian period or later)

Four hundred and seventeen objects are of modern date. This material was retrieved during the metal detecting of the topsoil and subsoil layers; they are summarised here with only select items of interest being highlighted.

Predominantly the objects in this section include debris of 19th century to 20th century date that has been discarded or lost during agricultural activities on the site. It includes quantities of lead, copper alloy and tin offcuts or waste from industrial activities or roofing from beyond the vicinity of the site (SF 3025, 3030, 5005, 5067, 5068). Amongst this modern assemblage are a range of buttons, SF3026, including livery buttons such as the General Army Service button, SF 5015, and several made by the makers Firmen & Sons, London, SF 5027 and SF 5028; the former is decorated with an animal head in front of crossed swords.

In addition to the buttons, 19th century dress accessories include copper alloy corset fasteners (SF 3029), silver cufflinks (SF 3029) and a copper alloy bead (SF 5022).

Household objects include machine made copper alloy thimbles (SF 3020, SF 3047); copper alloy fixtures and fittings such as escutcheons and mounts (SF 2087, SF 3028, SF 4004, SF 4005); furniture handles (SF 3037), swivel hoops (SF 5066) and a monogrammed plaque (SF 3029); substantial iron fittings that are perhaps of a more structural nature (SF 3066).

There are also lost Georgian and Victorian coins (SF 3029, SF 3040, S F3047) and selected spent bullet cartridges (SF 3045) that are likely to relate to the use of the site in WW2 as practice ranges. Three iron horseshoe nails (SF 4020) and fragments of an iron horseshoe (SF 3066) reflect the use of horses during the periods.

In the fill 12515 of pit 12514, approximately one hundred and forty pieces of wire with decayed cardboard attached were recovered. These are likely the remnants of a 20th century mesh-like container. Overall, the post-18th century assemblage does not relate to the archaeology on the site and warrants no further study. A single find has here been highlighted due to its unusual nature:

Copper alloy

A 1930's masonic token-advanced. Obverse: ADVANCED plus mason's hammer and chisel and words SON OF MAN, MARK WELL within a circle. Reverse: central image of triangle with a keystone within Hebrew script around triangle sides. Outer border of snake eating its tail.

SF5012, layer 12000, topsoil for P2.

Uncertain date

Twenty-three objects were found that are of uncertain date and function, and are listed here.

Copper alloy

Ten copper alloy objects were recovered during the metal detecting of the plough soil, including offcuts, SF 2027, SF 2028, SF 3012, SF 4019, SF 5064 and amorphous pieces of waste SF 2080 and SF 2081. One is possibly a button head, SF 2006; another a possible weight, SF 2084; and another, a piece of gilded mesh, SF 2029.

Two co-joining pieces of openwork. The thin sheet has a series of evenly spaced circular perforations (6 complete in total) with a series of prongs between each circle for attachment. The piece appears gilded and is possibly part of a decorative buckle plate.

SF2029, layer 5002, subsoil for EX 2.

Iron

A single nail was retrieved and recorded in bulk bag, SF 4024.

Lead

Twelve lead objects were recovered during the metal detecting of the ploughsoil and are of uncertain date; the nature of some lead objects such as weights is that similar forms were used from the Roman to later periods. A wide range of weights were recovered from Elms Farm excavations in Heybridge (Tyrrell 2015) and offer some suitable comparisons to the weights retrieved here.

5.4.1 Ceramic Loomweights

Ioannis Smyrnaiois

FAS 055

Thirty-two fragments of fired clay weighing 1,232 grams were originally identified as ceramic loomweights and were given a small find number on site. An additional sixty-eight pieces of loomweights and possible loomweights, weighing 445 grams, were

identified during the fired clay assessment in Section 5.3.4. The material discussed in this section only describes the fragments that were originally assigned a small find number, which are summarised in Appendix 14. Suggestions for the potential of remaining material are presented in Sections 6.5.2 and an updated project design is presented in Section 7.

According to the appendix, with exception of some small flat undiagnostic pieces from pit fill 0397 (SF 1026), most of the loomweights are triangular with rounded edges, dating to the Late Iron Age. Such loomweights have at least three perforations, going through each side of the loomweight twice. The perforation angles range between 30 and 50 degrees, and the perforation diameters range between 11mm and 15mm.

Table 106 presents the quantification of loomweights by fabric. As can be seen, most of the pieces have been produced from a medium sandy fabric with flint.

Fabric	Description	No	% No	Wt/g	% Wt/g
fsc	fine sandy with chalk	9	28.1	364	29.5
fsf	fine sandy with flint	1	3.1	13	1.1
fsv	fine sandy with voids	3	9.4	70	5.7
msf	medium sandy with flint	19	59.4	785	63.7
	Totals	32	100.0	1232	100.0

Table 106. Quantification of ceramic small find fabrics

Table 107 presents the distribution of all ceramic small finds by feature type. As with the fired clay, most of the material derived from pit fills.

Feature type	No	% No	Wt/g	% Wt/g
Ditch	1	3.1	90	7.3
Pit	30	93.8	1077	87.4
Topsoil	1	3.1	65	5.3
Totals	32	100.0	1232	100.0

Table 107. Quantification of ceramic small finds by feature type

FAS 056

The site produced seventeen pieces weighing 379 grams, which were originally identified as ceramic loomweights and were given a small find number on site. An

additional sixty-four pieces of loomweights and possible loomweights, weighing 1,107 grams, were identified during the fired clay assessment in Section 5.3.4. The material discussed in this section only includes the fragments that were originally assigned a small find number, which are summarised in Appendix 14. Suggestions for the potential of remaining material are presented in Sections 6.5.2 and an updated project design is presented in Section 7.

Pit fills 5085 and 5134 were the only contexts that produced pieces of fired clay identified as possible Late Iron Age triangular loomweights. The remaining fragments could come from loomweights, even though they do not bear any features that allow positive identification. Table 108 shows that the heaviest pieces were produced from a medium sandy fabric with flint. All of the material was recovered from pit fills.

Fabric	Description	No	% No	Wt/g	% Wt/g
fs	fine sandy	1	5.9	9	2.4
fsf	fine sandy with flint	5	29.4	236	62.3
fsv	fine sandy with voids	10	58.8	133	35.1
ms	medium sandy	1	5.9	1	0.3
	Totals	17	100.0	379	100.0

Table 108. Quantification of ceramic small find fabrics

5.5 Quantification and Assessment of the Environmental Evidence

5.5.1 Human Skeletal Remains from FAS 056

Sue Anderson

Groups of cremated bone from three urned burials, two unurned burials and a pit were assessed by rapid scanning. Three of the burials are of Early/Middle Bronze Age date, but the other features had no associated finds. The material is presented in Appendix 15.

Bone from the burials was collected as bulk samples and flotation-sieved, the entire residue being retained as a single group for each context with the exception of urn burial 12257, the contents of which were excavated in spits. Unurned burial 2099

was excavated on site in an upper and a lower spit, and 12271 was half-sectioned with each half being collected under a separate context number. The residues have been divided into four fractions (>10mm, >4mm, >2mm and <2mm).

Table 109 shows the approximate bone weights by context.

Burial	Contexts	Date	Total wt(g)
2099	2101, 2102	-	403.5*
5086	5087	-	5.5
12257	12270	MBA	52.6
12263	12269	-	5.2
12271	12272, 12273	EBA/MBA	7.4
70219	70221	EBA/MBA	4.4

Table 109. Approximate bone weights by context (* weight includes unsorted <2mm fractions)

The largest collection of bone was from pit 2099, but the total quantity is low (less than a quarter of the average expected weight for an adult female). The other burials had been smashed and were substantially truncated, resulting in the very low bone weights recovered.

Burial 2099 was from an isolated pit in Area SME1. It is in fair condition and includes several identifiable fragments such as pieces of cranial vault and long bone. The size of the bones and gracility of the skull, together with the lack of fusion of the lambdoid suture, suggests that the individual may be a young adult female or possibly an older sub-adult.

Pit 5086 in Area EX2 contained small fragments of brown-stained bone which appeared to be of animal origin, together with some fully calcined white bone. Some of the latter may be human, but further work would be required to confirm this.

Four features in a cluster within the Phase 2 area contained cremated bone in small quantities. A further four pits in this area were sampled, but no bone was recovered. The largest quantity from this group is from fill 12257, and a few fragments from the vessel are relatively large with some identifiable pieces, although age and sex has not yet been determined. Most of the pieces recovered from fills 12263 and 12271 are too small for identification. The small fragments from fill 70219 appear to be pieces of infant/juvenile skull and long bone.

5.5.2 The Animal bone

Julie Curl

Methodology

Animal bone was recovered from both sites, and the assemblage from each one is discussed separately below. The bone in the assemblages consisted of hand-collected material and bone from sieved samples. Bone was identified to species wherever possible and assessed for the presence of suitable bones for ageing, measuring for estimates of species, stature and breed. There was no attempt to record all bird and fish remains to species at this stage, hence, many were recorded simply as 'bird' or 'fish'. The mammal bones were recorded and estimated following a modified version of guidelines described in Davis (1992) and Baker & Worley (2014).

Butchering was recorded, where possible noting the type of butchering, such as cut, chopped or sawn, and location of butchering. A note was also made of any burnt bone. Pathologies were noted where easily observed. Other modifications were also recorded, such as any possible working, working waste or animal gnawing.

Weights and total number of pieces counts have been taken for each context for the hand-collected bone, and these appear in the appendix. Samples were not quantified at this stage. Bones that were assessed as measurable (following Von Den Dreisch 1976) and countable (following Davis 1992) were noted as present by context. All information was recorded directly into an Excel database for analysis. A catalogue is provided in Appendix 16a giving a summary of all of the faunal remains by context. The full assessment data record is available in the digital archive and a summary table is provided for the appendix.

The animal bone from FAS 055

The hand-collected assemblage – provenance and preservation

A total of 18,226 grams of faunal remains, consisting of 5,773 elements, was recovered from the hand-collected bone from FAS 055. These are quantified by weight in Table 110 and by element count in Table 111.

Date range	Feature type and weight (g)				Total by date
	Bioturbation	Ditch	Pit	Posthole	
Prehistoric	1	2	16714		16717
Roman. Pre			38		38
Undated		380	1088	3	1471
Total by feature	1	382	17840	3	18226

Table 110. Quantification by weight of the hand-collected faunal assemblage by major period and feature type

The bulk of the bone was produced from pit fills of prehistoric date range. Much smaller amounts were recovered from ditch, posthole and bioturbation fills, with some bone associated with Roman ceramics.

Date range	Feature type and count of elements				Total by date
	Bioturbation	Ditch	Pit	Posthole	
Prehistoric	12	26	5067		5105
Roman. Pre			74		74
Undated		41	552	1	594
Total by feature	12	67	5693	1	5773

Table 111. Quantification by count of the hand-collected faunal assemblage by major period, and feature type

The condition of the bone at this site varied considerably. Some remains were in good condition with little damage to surfaces. Many fills produced heavily fragmented bone with numerous small fragments and some powdering and erosion of surfaces. Fragmentation had also occurred from butchering, which was regularly seen in the assemblage.

One pit fill showed clear canid gnawing. Several fragments of burnt bone were also recovered from pit fills and associated with other bone waste, suggesting cooking fire remains and burnt food debris.

Several bones were noted with surviving metrical data that would allow estimation of stature, breed and species.

Species, modifications and observations

At least six species were noted during the assessment, with the probability that further will be identified during a full analysis. Most are of a probable domestic stock

origin, with environmental evidence provided from herpetofauna bones discovered. Quantification of the hand-collected bone by species is presented in Table 112.

Species	Feature type and NISP				Species total
	Bioturbation	Ditch	Pit	Posthole	
Cattle		17	227		244
Equid		3	67		70
Herpetofauna			17		17
Mammal	12	46	5295	1	5354
Pig/boar			8		8
Sheep/goat		1	77		78
Small mammal			2		2
Feature total	12	67	5693	1	5773

Table 112. Quantification of the hand-collected faunal assemblage by feature type, species and NISP

The main food species

The most frequent species was cattle, which was found in sixty deposits. Most cattle were adults, with some juvenile and neonatal bones, suggesting local breeding; several pathologies were recorded.

Thirty-one fills yielded remains of sheep/goat. Ages varied considerably: most were remains of adult, with several juveniles and one pit fill that produced neonatal remains, indicating local breeding. The bulk of the remains appear to be sheep, although a small amount of bone may be from goat, but this needs to be confirmed with metrical data and comparison with reference material.

Three deposits produced remains of pig/boar, including a well-worn third molar that might suggest an older breeding animal or perhaps wild boar.

Other species

Equids were discovered from eighteen deposits, seventeen of which were pit fills. All of the equid bone was from adult animals, which may suggest breeding elsewhere. Most of the equid bones noted indicate small equids, either small ponies or possibly mules, and mature in age. Butchering was seen on several equid bones, with knife

cuts from skinning and two limb bones that may have been chopped, which would either suggest meat or perhaps dismemberment for burial into a smaller pit.

Two small mammal bones, which need to be identified, were recorded from pit 0281, fill 8004.

Herpetofauna bones were recorded from three contexts, mostly from frog or toad. All are from pit fills and perhaps suggests the pits became pitfall traps for wandering frogs and toads, either on migration in spring or while out hunting.

Butchering

Butchering was seen throughout on the main domestic food mammals and birds. Chops from the division of the carcass and from production of cuts of meat were observed. Finer cuts were seen from the skinning process and from the removal of the meat from the bone. Splitting of bone was recorded, suggesting an interest in the marrow. Butchering was noted on several equid bones, with knife cuts from skinning and two limb bones that may have been chopped, which may indicate meat consumption, either for people or perhaps dogs.

Butchering varied a great deal, with some very light and other bones quite heavily hacked, perhaps suggesting that some preparation of the carcasses was carried out by inexperienced butchers.

Pathologies

Pathologies were noted with the cattle, most of which indicate working animals used for traction. Pathologies were also seen with some of the equid remains, indicating animals kept to a mature age. Surprisingly few pathologies were recorded with the sheep/goat.

The sieved sample assemblage

Sieved sample residues produced bone from forty-five samples; forty-four from pit fills and one from a posthole. The samples were not quantified at this stage and only scanned for range of species and potential for producing dietary or environmental evidence.

Species identified from the sieved samples included domestic food mammals, numerous herpetofauna, small mammals, rodents, and a range of birds including songbird and waders. Burnt bone was frequently recorded from samples.

Discussion

The assemblage from FAS 055 was varied. The hand-collected remains included the main domestic food mammals of cattle and sheep/goat. Equids were frequent and initial observations suggest ageing small equids. Pigs/boars appear to have supplemented the diet, but were not relied upon.

There were several small and delicate herpetofauna remains, which suggested that rubbish pits acted as pitfall traps for the wandering frogs and toads. Canids were not recorded from the bone remains, but their presence is indicated by gnawing on some of the bone. The sieved samples provided greater evidence for small mammals, birds and further herpetofauna remains.

The animal bone from FAS 056

The hand-collected assemblage – provenance and preservation

The hand-collected assemblage produced a total of 23,272 grams of faunal remains, consisting of 7,890 elements, and is quantified in Table 113.

Feature type	Date range and weight (g)				Feature total
	?Roman/Pre	Prehistoric	Roman	Undated	
2msubdiv12708				1	1
Boundary ditch			1		1
Burnt mound		10			10
Ditch	211	1223	4533	2747	8714
Gully				37	37
Natural feature		2		11	13
Pit		5950	178	290	6418
Posthole				1	1
Quarry		1	3181	4	3186
'Sheep remains'				251	251
SK5113/Pit				2245	2245
Terminus of ditch		44			44
Type					0

Feature type	Date range and weight (g)				Feature total
	?Roman/Pre	Prehistoric	Roman	Undated	
Well		2230	121		2351
Total by date	211	9460	8014	5587	23272

Table 113. Quantification by weight (g) of the hand-collected faunal assemblage by major period and feature type

The bulk of the remains (38%) were yielded from ditch fills that included prehistoric and Roman artefacts; still, some of the remains are undated. Prehistoric pit fills produced 25% of the hand-collected bone (by weight), and prehistoric well deposits yielded 10% of the remains (Table 114).

Feature type	Date range and count of elements				Feature total
	?Roman/Pre	Prehistoric	Roman	Undated	
2m subdivision 12708				1	1
Boundary ditch			6		6
Burnt mound		23			23
Ditch	17	1229	1338	1214	3798
Gully				4	4
Natural feature		10		16	26
Pit		2002	62	299	2363
Posthole				1	1
Quarry		3	784	4	791
'sheep remains'				156	156
SK5113/Pit				204	204
Terminus of ditch		44			44
Well		445	28		473
Total by date	17	3756	2218	1899	7890

Table 114. Quantification of the hand-collected faunal assemblage by spot dates, feature type and count of elements

The condition of the bone at this site varied considerably. Some remains were in good condition with little damage to surfaces. Many fills produced heavily fragmented bone with numerous small pieces and some erosion of surfaces and powdering. Fragmentation has also occurred from butchering, which was regularly seen in the assemblage. One fill produced gnawed bone and several deposits produced burnt fragments.

Numerous bones were noted with surviving metrical data that would allow estimation of stature, breed and species.

Species, modifications and observations

At least nine species were identified during the assessment, which are quantified in Table 115.

Species	2msubdiv12708	Boundary ditch	Burnt mound	Ditch	Gully	Natural feature	Pit	Posthole	Quarry	'Sheep remains '	SK5113/Pit	Terminus of ditch	Well	Species total
Bird									3					3
Cattle			20	129	2	1	112		20			12	19	315
Deer - Red							1							1
Deer - Roe							1							1
Deer?							2							2
Dog				5										5
Dog/wolf				2			24							26
Dog?				1										1
Equid				30			9		26			8	6	79
Goat										156	179			335
Mammal	1	6	3	3628	2	25	2162	1	738		25	22	445	7058
Pig/boar							9					2	2	13
Sheep/goat				3			43		4				1	51
Feature total	1	6	23	3798	4	26	2363	1	791	156	204	44	473	7890

Table 115. Quantification of the hand-collected faunal assemblage by feature type, species and NISP

The main food species

Fifty-two deposits yielded remains of cattle. Most remains were from adults, although several juvenile bones and one neonatal were recorded. The cattle produced some pathologies.

Twenty-three deposits produced sheep/goat, most from adult animals, with one juvenile femur seen. Most remains were limb and teeth, with two fills producing sheep skull/horncores. The sheep/goat included two deposits, pit 5112, fill 5114 and

a 'sheep remains' deposit 12504, fill 12505, that produced numerous bones of goat, suggesting two burials of complete animals, one of which showed multiple pathologies.

Pig/boar were found in four fills. All remains were from juvenile animals, including a neonatal, indicating local breeding.

Other species

Seventeen deposits produced bones of equid, all of adult and none with any clear butchering noted during the assessment. The equid seen all appear to be from small individuals.

Dog and dog/wolf were recorded from four deposits (three ditches and one pit) and included a medium to large individual.

Deer remains were seen from two fills: pit 5390, fill 5392 produced a red deer tibia and pit 5337, fill 5339 yielded a roe deer scapula. A possible deer pelvis was also seen in fill 5392. Both the red and roe deer had been butchered, attesting to their use for meat.

A single bird bone was recovered from the quarry fill 5426, which needs to be identified to species.

Butchering

Butchering was seen throughout the main domestic food mammals and birds. Chops from the division of the carcass and from production of cuts of meat were seen. Finer cuts were seen from the skinning process and from the removal of the meat from the bone. Splitting of bone was recorded, suggesting an interest in the marrow. Although numerous equid bones were recorded, none from them site appeared to be butchered.

Butchering varied a great deal, with some very light and other bones quite heavily hacked; some unusual chops and cuts were seen, including those across the

proximal articular end of a cattle metapodial, perhaps suggesting that some preparation of the carcasses was carried out by inexperienced butchers.

Pathologies

Cattle pathologies generally indicated age and wear, suggesting traction animals. The equid bone, as with the cattle, showed pathologies that indicated stress and probable traction or load-bearing. The sheep showed some evidence of age. The goat skeleton from pit 5112, fill 5114, showed numerous pathologies, including a severe infection in the mandible and problems with the feet and limbs.

The sieved sample assemblage

The sieved sample residues from FAS 056 produced bone from thirty-three samples from a range of pit, ditch, quarry and well deposits. The samples were not quantified at this stage and only scanned for range of species and potential for producing dietary or environmental evidence.

Most of the samples show some potential to provide additional dietary and environmental evidence. Sample numbers 91 (from ditch 5305), 313 (from pit fill 5408) and 321 (from well deposit 5479) show a greater range of species.

The samples include the main domestic food mammals, along with remains of small mammals, bird, rodent, a possible bat, dog, and herpetofauna. A single land mollusc was also seen in Sample 63.

Discussion

The assemblage from FAS 056 was varied; it included food and working animal waste and two species of hunted animals. The hand-collected remains were made up of the main domestic food mammals of cattle and sheep/goat with primary and secondary butchering. The sheep/goat remains were mostly sheep, with exception of the bone from two pit fills, 5114 and 12505, which produced numerous bones clearly identified as goat.

Equids were frequent and initial observations suggested small animals, with no clear butchering noted during the assessment. Pigs/boars appeared to have

supplemented the diet, but were not relied upon. There was also evidence of hunting with the presence of meat waste from red and roe deer. In addition, there was evidence of domestic or working dogs.

There were several small and delicate herpetofauna remains, which suggested the rubbish pits acted as pitfall traps for the wandering frogs and toads. The sieved samples provided greater evidence for small mammals, birds and further herpetofauna remains.

5.5.3 Shell

Ioannis Smyrnaiois

FAS 055

The excavation produced twenty-three small fragments of shell weighing roughly 5 grams. The material which derived from six features which were mainly pit fills, is presented in Appendix 17a. The catalogue includes columns with the types of shell and identified species, and the pottery spot-dates of each feature that produced it. The assemblage includes both terrestrial and marine shell, both represented by small fragments. The shell derived from a minimum of seven species. All pit fills that produced shell contained broadly Iron Age pottery, while pit fill 0079 included LIA-Roman sherds.

FAS 056

280 large and countable fragments of shell and over 220 non-countable fragments, consisting mainly of infant species, were recovered from the excavation at FAS 056. The total shell weighs 2,096 grams and is formed by a minimum number of 153 individual adult species. The assemblage also includes roughly 220 infant individuals, recorded as terrestrial snails, although some could also be marine periwinkles. The average shell diameter of such infant species is below 3mm.

The material derived from twenty-five contexts, including nine soil samples, and is presented in Appendix 17b. The shell catalogue includes columns with the types of shell and identified species, and the pottery spot-dates of each feature that produced

it. As with other finds categories from FAS 056, the catalogue includes only part of the total material collected through soil sampling.

As Table 116 shows, the heavier fragments come from marine shell and the lighter ones from terrestrial. Terrestrial shell is also represented by a larger fragment count compared to marine shell. In relation to its total weight, the assemblage consists primarily of native oysters (*Ostrea edulis*).

Shell type	Species	c. No	% No	Wt/g	% Wt/g
Marine	Common periwinkle (<i>Littorina littorea</i>)	2	0.4	4	0.2
Marine	Common whelk (<i>Buccinum undatum</i>)	1	0.2	1	0.0
Marine	Native oyster (<i>Ostrea edulis</i>)	211	42.2	1928	92.1
Terrestrial	Snails	286	57.2	161	7.7
	Totals	500	100	2094	100.0

Table 116. Quantification of shell by species

Table 117 summarises the distribution of shell by feature types. The table shows that the largest quantities of marine shell derived from quarry fills. By contrast, the largest quantities of terrestrial shell derived from ditch fills and wells.

Feature type	Marine				Terrestrial			
	c. No	% No	Wt/g	% Wt/g	c. No	% No	Wt/g	% Wt/g
Burnt mound	1	0.5	11	0.6	0	0.0	0	0.0
Ditch	28	13.1	232	12.0	204	71.3	83	51.6
Natural	0	0.0	0	0.0	3	1.0	1	0.6
Pit	12	5.6	222	11.5	25	8.7	19	11.8
Quarry	171	79.9	1445	74.8	14	4.9	23	14.3
Well	2	0.9	23	1.2	40	14.0	35	21.7
Totals	214	100.0	1933	100.0	286	100.0	161	100.0

Table 117. Distribution of shell by feature type

The chronological distribution of the material, as presented in the appendix, shows that most of the shell derived from fills with Roman pottery, followed by fills with Late Bronze Age or broadly Iron Age pottery.

5.5.4 Plant macrofossils and other remains

Anna West

Methods

The samples from both sites were processed in full using manual water flotation/washover and the flots were collected in a 300 micron mesh sieve. The dried flots were scanned using a binocular microscope at x10 magnification and the presence of any plant remains or artefacts are noted on Appendix 18a. Identification of plant remains is with reference to the *New Flora of the British Isles* (Stace 1997). The non-floating residues were collected in a 1mm mesh and sorted when dry. All artefacts/ecofacts were retained for inclusion in the finds total. The residues were also scanned with a magnet to retrieve any hammerstone or ferrous spheroids present.

Quantification

For the purposes of this initial assessment, items such as seeds, cereal grains and small animal bones have been scanned and recorded quantitatively according to the following categories:

= 1-10, ## = 11-50, ### = 51+ specimens

Items that cannot be easily quantified such as charcoal, magnetic residues and fragmented bone have been scored for abundance:

x = rare, xx = moderate, xxx = abundant

Plant macrofossils from FAS 055

Introduction

A total of 103 bulk samples was taken from archaeological features during the excavation at FAS 055. Features sampled included pits, ditches and post holes ranging in date from the prehistoric to medieval periods.

For the purposes of this initial assessment, a subsample of seven flots, from six Iron Age storage pits and a medieval quarry pit, were rapid-scanned in order to assess

the preservation of any plant remains present and their potential to provide useful data as part of the archaeological investigations.

Results

Plant macrofossils

Preservation of the plant macrofossils present is through charring and is generally fair to poor. Wood charcoal fragments are present in all the samples; in many it made up the majority of the material present; in others however, charcoal fragments were rare. Commonly, the charcoal is highly comminuted but occasionally fragments are large enough to be suitable for radiocarbon dating; where applicable this is noted in Appendix 18a.

Charred cereal grains are present in all but one of the samples, mostly however, in very small numbers or as individual grains. The counts recorded within Appendix 18a include large fragments as well as whole caryopses. The majority of caryopses present were very fragmented and/or abraded making identification to species difficult or impossible. Many of the grains present were puffed, with a honeycomb structure and were very friable, as though they had been exposed to combustion at high temperatures.

Barley (*Hordeum* sp.) and wheat (*Triticum* sp.) were both present with wheat being dominant and barley being rare. Both elongated spelt wheat grains and the rounded grains of a free threshing wheat were present within the samples from the Iron Age pits. Free threshing bread wheat grains were more common within Sample 400, from quarry pit fill 9005, along with a small number of barley grains and occasional fragments of large and small pulses. As with the cereal grains, fragments of legumes were included in the total count.

Hazel (*Corylus* sp.) nutshell fragments were recovered from two of the Iron Age pit fills and possible plum family (*Prunus* sp.) stone fragments were present in three samples.

Charred weed seeds were sparse, being most common within Sample 19, from pit fill 0394. Charred grass (Poaceae) seeds, sedge family (*Carex* sp.), and wild radish (*Raphanus raphanistrum* L.) were all observed, but again in relatively small numbers.

Uncharred weed seeds were more common but still only present in small numbers. Knotweed family (Polygonaceae), clover/medicks (*Trifolium/Mediago* sp.), goosefoot family (Chenopodiaceae), speedwells (*Veronica* sp.), campion family (*Silene* sp.) and cabbage family (*Brassica* sp.) were all present, but often as less than ten specimens at a time. Many of the species present were common weeds of both cultivated or rough, open ground; however, as none of them were either charred or mineralized, it is possible that they are modern contaminants and intrusive within the archaeological contexts sampled.

Other materials

Terrestrial snails were common within Sample 400, from quarry pit fill 9005, but were rare within the Iron Age pits. Amphibian/small mammal bones were present but were also rare. Insect remains were frequent within Sample 18 from pit fill 0200; these appear to be pollen beetles (*Meligethes* sp.). It would not be expected for beetles to be preserved in archaeological contexts unless subject to chance waterlogging; it is therefore, likely that these specimens are modern and entered the sample during excavation. No further attempt has been made to identify any of this material for the purposes of this report.

The presence of any bone fragments, spheroidal hammer scale and non-ferrous vitrified globules were all recorded in Appendix 18a. This material was observed during scanning under a microscope and although its presence was noted, the fragments were often too sparse or too small to justify further examination.

Discussion

Iron Age pits

Six samples were examined from Iron Age pits; the flots recovered were relatively small at 50ml or less and the material within most of them was fairly sparse. Charred spelt wheat and barley grains were both observed but were generally fragmented

and too sparse in numbers to quantify, fewer than ten grains or fragments being present in most of the samples examined. Spelt wheat was favored during the Iron Age and Roman periods in lowland Britain. A small number of spelt wheat spikelet forks were observed within Sample 19, from pit fill 0394, suggesting that cereal processing may have been taking place in the vicinity. Glume wheats such as spelt had to be processed using heat (or parched) before pounding to release them from their spikelet; this was often done in small batches possibly on a daily basis or as required. Possible sedge nutlets were also observed within Sample 19, from pit fill 0394; these remains may indicate the utilisation of plant resources as thatching, flooring or bedding.

Ferrous spheroids and non-ferrous globules were recovered from Sample 18, from pit fill 0200, and Sample 36, from pit fill 0600. Spheroid hammerscale is produced during hot welding and indicates metalworking may have been taking place in the vicinity. Non-ferrous vitrified material may also be the result of some unidentified light industrial activity.

The mixed assemblage of cereal processing waste, animal bone fragments and light industrial residues suggest that the pits have been backfilled with domestic refuse and detritus once they were no longer required as storage pits, if that was their original function.

Medieval quarry pit

The flot recovered from Sample 400, from pit fill 9005, was relatively small at 15ml. Charred cereal fragments were present, but were generally too fragmented for detailed identification. Both free threshing bread wheat and barley grains appeared to be present. A small number of legume fragments were also observed; as with the cereal grains these were too fragmented for detailed identification at this stage. Wood charcoal was rare within this flot and the majority of the volume present was made up from mollusc shells, closer examination of which may be informative regarding the nature of the immediate environment and how depositional processes effected the backfilling of this feature.

The cereal remains recovered from Sample 400 were too sparse to justify quantification.

Plant macrofossils from FAS 056

Introduction and site-specific sample strategy

A total of 206 bulk samples was taken from archaeological features during the excavations at FAS 056. Features sampled included pits, ditches and wells, ranging in date from the prehistoric to Roman periods.

Due to the large number of samples taken during the excavation a subsample of sixteen flots have been rapid-scanned for the purposes of this report, in order to assess the preservation of any plant remains present and their potential to provide useful data as part of the archaeological investigations. Features examined include pits, ditches, wells and a posthole dating from the Bronze Age to the Roman period. The majority of the bulk samples have been processed in full; however, a number of one-litre, ten-litre or forty-litre subsamples have been retained from contexts within the burnt mound complexes, in order to retain material suitable for further specialist analysis.

As part of the excavation process, a number of high-volume samples (160 litres +) were taken from contexts within the burnt mound structures. From these large samples a subsample of forty litres was floated; ten litres were retained and the remaining material was wet sieved for finds retrieval.

Following quantification, a subsample of fire-cracked flint has been retained from the non-floating residues of bulk samples taken from the burnt mound complexes. These, along with a number of unwashed flint scappers, have the potential to be submitted for lipid or residue analysis and provide evidence of the exploitation of animal or plant based resources, as part of the analysis report.

Results

Plant macrofossils

Preservation of the plant macrofossils present was through charring and was generally fair to poor. Wood charcoal fragments were present in all the samples, in many making up the majority of the material present; in others however, charcoal fragments were rare. Commonly, the charcoal was highly comminuted but occasionally fragments were large enough to be suitable for radiocarbon dating; where applicable this is noted in Appendix 18b.

Charred cereal grains were present in many of the samples, mostly however, in very small numbers or as individual grains. The counts recorded within Appendix 18b include large fragments as well as whole caryopses. The majority of caryopses were very fragmented and/or abraded making identification to species difficult or impossible. Many of the grains present were puffed, with a honeycomb structure and were very friable, as though they had been exposed to combustion at high temperatures. Barley (*Hordeum* sp.) and wheat (*Triticum* sp.) were both observed but in low numbers or as single specimens. Chaff elements were also extremely rare within the samples scanned, again only being observed in low numbers or as single specimens within three samples.

Pulses were present in small numbers in two samples; again, as with cereal grains, fragments were included in the total count and recorded as small or large legume.

Hazel (*Corylus* sp.) nutshell fragments were recovered from Bronze Age and Iron Age features but were rare; a possible plum family (*Prunus* sp.) stone fragment was observed in one sample.

Charred weed seeds were sparse; grass (Poaceae) seeds were observed in three samples. The charred bulbous basal culm internodes of false Oat Grass (*Arrhenatherum tuberosum* L.) also known as Onion couch grass, were recovered in small numbers from the flot and non-floating residue of Sample 653, from ditch fill 12439. This grass is intolerant of cutting or trampling and so is unusually absent from pasture, but may be present in ungrazed grasslands or arable land that has fallen

fallow. The swollen basal internodes often form a chain of bulbs that will vegetatively reproduce when severed through ploughing or harrowing; this grass therefore can quickly become an invasive weed of arable crops unless winter ploughing or burning of the soil surface is carried out. The presence of the basal nodes suggests the grass may have been uprooted by hand, possibly whilst a crop was being harvested in this way (Roehrs *et al.* 2012).

Uncharred weed seeds were more common but still only present in small numbers. Knotweed family (Polygonaceae), clover/medicks (*Trifolium/Medicago* sp.), goosefoot family (Chenopodiaceae), speedwells (*Veronica* sp.), campion family (*Silene* sp.) and black-bindweed (*Fallopia convovulus* L.) were all present, but often as less than ten specimens at a time.

Many of the species present were common weeds of both cultivated or rough, open ground, however, as none of them were either charred or mineralized, it is possible that they are modern contaminants, and that they are intrusive within the archaeological contexts sampled.

Other materials

Terrestrial snails were common within many of the samples. Within Sample 507, from pit fill 11121, mollusc shells made up the majority of the flot volume. Amphibian/small mammal bones were present but were rare. Insect remains were present in low numbers within Sample 78, from pit fill 5111. No further attempt has been made to identify any of this material for the purposes of this report.

The presence of any bone and fired clay fragments was recorded in Appendix 18b. This material was observed during scanning under a microscope and although its presence was noted, the fragments were often too sparse or too small to justify further examination by the relevant specialist as part of this report. Coal fragments were present in low numbers in Sample 99, from pit fill 5344; these were considered to be modern and intrusive within this archaeological context.

Discussion

Bronze Age features

The material recovered from the Bronze Age features scanned for this report was sparse. Cereal grains were rare and wood charcoal was highly fragmented. The presence of cereal remains and gathered food resources, such as hazel nutshell however, may indicate the transition from subsistence to a more agrarian economy.

The Onion couch remains may have grown within an arable crop, been uprooted during the harvest, or may indicate the presence of open grassland or fallow land nearby.

The presence, however, of an abraded glume base, possibly of spelt wheat which is more commonly grown during the Iron Age or Roman period, within Sample 653 from ditch fill 12439, suggests that some of the material may be intrusive.

Iron Age features

The flots examined from Iron Age features were all relatively small at 100ml or less, and the material within them was sparse. Charred grains were observed but were generally highly fragmented and abraded making identification impossible. This material was also too sparse to quantify, with fewer than ten grains or fragments being present in each sample.

Roman features

Two samples were examined from a Roman pit and ditch. The flots were small at 20ml or less; the majority of this material was made up of wood charcoal and mollusc shells. Cereal remains were sparse within the flots examined. A single spelt wheat (*T.spelta* L.) glume base was observed within Sample 75, from pit fill 5111, and animal bone fragments were present within Sample 78, from ditch fill 5148. This mixture of material is most likely to represent domestic waste, which may have been deliberately disposed of within the archaeological features. However, its sparse nature suggests the material may be general occupation detritus that could have been moved through the actions of wind, water or trample before becoming incorporated within the contexts samples.

5.5.5 Geoarchaeology, palaeo-environmental (pollen and diatom) and organic residues (lipids)

Michael Allen with Nigel Cameron, Julie Dunne, Richard P. Evershed & Catherine Langdon

Sampling and geoarchaeological records

The site was visited on 4th October 2016 and five pits were examined and described (Allen 2016), four of which were sampled as undisturbed samples with 5 x 50cm monoliths, from which a series of pollen and diatom subsamples were removed, and one for residue/lipid analysis. Subsequently the excavator sampled another nineteen features in monolith sequences completing a total of forty-one monoliths of mainly between 43-53cm (Table 118). These were examined by the author and subsequently twelve sequences were subsampled for pollen, three of which were sampled for diatoms as well. A total of ninety-five pollen and seventeen diatoms subsamples were taken (Table 118).

Sequences recorded	Monolithed sequences	Monoliths recorded	Sequences sampled	Pollen		Diatoms	
				Taken	assess	Taken	assess
22	20	41	12	95	14	17	6

Table 118. Numbers of sequences recorded and sampled

Methods

Profiles on site or undisturbed monolith samples in the laboratory were cleaned and described following standard notation (Hodgson 1997) and Munsell colours recorded moist in daylight conditions. Monoliths varying from 25cm to approximately 50cm were carefully cut into the sections and removed from site, and more detailed examination and description undertaken at the AEA laboratory facilities. The face of the undisturbed samples in the monoliths was carefully cleaned and examined in detail with the aid of illuminated magnification and described.

Following full recording, a series of twelve profiles were selected for subsampling and samples were removed from the selected sequences at 10mm band width and intervals of between 40mm and 160mm for pollen and diatoms (see appendices). Following description and subsampling the monolith sequences were discarded. A selection of those subsamples was assessed.

The methods described above applies to the assemblages of both sites, which will be considered separately below.

FAS 055

Aims

The object was to examine the geoarchaeology of the Iron Age pits and associated contexts, and to select appropriate profiles for subsampling for palaeo-environmental data (pollen, diatoms).

Geoarchaeology

For FAS 055 the described and sampled features consists of a single category, the Iron Age pits. The detailed descriptions are provided in the relevant appendices (19a) and summarised in Table 119 below.

Feature/sequence	Description	Monolith tins	Kubiena tins	Soil chemistry	Lipids/residue	Pollen	Diatoms
Iron Age pits							
Pit 0379	Monolith 44	2	-	-	-	7	-
Pit 0500	Monolith 41	1	-	-	-	-	-
Pit 0510	Monolith 42	2	-	-	-	10	-
Pit 0548	Monolith 49	1	-	-	-	-	-
Pit 0599	Monolith 40	1	-	-	-	7	-
FAS 055 totals		7	0	0	0	24	0

Table 119. List of sampled features and samples from FAS 055

Five Iron Age pits were sampled in monolith sequences and described (Table 119), three of which were sampled for pollen (pit 0510) and from which just two samples were assessed (Table 120).

Profiles were sampled in undisturbed monolith samples and removed from site; more detailed examination and descriptions were undertaken at the AEA laboratory facilities. The face of the undisturbed samples in the monoliths was carefully cleaned and examined in detail with the aid of illuminated magnification and described following standard notation (Hodgson 1997) in the laboratory and Munsell colours recorded moist in daylight conditions.

The principle reason for sampling the Iron Age pits was to provide a general geoarchaeological context, a contrast with the burnt mound complexes in FAS 056, and enable selected subsampling for the pollen. The five pits examined (Table 119) had relatively uniform fills, possibly representing a combination of local colluvial and deliberate backfilling (Appendix 19a)

Feature	Sample	Pollen
IA pit 0510	42	2

Table 120. Features sampled for pollen assessment

The Pollen assessment

Catherine Langdon

Pollen methods

Pollen sub-samples of 2ml volume were processed by Rob Scaife using standard techniques for the extraction of the sub-fossil pollen and spores (Moore & Webb 1978; Moore *et al.* 1991) and one lycopodium tablet was added to assess the total concentration of pollen and spores per ml. The pollen and spores were identified and counted using Nikon and Olympus biological research microscopes at magnifications of x400 and x1000. Pollen counts made range from 0 to only 52 grains per sample. Fern spores and miscellaneous elements were counted outside of the basic pollen sum. The raw pollen data is displayed in Tables 79 and 80. Percentages have not been calculated due to the extremely low counts achieved.

Pollen taxonomy, in general, follows that of Moore & Webb (1978), modified according to Bennett *et al.* (1994) and Stace (1992). These procedures were carried out in the Palaeoecology Laboratory of the School of Geography, University of Southampton (PLUS).

Introduction

The principal objectives of the pollen assessment were to establish if sub-fossil pollen and spores are present and, if so, their state of preservation; to provide a record of the past vegetation and environment, and to provide any recommendations

for further analysis. From FAS 055 this included just two samples from Iron Age pit 0510 (context 0513, monolith <42>). Unfortunately, both samples assessed had poor preservation and concentrations.

The pollen data

Samples from pit 0510 showed particularly poor preservation and concentration is apparent in these samples with only the odd incidence of Poaceae, Lactucoideae, *Pteridium* and a single liverwort. Pollen and spores were completely absent from 18cm.

Feature	Sample	Pollen	Diatoms
IA pit 0510	42	3	-
Totals	1	3	0

Table 121. Features sampled for pollen and diatom assessment

Features / monolith	Pit 0510 <42>		
Context	-	-	0513
Depth	18cm	36cm	52cm
Pollen/spore type			
Poaceae	-	-	1
Lactucoideae	-	-	4
<i>Pteridium aquilinum</i>	-	2	-
Liverwort	-	-	1
Total pollen + spores	-	2	6
Exotic	29	22	91
Concentration pollen+ spores/ml	-	439	319

Table 122. Pollen assessment data from pit 0510 (FAS 055)

FAS 056

The site consists principally of two large 'burnt mound complexes' (BMCs) which are hollows with heat-altered flint overlaying and within pits and large waterholes or wells. In addition, there are other Bronze Age ditches and other features. The deposits associated with the burnt mounds are variable and encapsulated, recorded in a large number of geoarchaeologically significant (and sampled) profiles.

Geoarchaeology

The described and sampled features can be divided into a series of three main categories, and are discussed in geoarchaeological terms in these groups. For FAS

056 the features are burnt mound complex buried soils, burnt mound complex related feature sequences and an Iron Age ditch. The detailed descriptions are provided in the relevant appendices (19b) and summarised in Table 123 below.

Feature/sequence	Description	Monolith tins	Kubiena tins	Soil chemistry	Lipids/residue	Pollen	Diatoms
1. BMC soils							
BMC1	Kubiena 474	-	1	1	-	5	-
BMC 1	Kubiena 475	-	1	1	-	-	-
BMC 2	Kubiena 726	-	1	2	-	4	-
2. BMC sequences							
BMC 1: Pit 2921	Field only	-	-	-	1	-	-
BMC 1: Well/pit 2718	Field	-	-	-	-	-	-
BMC 1: Well 2718	Monolith 450	1	-	-	-	-	-
BMC 1: Pit 2932	Field	-	-	-	-	-	-
BMC 1: Pit 3106 (top)	Monolith 157	1	-	-	-	5	-
BMC 1: Pit 3106	Monolith 148+149	3	-	-	-	18	10
BMC 1: Pit 2659	Monolith 129	4	-	-	-	8	-
BMC 1: Pit 2715	Monolith 130	3	-	-	-	-	-
BMC 1: Pit 2715	Monolith 131	4	-	-	-	-	-
BMC 2: Pit 12585	Monolith 706	3	-	-	-	-	-
BMC 2: Pit 1285	Monolith 702	2	-	-	-	-	-
BMC 2: Pit 12585	Monolith 708	5	-	-	-	8	3
BMC 2: Pit 12769	Monolith 715	3	-	-	-	8	4
BMC 2: Pit 12772	Monolith 721	1	-	-	-	4	-
BMC 1: pit 2932	Heat-altered flint 455	-	-	-	1	-	-
BMC 1: pit 2921	Heat-altered flint 469	-	-	-	1	-	-
BMC 2: pit 12586	Heat-altered flint 689	-	-	-	1	-	-
3. Iron Age ditch							
Ditch 11051	Monolith 505	4	-	-	-	10	-
FAS 056 Totals		34	3	4	4	71	17

Table 123. FAS 056 summary of geoarchaeology samples assessed

Description of the features

Burnt mound buried soils

The burnt mound soils were sampled in three kubiena tins (see soil micro-morphological assessment below), and the descriptions (Appendix 19b) indicate the presence of poorly developed weak azonal soils (rendzinas) or brown earth profiles, possibly with a thin Ah (turf) (Fig. 36).



Figure 36. Burnt Mound Complex 1 (sampled as 474, and assessed for pollen)

Burnt mound related sequences

The main category was selected pit infills relating to the two burnt mound complexes (Table 123), a number of which were summarised previously (Allen 2016). In general, the pits can be considered as those with heat-altered flint deposits and those which were large pits / waterholes, and the aim here is not to list all the samples and review them individually, but to provide a geoarchaeological overview and assessment.

There was little clear evidence of sorting of fine-grained material in standing water, in particular the upper fills of pit 3106 (monolith 147). There were a few instances that the deposits were waterlain, and several others were gleyed indicating seasonal (but not permanent) waterlogging. The upper fills of many pits (e.g. well/pit 2718) were clearly locally colluvial, and also contained a possible dumped clay 'plug'. Isolated dumped deposits of heat-altered flint were also present (pit 2932).

Pits with heat-altered flint deposits near their base had, on the whole, primary fills indicating weathering prior to flint dumping; however, some, e.g. pit 2921, showed a

sharp contact between the base and the infills with no primary fill suggesting use immediately after digging or recutting.

Some waterlain deposits and washes were identified; possible waterlain silts were seen within well/pit 2718 (context 2756.2) and washed-in cobbles beneath (context 3107). The base of pit 12585 (BMC 2), however, did show possibly indication of a shallow (170mm thick) waterlain deposit (context 12789).

In pit 2921, a very thin intermittent very dark brown 'greasy' silty clay was present at the very base and may be, or could contain, residue relating to processing and use of the pit. This may be a fatty residue from use such as boiling, skin/hide preparation retting or cooking. A small sample was taken to consider for residue / lipid analysis. Overall a large series of pollen and diatom samples were taken (Table 123), a selection of which were assessed (see below).

Iron Age ditch

Ditch 11051 showed typical tripartite ditch fills (cf. Allen 2017, 38-41; Evans 1972, 321-8), with charcoal flecks in many deposits (Appendix 19b). The profile was sampled (4 monolith tins) and subsampled for pollen.

Soil micromorphology assessment

Methodology

Soil micromorphology samples were taken and analysis considered of soils beneath burnt mound cobbles (Fig. 33). The burnt mounds deposits were characterised by a layer of small and medium stones 'cobbles'; sometime with a darker (burnt or humic) soil matter overlying 'clay', which in some instances is clearly the base of the former soils (A/B or Rw) horizons.

Very large undisturbed samples were taken through burnt mound complex 1 (BMC 1) as K474 and K475, and a third, K726, through BMC 2 by the excavators (see Table 123):

BM1, K474: 23cm high x 19cm wide x 12cm deep
BM1, K475: 17 cm high x 35cm wide x 22cm deep
BM2, K726: 11cm high x 28cm wide x 23cm deep

In each case the large samples were intact and orientation clearly marked. Their large size (see above), however, precluded impregnation and soil thin section (micromorphology) slide manufacture. Consequently, each profile was subsampled into foil kubiena samples (12 x 8 x 4cm). Soil chemistry subsamples were also taken from the main unit in each profile (Table 124).

Prior to sampling, each profile was described in the AEA laboratory facilities; Munsell soil colours being recorded on moistened soil, and descriptions and following notation outlined by Hodgson (1997). One sample from each burnt mound complex was subsampled for pollen at 10mm band width and between 20mm and 40mm intervals.

Sampling Kubiena samples from the large soil blocks

Exceptional care, and considerable time, had to be taken in subsampling these large soil blocks. Having been removed from the context, and partially dried out, they were inherently unstable, loose, cracking and starting to fall apart. They were weak and had little or no cohesive structure. Initial attempts to carefully cut soil block from these using fine instruments and illuminated magnification failed; only succeeded in loosening the soil and weakening one edge. The block could not be sampled satisfactorily; soil collapsed and failed to remain in a block or retain any coherence.

Each soil block was individually consolidated temporarily using a variety of different methods:

- One was placed in a large plastic tray and then infilled with foam which, on drying hardening, supported the soil block and allowed the foam to be cut and a kubiena (undisturbed) sample to be taken against its edge (i.e. profile).
- A second was wrapped in crepe bandages, then sealed with a thin layer of plaster-of-paris and on drying this too was cut away retaining and supporting the rest of the soil block, while a kubiena sample profile was carefully cut from one edge.

In this way three kubiena samples of varying sizes were successfully cut and subsampled from the soil blocks over 1.5 days.

Feature	Context	Sample	Pollen	Soil chemistry
BM1 buried soil	2658	K474	5	A/B
BM1 buried soil	3090	K475	-	A/B
BM2 buried soil	12865	K726	4	A/B R

Table 124. List of samples and subsampled from the three soil blocks

Significance and potential

Soil micromorphological analysis of the two buried soils provides the only secure way to identify the presence of pedogenesis and to satisfactorily define land-use history and pedological differences between the two. There is also the potential to identify pedofeatures or elements specifically relating to the function of the burnt mound complexes.

Keys aims

The key defined aims of soil micromorphological analysis can be identified as follows:

- To elucidate and assist in the interpretation of the function and process of the burnt mound complex and their construction/creation, and to compare and define if they were being used for different substances.
- Define/confirm the presence of Ah (turf/topsoil) material.
- Examine the pedological differences between the soils sampled in BMC1 (K474 and 475) and the less obvious signs of pedogenesis (soil formation) in BMC2 (K476).

Addressed questions

Soil micromorphological analysis will address the following questions:

- Is there a full soil profile present, or how much of the soil profile is present? Was it truncated or de-turfed?
- What was this soil? Is there evidence of previous tillage or pasture (?worm-worked): soil, land-use, human activity history
- Is there evidence of previous heating burning episodes?
- What activity/disturbance is evident at the contact between the 'soil' and the cobbles?
- Is there evidence of heating or burning associated with the upper (cobbles) surface?

- Is there evidence of water quenching? (possible slaking?)
- What other human activities are indicated?

And at broader level:

- What is the potential for further analysis to address these questions?
- What were the hollows (burnt mound complexes) for? Are there primary and secondary functions?
- Can we determine how long they were in use?
- Do both the hollows (burnt mound complexes) have similar functions?
- Were they in use at the same time?
- What was the local environment like at the time?
- What happened to them when they stopped being used for their primary function?

Pilot Lipid assessment programme; a pilot study

The majority of the activity is represented by a number of pits with discrete or clear dumps, or concentrations of heat-altered stones (flints). Four samples were recovered (Table 125) and considered for a pilot lipid residue analysis programme, to determine if organic residue analysis could define if fats were present in the deposits; if there was a potential to determine the nature of those fatty materials; and finally, their significance in relation to the function of the burnt mound complexes.

Sample no.	Material	From	Notes
455	c. 20 varying sized burnt flints c. 300g	Pit 2932, fill 2935, Burnt mound complex 1	Small flints in soil. Only small flints present. Middle fill of pit.
469	Number of burnt flints, varying size, c. 490g	Pit 2921, fill 3150, Burnt mound complex 1	Greasy layer, flint and soil. Middle/ basal fill of pit
689	c. 10 medium/small flints c. 310g	Pit 12586, fill 12587, Burnt mound complex 2	Large flints only, only fill of pit
=469	'Greasy' soil silt	Pit 2921, fill 3150 1cm thick at 55-56cm in, Pit 2921, Burnt mound complex 1	Greasy layer, silt. Base of pit

Table 125. Samples from 'greasy' deposits submitted for the pilot lipid/organic residue analysis

The range of samples (Table 125) would allow an assessment of the methods applicable to the samples from Fornham and assess their ability to provide information useful, and relevant to the questions of the function and activities related

to the burnt mound complexes. The overall aim is to determine materials that would aid in defining the activities (i.e. animal fat processing) associated with the heating of the flints and then to determine if the different complexes had different activities or functions.

Organic residue analysis on burnt flints and sediments: preliminary report

Julie Dunne & Richard P. Evershed

Introduction

Lipids, the organic solvent soluble components of living organisms, i.e. the fats, waxes and resins of the natural world, are the most frequently recovered compounds from archaeological contexts. They are resistant to decay and are likely to endure at their site of deposition, often for thousands of years, because of their inherent hydrophobicity, making them excellent candidates for use as biomarkers in archaeological research (Evershed 1993). Lipids are associated with the major classes of organic remains, namely, absorbed residues found in archaeological pottery, soils and sediments and human, animal and plant remains (Evershed 2008).

The majority of lipid analyses are carried out on archaeological pottery; however, biomarker analyses have great potential as a diagnostic tool to investigate subtle differences in soil organic matter (SOM) caused either by natural changes to soil, such as overlying vegetation changes, or anthropogenic additions caused by human activities (Van Bergen *et al.* 1997; Bull *et al.* 1999). Several classes of compounds provide evidence for the input of specific organic materials into ancient soils and sediments, including middens, disused watercourses, latrines and cesspits (Lin *et al.* 1978; Bethell *et al.* 1994; Evershed & Bethell 1996; Evershed *et al.* 1997a; Bull *et al.* 2002; 2003; Bull & Evershed 2012 and references therein; Shillito *et al.* 2013a; 2013b). Furthermore, the identification of agricultural deposits, such as manure used to fertilise soils, at archaeological sites, has also proved valuable in determining land management practices by early farmers. Other biomarker compounds, lipids diagnostic of human remains, plant and animal input, commodities such as beeswax and other insect or plant waxes and 'exotic' products, such as resins, have been used to determine inputs to anthropogenic archaeological sediments found in

contexts such as tombs and burials. These can be used to recognise specific activity areas, including placement of bodies in tombs, body treatment, tomb furnishings, funerary offerings and feasting (Mukherjee *et al.* 2007; James *et al.* 2009). Overall, this wide range of biomarkers provides evidence for the input of specific organic materials into ancient soils and sediments, providing an understanding of site formation processes and the broader environment as a whole.

The application of modern analytical techniques enables the identification and characterisation of these sometimes highly degraded remnants of natural commodities used in antiquity (Evershed 2008). Often, data obtained from the organic residue analysis of pottery or other organic material provides the only evidence for the processing of animal commodities, aquatic products or plant oils and waxes, particularly at sites exhibiting a paucity of environmental evidence. To date, the use of chemical analyses in the reconstruction of vessel use at sites worldwide has enabled the identification of terrestrial animal fats (Evershed *et al.* 1997b; Mottram *et al.* 1999), marine animal fats (Copley *et al.* 2004; Craig *et al.* 2007), plant waxes (Evershed *et al.* 1991), beeswax (Evershed *et al.* 1997c) and birch bark tar (Charters *et al.* 1993; Urem-Kotsou *et al.* 2002). This has increased our understanding of ancient diet and foodways and has provided insights into herding strategies and early agricultural practices.

Today, the high sensitivities of instrumental methods such as gas chromatography and mass spectrometry allow very small amounts of compounds to be detected and identified. Furthermore, higher sensitivity can be achieved using selected ion monitoring (SIM) methods for the detection of specific marine biomarkers (Evershed *et al.* 2008; Cramp & Evershed 2013). The advent of gas chromatography-combustion-isotope ratio mass spectrometry in the 1990s introduced the possibility of accessing stable isotope information from individual biomarker structures, opening a range of new avenues for the application of organic residue analysis in archaeology (Evershed *et al.* 1994; 1997b).

The stable carbon isotope approach, using GC-C-IRMS, is employed to determine the $\delta^{13}\text{C}$ values of the principal fatty acids (C_{16} and C_{18}), ubiquitous in archaeological

ceramics. Differences occur in the $\delta^{13}\text{C}$ values of these major fatty acids due to the differential routing of dietary carbon and fatty acids during the synthesis of adipose and dairy fats in ruminant animals, thus allowing ruminant milk fatty acids to be distinguished from carcass fats by calculating $\Delta^{13}\text{C}$ values ($\delta^{13}\text{C}_{18:0} - \delta^{13}\text{C}_{16:0}$) and plotting that against the $\delta^{13}\text{C}$ value of the $\text{C}_{16:0}$ fatty acid. Previous research has shown that by plotting $\Delta^{13}\text{C}$ values, variations in C_3 versus C_4 plant consumption are removed, thereby emphasising biosynthetic and metabolic characteristics of the fat source (Dudd & Evershed 1998; Copley *et al.* 2003).

Samples from FAS 056

Three samples of heat-altered flints from both 'burnt mound complexes' were selected, along with one dense and 'greasy' layer near the base of pit 2921 (Table 125). These include two samples of heat-altered flint from BMC 1 pits 2932 and 2921 (samples 455 and 469), and one from BMC 2 pit 12586 (sample 689).

Aims and objectives

The objective of this investigation was to determine whether organic residues were preserved on three samples of heat-altered flints found in a number of pits. Burnt mounds have been suggested to have been associated with cooking activity (O'Kelly 1954), thus, here we test the hypothesis that lipids originating from animal carcasses cooked in the pits may be preserved on the heat-altered rocks. One soil sediment sample was also analysed (Table 125).

Analytical methods

Lipid analysis and interpretations were performed using established protocols described in detail in earlier publications (Correa-Ascencio & Evershed, 2014). The sediment sample from pit 2921 was weighed directly into a furnaced culture tube and the heat-altered stones were placed in a methanolic acid solution for 12 hours to extract any lipids present. An internal standard was then added (30 μg *n*-tetratriacontane; Sigma Aldrich Company Ltd.) together with 5ml of $\text{H}_2\text{SO}_4/\text{MeOH}$ 2 - 4% ($\delta^{13}\text{C}$ measured) and the culture tubes were placed on a heating block for 1 hour at 70 °C, mixing every 10 minutes. Once cooled, the methanolic acid was transferred to test tubes and centrifuged at 2500rpm for 10 minutes. The supernatant was then decanted into another furnaced culture tube (II) and 2 ml of DCM extracted double

distilled water was added. In order to recover any lipids not fully solubilised by the methanol solution, 2 x 3ml of hexane was added to the extracted material contained in the original culture tubes, mixed well and transferred to culture tube II. The extraction was transferred to a clean, furnace 3.5mm vial and blown down to dryness. Following this, 2 x 2ml hexane was added directly to the H₂SO₄/ MeOH solution in culture tube II and whirlmixed to extract the remaining residues, then transferred to the 3.5mm vials and blown down until a full vial of hexane remained. Aliquots of the TLE's were derivatised using 30µl BSTFA, excess BSTFA was removed under nitrogen and the derivatised TLE was dissolved in hexane prior to GC, GC-MS and GC-C-IRMS. Firstly, the samples underwent high-temperature gas chromatography using a gas chromatograph (GC) fitted with a high temperature non-polar column (DB1-HT; 100% dimethylpolysiloxane, 15m x 0.32mm i.d., 0.1µm film thickness). The carrier gas was helium and the temperature programme comprised a 50°C isothermal followed by an increase to 350° at a rate of 10° min⁻¹ followed by a 10 min isothermal. A procedural blank (no sample) was prepared and analysed alongside every batch of samples. Further compound identification was accomplished using gas chromatography-mass spectrometry (GC-MS). FAMES were then introduced by autosampler onto a GC-MS fitted with a non-polar column (100% dimethyl polysiloxane stationary phase; 60m x 0.25mm i.d., 0.1µm film thickness). The instrument was a ThermoFinnigan single quadrupole TraceMS run in EI mode (electron energy 70eV, scan time of 0.6s). Samples were run in full scan mode (*m/z* 50–650) and the temperature programme comprised an isothermal hold at 50° for 2 min, ramping to 300° at 10° min⁻¹, followed by an isothermal hold at 300° (15 min). Carbon isotope analyses by GC-C-IRMS were also carried out using a GC Agilent Technologies 7890A coupled to an Isoprime 100 (EI, 70eV, three faraday cup collectors *m/z* 44, 45 and 46) via an IsoprimeGC5 combustion interface with a CuO and silver wool reactor maintained at 850°C.

Results

Lipid analysis and interpretations were performed using established protocols described in detail in earlier publications (e.g. Dudd & Evershed 1998; Correa-Ascencio & Evershed 2014). The mean lipid concentration from sample of the 'greasy' soil in pit 2921, was 0.194µg g⁻¹; however, lipid concentrations could not be obtained from the heat-altered stone samples as these could not be weighed. The

lipid profiles of the heat-altered stone samples 455, 469 and 689 (Table 126, Fig. 34), respectively, comprised the free fatty acids, palmitic (C₁₆) and stearic (C₁₈), typical of a degraded animal fat (e.g. Evershed *et al.* 1997b; Berstan *et al.* 2008). Also present were a series of long-chain fatty acids (in low abundance), containing C₂₀ to C₂₆ acyl carbon atoms (Fig. 34). It is thought these LCFAs likely originate directly from animal fats, incorporated via routing from the ruminant animal's plant diet (Halmemies-Beauchet-Filleau *et al.* 2013; 2014). The presence of an unsaturated compound C_{22:1} in each of these samples is somewhat unusual and requires further investigation. Plasticiser was present in all samples in varying abundances, likely due to their storage in plastic bags.

Laboratory Number	Sample number	Material	Pit number	Lipid	Total lipid	$\delta^{13}\text{C}_{16:0}$	$\delta^{13}\text{C}_{18:0}$	$\Delta^{13}\text{C}$	Attribution
				concentration (ug g ⁻¹)	in extract (ug)				
AEA001	455	Burnt flints	2932	-	-	-30.8	-30.3	0.4	Non-ruminant/ruminant adipose
AEA002	469	Burnt flints	2921	-	-	-29.6	-30.6	-1.0	Ruminant adipose
AEA003	689	Burnt flints	12586	-	-	-30.2	-29.8	0.4	Non-ruminant/ruminant adipose
AEA004	=469	'Greasy' soil	2921	194	500	-	-	-	-

Table 126. Laboratory number, sample number and type, pit number, lipid concentrations ($\mu\text{g g}^{-1}$), total lipid concentration in extract (μg) and $\delta^{13}\text{C}$ and $\Delta^{13}\text{C}$ values

The soil sample lipid profile (AEA004) was complex, comprising of a mixture of saturated and unsaturated fatty acids, together with plasticisers. These are not diagnostic and cannot be attributed to any particular source, likely arising from plant or animal matter present in the local environment.

GC-C-IRMS analysis was carried out on samples 455, 469 and 689 to determine the $\delta^{13}\text{C}$ values of the major fatty acids, C_{16:0} and C_{18:0}, and ascertain the source of the lipids extracted, through the use of the $\Delta^{13}\text{C}$ proxy (Table 126, Fig. 38).

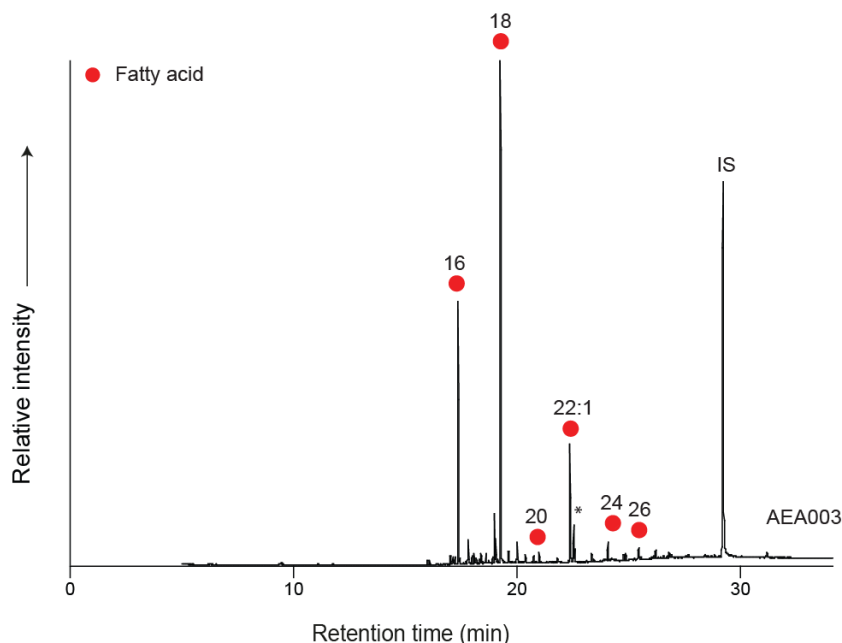


Figure 37. Gas chromatogram of trimethylsilylated FAMES from sample of heat-altared flint, sample 689. Circles, n-alkanoic acids (fatty acids, FA); * plasticiser; IS, internal standard, C34 n-tetratriacontane

The $\delta^{13}\text{C}$ values of the $\text{C}_{16:0}$ and $\text{C}_{18:0}$ fatty acids from the three heat-altered stone samples are plotted onto a scatter plot along with the reference animal fat ellipses (Fig. 38a). It has been established that when an extract from a ceramic vessel plots directly within an ellipse, for example, ruminant dairy, ruminant adipose or non-ruminant adipose, then it can be attributed to that particular source. If it plots just outside then it can be described as predominantly of that particular origin. However, it should be noted that extracts commonly plot between reference animal fat ellipses and along the theoretical mixing curves, suggesting either the mixing of animal fats contemporaneously or during the lifetime of use of the vessel (Mukherjee 2004; Mukherjee *et al.* 2005).

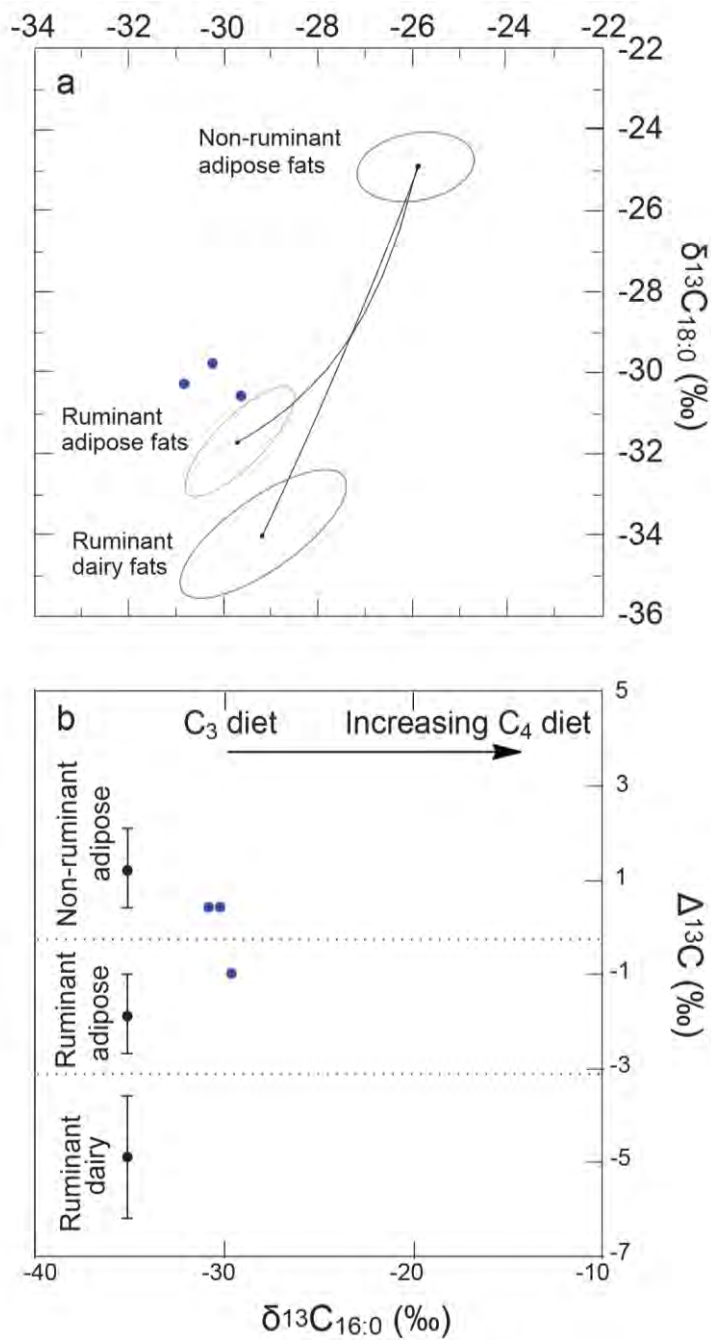


Figure 38. Graphs showing: a (upper); $\delta^{13}\text{C}$ values for the $\text{C}_{16:0}$ and $\text{C}_{18:0}$ fatty acids for archaeological fats extracted from three samples of heat-altered flints from pits at from Marham Park excavations. The three fields correspond to the $P = 0.684$ confidence ellipses for animals raised on a strict C_3 diet in Britain (Copley *et al.* 2003). Each data point represents an individual sample of heat-altered flints. b (lower) shows the $\Delta^{13}\text{C}$ ($\delta^{13}\text{C}_{18:0} - \delta^{13}\text{C}_{16:0}$) values from the same samples. The ranges shown here represent the mean \pm 1 s.d. of the $\Delta^{13}\text{C}$ values for a global database comprising modern reference animal fats from Africa (Dunne *et al.* 2012), UK (animals raised on a pure C_3 diet) (Dudd & Evershed, 1998), Kazakhstan (Outram *et al.* 2009), Switzerland (Spangenberg *et al.* 2006) and the Near East (Gregg *et al.* 2009), published elsewhere.

Here, all three samples plot just outside the ruminant adipose ellipse (Figure 38a), suggesting the processing of ruminant animal products with possible minor mixing of non-ruminant carcass products. This indicates the lipids originate from animal products produced by the cooking of mainly ruminants, such as cattle, sheep or goat, in the pits, with possibly the occasional pig.

The $\Delta^{13}\text{C}$ values of -0.4‰ and -0.4‰ for samples 455 (pit 2932) and 689 (pit 12586), respectively, suggest the mixing of non-ruminant and ruminant products in these pits with a predominance of pig processing (Fig. 38b) whereas, in contrast, sample 469 (pit 2921) plots within the ruminant adipose field but with the suggestion of some mixing with non-ruminant products.

Conclusion

The objective of this investigation was to determine whether organic residues were preserved on the surface of heat-altered flints, excavated from pits containing concentrations of such stones. A soil sample was also analysed. Interestingly, the three heat-altered flint samples provided clear lipid profiles dominated by the C_{16} and C_{18} fatty acids, typically indicative of degraded animal product processing. The results, determined from GC, GC-MS and GC-C-IRMS analyses, demonstrate that some possible processing of animal carcasses, ruminant and/or non-ruminant may have occurred in the pits. This confirms the hypothesis these pits were used for cooking purposes and or carcass preparation (such as hide processing).

These data suggest that further investigation of heat-altered flints from a range of pit features within the Fornham site might help confirm the use of burnt mound features as cooking pits.

Palaeo-environmental enquiry

Introduction

Following selection and sampling of twelve profiles, a suite of ninety-five pollen and seventeen diatom subsamples were taken (Table 127). Of those six profiles were selected for pollen assessment and fourteen subsamples assessed, and three of

those profiles which were also selected for diatom assessment and six samples assessed. The selection of samples covered the principle feature and deposit types (the buried soils, pit complexes, wells and Iron Age ditch), and would allow selection of appropriate sample suites for analysis.

Feature	Sample	Pollen	Diatoms
BM1 buried soil	K474	3	-
BM1 2659	129	3	-
BM1 well 3106	148-9	2	3
BM2 well 12585	708	-	1
BM2 well 12769	715	2	2
IA ditch 11051	505	2	-
Totals	5 / 3	12	6

Table 127. Features sampled for pollen and diatom assessment (FAS 056)

Pollen Assessment

Catherine Langdon

Objectives

The principal objectives of pollen assessment were to establish if sub-fossil pollen and spores are present and, if so, their state of preservation, to provide a record of the past vegetation and environment and to provide any recommendations for further analysis. Samples were assessed from both burnt mound complexes and a range of Iron Age features. These included FAS 056 burnt mound 1: buried soil 3090 <K474>, complex 2659 (contexts 2683.2 and 2790; monolith <129>), well 3106; FAS 056 burnt mound complex 2: well 12769 (contexts 12789 and 12799; monolith <715>) and Iron Age ditch 11051 (contexts 1055 and 1053, monolith <505>);

Unfortunately, all of the 14 samples assessed had poor preservation and concentrations.

Pollen methods

The processing and recording of the pollen subsamples has been described above for the site of FAS 055. The raw pollen data is displayed in Table 128. Percentages have not been calculated due to the extremely low counts achieved.

The pollen data

Two samples assessed were from the buried soil (3090) sequence; only two *Dryopteris* (fern) spores were recorded. Concentrations were extremely low.

All three samples assessed from burnt mound complex 1 (2659) had relatively low pollen concentrations. One *Pinus* (pine) pollen grain was recorded. Of the small herb assemblage grass (Poaceae) pollen is most dominant in sample 130cm from near the base, and one large grass was recorded. Other herb pollen present includes *Plantago lanceolata* (ribwort plantain), *Polygonum aviculare* (knotgrass) and *Ranunculus* type (buttercups). Some fern spores were present and *Pteridium aquilinum* (bracken) numbers are greatest in sample 130cm. The highest concentration of pollen and spores was also calculated at this level with 4361 per/ml.

From well 3106 only ten pollen and spores were recorded in total. Poaceae (a maximum of five grains in sample 78cm, context 3213.2) and other incidences of herbs were recorded including Caryophyllaceae (pinks), *Caltha* type (marsh marigold) and *Plantago lanceolata* (ribwort plantain). A single Cyperaceae, *Dryopteris* type and *Pteridium aquilinum* were also recorded. Absolute pollen frequency was very low.

Features / monolith	BM 1					BM 2				IA				
	Buried soil <K474>		2659 <129>			Well 3106 <148-9>		Well 12769 <715>		Pit 0510 <42>			Ditch 11051 <505>	
Context	A	3090	2683.2	2790	-	3123.2	3116.1	12789	12799	-	-	0513	11055	11053
Depth	2cm	4cm	82cm	106cm	130cm	78cm	128cm	32cm	48cm	18cm	36cm	52cm	48cm	72cm
Pollen/spore type														
Pinus	-	-	1	-	-	-	-	2	1	-	-	-	-	1
Quercus	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Corylus avellana	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Poaceae	-	-	1	-	13	5	2	3	-	-	-	1	1	2
Poaceae >40um	-	-	-	-	1	-	-	-	-	-	-	-	-	-
Ranunculus type	-	-	-	-	3	-	-	-	-	-	-	-	-	-
Caltha type	-	-	-	-	-	-	1	-	-	-	-	-	-	-
Brassicaceae	-	-	-	-	-	-	-	1	-	-	-	-	-	1
Caryophyllaceae	-	-	-	-	-	-	1	-	-	-	-	-	-	-
Polygonum aviculare	-	-	-	1	-	1	-	-	-	-	-	-	-	-
Plantago lanceolata	-	-	-	-	3	1	1	1	-	-	-	-	-	-
Plantago undiff.	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Succisa	-	-	-	-	-	-	1	-	-	-	-	-	-	-
Lactucoideae	-	-	10	1	2	1	1	1	-	-	-	4	1	3
Cyperaceaea	-	-	-	-	-	1	-	2	1	-	-	-	-	-
Pteridium aquilinum	-	-	2	6	10	-	1	30	8	-	2	-	4	7
Dryopteris type	-	2	-	3	3	-	1	4	-	-	-	-	2	1
Polypodium	-	-	-	-	1	-	-	1	-	-	-	-	1	-
Liverwort	-	-	-	-	-	-	-	-	-	-	-	1	1	-
Unidentified	-	-	-	1	1	1	1	4	1	-	-	-	1	1
Total pollen + spores	0	2	14	12	37	10	10	52	11	-	2	6	10	16
Exotic	5	50	50	66	41	58	46	132	74	29	22	91	57	51
Concentration pollen+ spores/ml	-	193	1353	879	4361	833	1051	1904	718	-	439	319	847	1516
Dinoflagellate	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Pre-Quaternary pollen and spores	-	1	3	8	25	-	-	-	-	-	-	-	4	1

Table 128. Pollen assessment data from 6 features examined (both sites)

Pollen from well 12769 was sparse. Trees recorded include *Pinus* (pine), *Quercus* (oak) and *Corylus* (hazel). Grasses and other herbs (Lactucoideae, Brassicaceae, *Plantago* types) were recorded in context 12789 (at 32cm), but herb types are absent in context 12799 (at 48cm). *Pteridium aquilinum* (bracken) spores are more abundant at 32cm with thirty recorded. One dinoflagellate was also noted. As in the other samples analysed absolute pollen numbers are low.

From pit 11051 a single pine pollen grain was recorded at 72cm (11053). Herbs include Poaceae, Lactucoideae (dandelion types) and Brassicaceae (cabbage family). Spores recorded include *Dryopteris* type, *Polypodium* and a single liverwort. Absolute pollen frequencies were 847 and 1516 respectively. Some pre-Quaternary pollen and spores were noted.

Interpretation and discussion

Universally pollen concentrations and preservation was poor in all fourteen samples assessed from six different features, and occasionally absent. Despite this we can make some broad and rather tentative statements about the nature of the vegetation and environment in some cases. It was not possible to make any particular inference about samples from burnt mound complex 1, buried soil 3090 <K474> (Table 128).

In burnt mound complex 1, 2659 (Table 128, <129>) there is a small amount of evidence for an open environment with some pastoral activity as evidenced by the presence of Poaceae (grass), Lactucoideae (dandelions) and *Ranunculus* type (buttercups). There is also some evidence of this type of environment in well 3106 (Table 128; burnt mound complex 1, <148-9>), well 12769 (Table 128; burnt mound complex 2, at 32cm) and Iron Age ditch 11051 (Table 128; <505>), although this is very limited and inferred often by the single incidence of pollen grains such as *Plantago lanceolata* (ribwort plantain) and *Polygonum aviculare* (knotweed).

The increase in Lactucoideae, particularly from context 2683.2 at 82cm (Table 128; burnt mound complex 1, 2659 <129>) is probably the result of preferential preservation. Lactucoideae is particularly robust and tends to differentially preserve in soil samples as it has a longer residence time than other, less robust, pollen types

(Dimbleby 1957). Additionally, a single large grass recorded at 130cm in this site may be of a cereal type and could attest to some arable activity nearby.

In general, there is a paucity of pollen associated with tree and shrub taxa, with only the occasional pine pollen grain recorded. The only sample that contained other tree and shrub taxa was context 12789 from well 12769 (Table 128; burnt mound complex 2, <715>) in which single oak and hazel pollen grains were noted. The pollen of these taxa is anemophilous and may have been transported from more regional or extra regional sources.

Summary and conclusions

- Pollen was of poor preservation and low concentration.
- There is a small amount of evidence for pastoral activity in some features.
- A single large grass pollen grain may be of cereal type, which would also indicate some arable farming (pit 2659).
- There is little tree and shrub pollen suggesting a predominantly open habitat. The arboreal taxa, which have been recovered, are mostly anemophilous and are likely to derive from regional or long-distance sources.
- Due to the degraded nature of the samples provided for assessment, no further work is recommended.
- The data here should be presented in suitable form for publication.

Diatom assessment

Nigel Cameron

Introduction

Three sequences were sampled for diatoms and a total of seventeen pollen samples taken. Six samples were selected (Table 127) and have been prepared and assessed for diatoms.

Aims

The purpose of carrying out the diatom assessment is to determine if diatoms are preserved. Secondly, to characterise deposits in which diatoms are present or absent

and use this information to indicate which other deposits might have potential for diatom analysis.

Of particular interest here is whether diatoms provide an indication of water-filled features, and if so, the nature of the water (e.g. diatom habitats, water quality, depth). The diatom assessment takes into account the numbers of diatoms, the state of preservation of the diatom assemblages, species diversity and diatom species environmental preferences.

Methods

Diatom preparation followed standard techniques (Battarbee *et al.* 2001). Two coverslips were made from the sample and fixed on a slide in Naphrax for diatom microscopy. A large area of the coverslips was scanned for diatoms at magnifications of x400 and x1000 under phase contrast illumination.

Results and discussion

The samples selected for diatom assessment are shown in Table 129.

Context	Monolith	diatom sample no.	depth (cm)
Burnt Mound Complex 1 Well 3016	M148 & M149	1 2 3	56 86 120
Burnt Mound Complex 2 12585	M708	4	56
Burnt Mound Complex 2 12769	M715	5 6	32 56

Table 129. Samples from Fornham assessed for diatoms. The sample depths of the samples selected for assessment are shown in bold type.

The results of the diatom assessment are shown in Table 130.

Sample	Diatoms	Diatom numbers	Quality of preservation	Diversity	Assemblage type	Potential for % count
1	absent	-	-	-	-	none
2	absent	-	-	-	-	none
3	absent	-	-	-	-	none
3	absent	-	-	-	-	none
5	absent	-	-	-	-	none
6	absent	-	-	-	-	none

Table 130. Diatom assessment for samples

A total of seventeen samples taken from three sequences were selected for possible diatom analysis. From these seventeen samples an initial assessment has been carried out on six samples. However, the assessment shows that diatoms are absent from all six samples that have been assessed (Table 130).

Absolutely no diatom remains of any kind were present in any of the six samples assessed. This is a shame, especially as the site is really interesting. Surprisingly, even after intensive scans of the coverslips, not even robust heavily silicified fragments, e.g. of a semi-terrestrial diatom, was found.

The absence of diatoms from the sediments may reflect unfavourable conditions for diatom silica preservation rather than an initial absence of diatoms from the deposits (Flower 1993, Ryves *et al.* 2001). Given the ubiquity of diatoms in water and in many semi-terrestrial habitats, the absence of their remains from the samples assessed here can be attributed to taphonomic processes. This may be the result of diatom silica dissolution and breakage, caused by factors such as high sediment acidity or alkalinity, through flow of water in the sediments, the under-saturation of sediment pore water with dissolved silica, cycles of prolonged drying and rehydration, or physical damage to diatom valves from abrasion.

It is not, therefore, possible to comment on the presence or absence of water, aquatic habitats, the water levels, water quality or other aspects of the aquatic environment based on diatom remains. However, the absence of diatoms does not preclude the existence of water in the features. The diatom valves may have been broken and completely dissolved. There is no further potential for diatom analysis of these samples.

Conclusions

Six samples from three sequences were prepared for diatom assessment. Diatom remains are completely absent from the six samples taken from sediments associated with possible aquatic environments. It is not therefore possible to determine from diatom analysis whether or not water was present, or on the nature of the aquatic environments. There is no further potential for diatom analysis of these samples. The absence of diatom assemblages is attributed to taphonomic processes.

6 Significance of the data and potential for analysis

6.1 Realisation of the Original Research Aims

The overarching aims of the project to record archaeological deposits at risk from the development have been realised in the completion of the 16.9ha of fieldwork carried out. The production of this post-excavation assessment report highlighting the potential of the evidence to contribute to regional research priorities as laid out in the Regional Research Agenda (Medleycott 2011) with its recommendations for further analysis and publication fulfils the other main objective. Detail of the original research aims can be found in Section 3.

6.1.1 FAS 055

The archaeological results were broadly as expected and the research aims (see section 3.1) were realised. In particular, many more Iron Age pits were identified in EX1 West, with a smaller number in EX1 East and the ditches excavated in the evaluation phase were found to be post-medieval rather than representing boundaries or tracks associated with the Iron Age activity. A small number of intercutting pits indicate multiple phases of pit digging. Ceramic finds will contribute to the regional pottery chronologies for the Iron Age. There was no extension to the medieval activity seen in the evaluation, the single feature excavated in SME5 was interpreted as a quarry pit. The volunteer project was undertaken and differences in finds retrieval showed that smaller items (mainly pot sherds) were recovered in greater numbers but the material was less diagnostic.

6.1.2 FAS 056

The original research aims for this site code were broadly answered but the unanticipated discovery of two burnt mound complexes changed the focus of the research. New research aims to establish the form, character, date and function of the features were introduced and realised. Small discontinuous ditches seen in most site areas were associated with a Bronze Age drove-way running north-south across the site and small groups of features contributed to an understanding of the Bronze Age landscape. Small numbers of cremation burials enhanced the evaluation evidence but, as expected, did not reveal an extensive cremation cemetery. Further Iron Age

occupation was identified with evidence of small enclosures and field systems, and occasional pit groups, the pottery from which can be compared with that from the FAS 055 pit groups. Roman evidence was consistent with that of a small isolated farmstead, although the potential for structures indicated by the quantity of pottery found in the evaluation did not materialise, probably lost to more recent activity. The finds from Enclosure 1 have some potential for contributing to a discussion about Roman craft and manufacture. The discovery of a World War II firing range was unexpected and of local interest, as was the evidence recovered for night-soiling from the extensive plough-soil metal detector survey. The results of these works remain in the archive for local consultation if requested.

6.2 The potential and significance of the stratigraphic data

The results of the excavation have been identified as being of national, regional and local significance and are discussed below within these categories.

6.2.1 Nationally significant results with high potential for further analysis.

The Burnt Mound Complexes and the Bronze Age landscape are of national importance both in terms of the morphology of the features themselves, the finds and environmental data recovered and the relationship with the wider landscape. Prehistoric occupation can only really be understood when seen as part of a landscape and adopting an approach that integrates the dispersed landscape evidence with examination of the exceptional character of the burnt mounds has high potential to address national research priorities outlined by Historic England, in particular their Critical Research Priority 1 (CP1), 'Integrated Approaches to Prehistoric Landscapes' and Critical Research Priority 2 (CP2) 'Setting Prehistoric Sites in Context' (Historic England 2010). The 'creation of an interpretative narrative for the Bronze Age' has been identified as the direction that national research into the Bronze Age should take, as well as the need for ceramic chronologies (Last 2008). The Bronze Age archaeological finds and features at FAS 056 have the potential to address all these elements.

Burnt mound complexes

The two burnt mound complexes are the most significant features discovered from the project and have very high potential for further analysis, particularly within the finds and environmental specialisations.

Burnt Mound 1 complex contains possibly one of the largest finds assemblages found relating to burnt mound activity in the country and the excavation techniques and sampling strategy employed will allow close study of the nature and location of individual finds which will contribute to understanding the character of the activity being carried out on site. The application of scientific dating and detailed stratigraphic analysis should establish the lifespan of these features. Environmental assessment has shown that whilst the potential for plant macrofossils and pollen is limited, lipids are present across a number of deposits; these have good potential for enabling detailed interpretation of the function of individual elements of the complexes.

The location of the burnt mound complexes shows that, contrary to most evidence, such feature types are not always located in close proximity to natural water sources or in low lying areas. This new evidence offers potential for comparative work with more conventionally placed mounds and to develop a more sophisticated interpretation of them. The two complexes exhibit some differences in morphology and closer examination of these has the potential to highlight functional or temporal differences between them which will have implications for interpretation of other monuments.

The large flint assemblage will allow investigation of elements of craft and production in the Bronze Age. The distribution of the tools has the potential to indicate the primary function of individual features and may show that centralised areas were used for certain craft and production activities.

The Bronze Age landscape

The Bronze Age landscape seen around the burnt mound complexes places the burnt mound complex activity within the broader landscape of the Lark valley and can be examined within the context for the nationally designated Fornham Cursus complex. The features and finds associated with this phase of activity has potential to answer specific national and regional research aims including the population and habitation patterns within the Bronze Age periods, utilisation of landscape resources and agrarian practices within an area that was also utilised for possible craft and production. The presence of a small number of cremations has the potential to make some contribution to population studies, although the poor survival of the human remains means that this is limited. However, the presence of these features provides the opportunity to examine the relationship between these burial events and the other more prosaic activities.

6.2.2 Regionally significant results with high potential for further analysis.

Iron Age activity and pit grouping locations

The Iron Age activity seen on site is of regional significance with potential to contribute to research topics relating to the agrarian economy, pottery chronologies, the relationship between ritual and daily life and to put the intense pitting activity into a landscape context with relation to the enclosures and field system further up the hill. In particular the very large ceramic assemblage has the potential to inform regional pottery typologies and chronologies, and to contribute to providing dates for the different occupation elements across both the FAS 055 and FAS 056 sites. The environmental evidence is unfortunately poor with limited or no potential for further examination, and there is thus little potential to confirm the primary function of the storage pits, although evidence from other sites can be used to infer a use. However stratigraphic analysis of the morphology of the pits does have potential to look at secondary functions, which in conjunction with examination of the enclosures will still allow some conclusions about the nature of the overall Iron Age occupation to be drawn.

Roman settlement and land use

The presence of a simple hill-top enclosure and field system is of regional significance to the discussion of Roman rural settlement. In particular the setting of the site, the size of the enclosures and the arrangement of the linking ditches can be compared with other local sites, and with the Roman small town of Icklingham c.8.5km to the north-west. The continued use of the landscape and exploitation of natural resources in the area has potential for further analysis, and in particular the evidence for craft and production. The pottery assemblage is mixed and redeposited and therefore has little potential to inform specific activities on site, but examination of the catalogue will have potential to establish the time-span of activity on site.

6.2.3 Low significance findings with low potential for further analysis.

Evidence of medieval, post-medieval and modern quarrying was recorded and the post-medieval ditch systems have been identified on an 18th century estate map. These have been discussed in this report and a complete record is held in the archive. These have little potential to contribute to regional research topics. The plough-soil finds found during metal detecting surveys have been discussed within this report and a full catalogue is held in the archive. Possible night soiling has been identified and

distribution maps have been created. Although of local interest, further work on this material does not address regional research priorities. The WWII firing range was excavated and recorded fully on site. All the records have been digitised and it is discussed in this report. Whilst of local interest it does not contribute to archaeological research priorities.

6.3 The potential and significance of the finds data

6.3.1 General introduction

The finds groups vary in significance for each archaeological period present on site. In general pottery and lithic assemblages are the most significant elements of the finds groups, especially relating to the Bronze Age activity on site. Heat-altered flint is particularly significant for the Bronze Age burnt mound complexes but holds less importance in other phases and feature types.

6.4 The Potential and Significance of the Bulk Finds Data

6.4.1 General introduction

Ioannis Smyrnaiois

FAS 055

FAS 055 produced some of the largest quantities of Iron Age pottery and worked flint found in the county. Together with the excavated material from FAS 056, the finds from Fornham offer a valuable opportunity for the study of domestic activities, craft production and prehistoric life, also in comparison with other sites from the vicinity.

A preliminary examination of the artefacts shows that the functions noted at FAS 055 are limited compared to those recorded at FAS 056. The excavated finds primarily come from pits, which are associated with Iron Age domestic activities such as pottery production and consumption, animal husbandry, agriculture and food production, preparation and consumption.

The disturbance of some contexts during Roman, medieval and post-medieval times is limited as this is attested by pottery, CBM and small finds. The prehistoric material comes in significantly large quantities and has been preserved in good condition;

therefore, the analysis of such material and its final publication is going to shed additional light on our current understanding of Iron Age life in Suffolk. Furthermore, the continuity noted between the material culture of the Middle and Late Iron Age and the Roman period, which is represented more clearly at FAS 056, offers a great opportunity for the investigation of Romanisation in the area.

FAS 056

FAS 056 produced a large assemblage of prehistoric pottery and worked flint, which represents various phases from earlier and later prehistory, and demonstrates clear continuity among these phases. Such an assemblage is equally important as other large assemblages from the county (e.g. Flixton and Mildenhall), which represent different chronological phases and offer a good opportunity for the study of domestic activities, craft production and prehistoric life at Suffolk.

A preliminary examination of the artefacts shows that the activities noted are more varied than those recorded from FAS 055. The excavated finds come from a variety of features, which are associated with a large spectrum of prehistoric dates and activities. These include the disposal of domestic refuse, the presence of cremation burials, signs of animal husbandry, agriculture and food production, and possibly the processing of raw materials at small scale level (e.g. hides).

Despite some minor disturbance of some contexts during Roman times, the prehistoric material is present in significantly large quantities and has been well preserved. The site also produced large quantities of Roman material, which demonstrates the continuation of human occupation in later periods. The wide distribution of post-medieval CBM and reused Roman CBM during later periods suggests that not all contexts are secure. Again, the analysis of all finds and their final publication is not only going to shed additional light on our current understanding of prehistoric life in Suffolk, but it will offer a great opportunity for the investigation of Romanisation in the area.

6.4.2 FAS 055 Pottery

Prehistoric

Ioannis Smyrnaiois

FAS 055

This is one of the largest assemblages of Middle to Late Iron Age pottery found in the area. The material offers a great opportunity for the study of regional ceramic production, the evolution of fabrics and ceramic styles. Furthermore, due to the size and nature of the FAS 055 settlement, the ceramic assemblage should be discussed in relation to its spatial and chronological distribution.

FAS 056

The prehistoric pottery from FAS 056 is an important large assemblage with significant potential for the study of regional domestic, ceremonial and production-related activities. The Iron Age material from the site shows similarities with that from FAS 055 and both can be studied together. The total Iron Age assemblage is one of the largest recovered from Suffolk and its study may not only inform us on the functions taking place at the site, but also on the regional patterns of pottery production and ceramic technologies.

The assemblage from FAS 056 includes an important quantity of early prehistoric pottery, and more specifically Early Bronze Age decorated Beakers made from grog-tempered or flint-tempered fabrics. Many of such Beakers were recovered from contexts that also produced Middle Bronze Age decorated pottery of the Deverel-Rimbury tradition, made from similar if not the same fabrics. The pottery from such contexts offers a great opportunity for the study and correlation of the two ceramic traditions in Suffolk (Beaker and Deverel-Rimbury), the connections of which are currently underexplored. It is highly likely that both traditions overlapped at some point during the Early/Middle Bronze Age, and that the latter tradition continued for part of the Late Bronze Age.

A comparative study of the two styles from Fornham is likely to produce important information and introduce revisions to the current state of archaeological dating at Suffolk based on ceramic evidence. Two radiocarbon dates taken from contexts that

produced pottery of different traditions will be useful in discussing their possible overlapping and chronological span.

Roman

Ioannis Smyrnaios

FAS 056

By contrast to FAS 055, where Roman pottery was limited, FAS 056 produced significant material that demonstrates the continuation of human occupation at the site during the Roman period. A preliminary analysis of the distribution of the Roman material shows that the settlement has been continuously used from early prehistory until the end of the Roman period, and also that the activities taking place at the site were probably different compared to those noted during prehistoric phases. The Roman pottery from the site has, therefore, great potential for examining the chronological continuity of human occupation in the area, and the extent and range of human activities.

Post-Roman

Sue Anderson

The post-Roman pottery from both sites has been fully recorded and catalogued. This material is of limited value for interpretation of the site. A note will be prepared for publication if required, taking into account the phasing of the site when this is available. The assemblage should be retained in the archive.

6.4.3 Ceramic Building Material

Sue Anderson

The CBM has been fully recorded and catalogued. A note will be prepared for publication if required, taking into account the phasing of the site when this is available. The assemblage does not have any great intrinsic value and post-medieval material could be discarded if required (as noted in the database).

6.4.4 Fired Clay

Sue Anderson

The fired clay has been fully recorded and catalogued for both sites. Further work is required to analyse the fired clay in its spatial and temporal contexts. A report will be prepared which describes the assemblage in more detail.

6.4.5 Worked Flint

Sarah Bates

General introduction

Significant amounts of flint were recovered from various parts of the site and from features of different types and dates. The material has potential to inform upon activities taking place at the site and on the nature of assemblages and flint-working during different periods. To enable full consideration, the assemblages from FAS 055 and FAS 056 should be fully catalogued. Small finds have been provisionally recorded by type (by Suffolk Archaeology) but the finds will be examined and descriptions will be amended/added as appropriate during cataloguing. Other retouched pieces that exist within the bulk-found material will be individually classified, along with the small finds, in the main flint catalogue.

Analysis work should be carried out, and the reports should be organised according to site codes FAS 055 and FAS 056 as requested by Suffolk Archaeology. For each site the flint assemblage should be considered by context and this will involve cross sub-area correlation of some features within each site code area (e.g. ditches, feature groups).

Flint from the evaluation of the site (FAS 050) has previously been reported on but material from relevant areas has been included in the flint catalogue for the project and will be considered alongside that from the subsequent excavation of those areas. It is currently proposed by Suffolk Archaeology that the final reports for the work at Marham will be primarily by site code. Thus, the flint should be reported on in this way with sub-

sections by period. Reference to, and comparison with, material from the same periods at each site will be made as appropriate.

The analysis of the flint from the site has the potential to increase understanding of its manufacture and use and of the activities which occurred at the site addressing areas of highlight for study in the region (Medlycott 2011, 21 and 31; Brudenell 2017) and research themes and topics identified in the Historic England Research Strategy for Prehistory (Historic England 2010, Themes PR2, 3, 5 and 6).

FAS 055

A few flints came from probable later Neolithic earlier Bronze Age contexts in area EX1 East and, although not yet catalogued, some of them are notable for their thinner neater nature than most of the material from the site. Some blade-like pieces, including a possible core preparation piece came from one pit. Although there is no cropmark evidence to suggest that activity associated with a large Neolithic cursus to the north, extended into the area of the present site, the presence of the flint and the potential that other pieces may be identified, might suggest that early Bronze Age or earlier activity occurred more widely, if only sparsely represented, across the area.

A small amount of flint was recovered from features which may have dated from the later Bronze Age. It is possible that differences in the material from these and other (earlier or later) assemblages may help identify the presence and type of activity at the site during the period (Ballin 2002). The potential of this material, however, may be quite low due to its relative sparsity here and, also, considering the many Iron Age features recorded in the area, the long-recognised likely similar nature of later Bronze Age and subsequent Iron Age flint work (Humphrey & Young 1999).

Much of the dated archaeology from FAS 055 was Iron Age, particularly in area EX1 West, where numerous pits were fully excavated and groups of postholes suggested the presence of structures. Due to the nature of excavation (half-excavation and subsequent full excavation), finds were recorded by different fill numbers within each half of the pits and correlation of the context assemblages will be necessary during analysis to better enable the potential of the material to be identified. The excavation/recording system will also enable comparison of the methods used and might identify collection biases between the two phases of work. The pits have been

interpreted as storage pits and the flint is likely to be redeposited; it appears to include at least some residual material, although the relative sparsity of earlier activity in the area is noted and may make this less likely to be the case.

The nature and condition of the flint debitage, as well as the composition of assemblages and the presence/absence of specific tool types, has potential to contribute to a better understanding of activities occurring at the site and to the nature of Iron-Age knapping. A number of flint hammerstones were recovered from the site, as it appears mostly from Iron Age contexts. These have potential to suggest particular stages of flint utilisation, or use for flint.

A few flints were recovered from other Iron Age pits, possibly extraction pits. Comparison of this material with that from the storage pits may show differences in the material present and activities represented. It might also suggest differing degrees of possible residuality of material in different feature types.

Other flint from the site might have some potential in suggesting a date for otherwise undated features. Flint from Roman or later contexts may have some limited potential in terms of distribution and presence of flint types, particularly where those contexts are in close proximity to, or truncate, prehistoric activity.

No refits were identified from FAS 055, but as not all of the material from the site was catalogued or looked at in any detail, refitting pieces might be identified during analysis and help in the recognition of *in situ* or nearby knapping. It will be useful to look at the flint recovered from the pits in area EX1 together (i.e. from the initially and subsequently excavated halves of the pits) as this may lead to the identification of refitting or similar pieces, and help confirm *in situ* working.

FAS 056

At FAS 056, in contrast to FAS 055 to its north, most flint was recovered from Bronze Age contexts. Recognition of earlier flint types may help identify activity pre-dating that relating to the two excavated burnt mounds, possibly including any activity presently represented by undated features or utilising natural features.

By far the greatest amount of flint from FAS 056 was recovered from contexts within, and relating to, the two burnt mounds. Large quantities of flint debitage and significant numbers of provisionally identified small finds came from the deposits. Bulk-found flint was recorded by context according to a combination of quadrants, 2m grid squares and soil layers. The locations of small finds were 3D-recorded and this information along with flint types present provides potential for an enhanced analysis of the material from across and within the excavated areas. Further potential for the identification of knapping areas is offered by the possibility of finding re-fitting pieces within, or between, the context assemblages; a small number of such pieces were identified at assessment.

The worked flint associated with the burnt mounds is of particular interest as such quantities of knapping debris, retouched and utilised flint, is extremely rare at such sites. Struck flint has been recorded at many burnt mound sites but usually in fairly (or very) small amounts (e.g. Edmunds 2000, Robins 2004). Possible parallels should be sought for comparative purposes but it seems likely that, as suggested by the excavator, the activity represented at the present site is of a different nature to that which has most often traditionally been suggested for burnt mounds elsewhere (Layard 1922, O'Drisceoil 1988) although others have emphasised the fact that different sites are very likely to have had different or multiple functions (Crowson 2004, 33-35; Brown *et al.* 2016).

The flint has potential in relation to identifying activities and tasks which were undertaken at and around the burnt mounds and might suggest differences between the two mounds. Tool types and nature of retouch or use damage as well as, possibly, any residues present on some flints, may suggest tasks carried out and/or the types of materials which were being worked. Lipid analysis of samples of burnt flint mound material is currently being undertaken with the aim of identifying possible processes (pers. com. Michael Green), and residue analysis of some of the worked flint tools is proposed. Microwear analysis offers further potential for the identification of tool purpose and history and might identify hide working processes undertaken during the preparation of animal skins for leather or during a wide range of other domestic activities/processes (Donahue & Burrioni 2004; Levin 201; Donahue pers. com., April 2018). Experimental working of hides, for example, has shown the usefulness of scrapers, blades and serrated flakes (Harris 2012).

The consideration of flint from other Bronze Age features, including a driveway and a number of pits from across the site, which were recorded in small groups or in more isolated positions, has the potential to allow comparison with the material relating to the burnt mounds and, possibly, suggest different types of activity.

Flint from dated Iron Age features has potential in relation to identifying, and adding to the knowledge of, Iron Age flint working (also see FAS 055 report). Although later prehistoric (Bronze Age-Iron Age) flintwork is similar in many respects, it might be possible to recognise different traits in terms of type and knapping methods between the two periods. It is noted in the FAS 055 report, for example, that a number of flint hammerstones recovered from the site were almost all from Iron Age contexts.

A small number of refitting pieces were seen at assessment, mostly from one burnt mound and two flakes from an early Bronze Age pit. It seems particularly likely that other pieces will be identified from the mound-related contexts during analysis.

6.4.6 Heat-altered Flint and Heat-Altered Stone

Ioannis Smyrnaiois

FAS 055

The heat-altered flint from FAS 055 consists of mixed high and-low fired fragments, which were probably heated up for different purposes. The material should be discussed in relation to its spatial and chronological distribution, and also in association with FAS 056. Before doing so, some frost-affected pieces that were mistakenly identified as heat-altered flint need to be discarded and the material needs to be re-quantified. In relation to heat-altered stones, the material has been fully quantified and is unlikely to offer any other useful information.

FAS 056

Like FAS 055, the heat-altered flint from FAS 056 consists of mixed high and-low fired fragments, which are likely to have been heated up for different purposes. Further analysis of this material with the use of microscopic techniques is likely to identify such activities and offer useful information in understanding prehistoric practices in this area. The identification of organic residues on the heat-altered flint from the pits and the burnt

mounds could offer information on different activities associated with food preparation of other small-scale production (as recommended in the scientific analysis section 6.6.4).

Furthermore, the material should be discussed in relation to its spatial and chronological distribution, and also in association with FAS 055. Before doing so, some frost-affected pieces that were mistakenly identified as heat-altered flint need to be discarded and the material needs to be re-quantified. Additional material from the samples that were not available during the writing of this report needs to be included in the final catalogue.

In relation to heat-altered and plain stone, the material has been fully quantified with exception of that potentially deriving from additional soil samples. In general, such material is unlikely to offer any useful information; however, if organic residues could be extracted from heat-altered sandstones, it might be interesting to correlate such results with those from the organic residues extracted from the heat-altered flint.

6.4.7 Lava Quern

Ioannis Smyrnaiois

The material from both the excavations is limited and unlikely to offer any useful information. It has been catalogued and discussed in the previous section of this report, and no further work is required. In any forthcoming publication, a note needs to be included in the final volume.

6.4.8 Slag

Ioannis Smyrnaiois

The material from both sites has been catalogued and an initial identification has been made; however, the slag needs to be re-examined by a metallurgy specialist in order to examine the possibility of smelting or other metal production-related activities taking place in the vicinity. The material needs to be discussed in relation to its chronological and spatial distribution in the final report.

6.4.9 Iron Nails

Ioannis Smyrnaiois

The material from both the excavations is limited and unlikely to offer any useful information. It has been catalogued and discussed in the previous section of this report, and no further work is required. In any forthcoming publication, a note needs to be included in the final volume.

6.4.10 Post-medieval Glass

Ioannis Smyrnaiois

The material from the excavation is limited and unlikely to offer any useful information. It has been catalogued and discussed in the previous section of this report, and no further work is required. In any forthcoming publication, a note needs to be included in the final volume.

6.4.11 Post-medieval Clay Tobacco Pipe

Ioannis Smyrnaiois

The material from the excavation is limited and unlikely to offer any useful information. It has been catalogued and discussed in the previous section of this report, and no further work is required. In any forthcoming publication, a note needs to be included in the final volume.

6.5 The Potential and Significance of the Small Finds Data

6.5.1 Metal Small Finds

Ruth Beveridge

FAS 055

With the exception of the stratified objects, the small finds assemblage has limited potential to inform on the archaeology of the site. The bulk of the material was recovered during the metal detecting of the topsoil and subsoil layers and has been examined by period and to some extent by distribution based on plotted co-ordinates.

The Iron Age assemblage was recovered exclusively from the Middle Iron Age pit groups within area EX1 west. These finds have the potential to inform on secondary usage of the pits as well as on activities occurring within the vicinity of the site during this period, such as food preparation. The involute brooch and silver coin demonstrate the limited wealth of the occupants and are likely to be casual losses as opposed to discarded items.

The objects of Roman date, whilst unstratified, have the potential to reflect a continued presence on the site from the Iron Age period. The early silver coin and brooch are again likely to represent casual losses and potentially relate to the Roman use of the site as demonstrated by the enclosure ditches in the FAS 056 site.

The objects of medieval and later date reflect life from settlements within the environs, more specifically Bury St Edmunds, and are most likely present on the site due to the common practice of night soiling during those periods.

FAS 056

Leaving aside the stratified objects, the small finds assemblage from this site too has limited potential to inform on the archaeology on the site. The bulk of the material was recovered during the metal detecting of the topsoil and subsoil layers and has been examined by period and to some extent by distribution based on plotted co-ordinates.

The Iron Age assemblage has the potential to inform on secondary usage of the pits as well as on domestic activities occurring within the vicinity of the site during this period, such as food preparation and textile production. The presence of antler beams indicates there may have been some element of antler working in the area too.

This hooked-blade, SF2033, has the potential to reveal more about Iron Age ritual activities on the site and this warrants further consideration in order to consider similar activities regionally and nationally.

Roman objects have the potential to inform on the types of activity occurring in relation to the ditched enclosures. The assemblage represents little in the way of wealth, with only two brooches recovered. Overall the coins represent casual losses across the site; other Roman objects represent debris discarded in the Roman enclosures. Lead finds

within the ditches also have the potential to inform on craft and manufacture in the Roman periods.

The objects of medieval and later date reflect life from settlements within the environs, more specifically Bury St Edmunds, and are most likely present on the site due to the common practice of night soiling during those periods; this is particularly evident in area EX2 where the concentration of medieval silver coinage; early post-medieval tokens and dress accessories were at their greatest.

6.5.2 Loomweights

Ioannis Smyrnaiois

The loomweights from both sites, which were originally assigned a small find number, are highly fragmented and offer limited information on the activities taking place in the vicinity. However, possible loomweights that were originally not given a small find number, which were identified as such during the fired clay assessment above, are likely to provide additional information together with the existing small finds. This material should be examined in detail, and the fragments need to be assigned new small find numbers if they are proven to be loomweights. Due to the wide distribution of triangular loomweights during the later Iron Age, the material from Fornham needs to be examined in conjunction with the pottery from the site, which is by majority contemporary MIA-LIA fabrics. Such combined analysis could offer useful information on the activities taking place at the site during the later prehistory, with particular reference to domestic activities and the production of textiles.

6.6 The Potential and Significance of Environmental Evidence

6.6.1 Human Skeletal Remains

Sue Anderson

The burials have not yet been fully recorded or analysed and, as a minimum standard, they will require a full catalogue for archive and/or publication reports. The cremated remains should be discussed in terms of their context, and in comparison with other Bronze Age cremation cemeteries in East Anglia and those to south of the site (FAS023 and BSE002). A radiocarbon date could be obtained for cremation burial fill 2099 if

required, but it is unlikely that any of the fragments in the other burials would be large enough for a single entity date.

6.6.2 Animal bone

Julie Curl

The assemblages from both sites have the potential to provide further information on the diet in the prehistoric and Roman periods. Ages of individuals and estimates of stature should provide information on breeds present and their uses. Similarly, pathologies should provide insights into the health and husbandry of domestic food stock and other domestic animals present. In addition to the dietary evidence, the hand-collected and especially the sieved samples, have the potential to provide environmental evidence. For FAS055 in particular much of the animal bone from the sieved samples show further species, information on diet and evidence to suggest the environment in the surrounding area. Of particular note is the potential of sample numbers 19, 159, 162 and 170, which appear particularly rich.

6.6.3 Shell

Ioannis Smyrnaios

The site of FAS 055 produced a small and relatively insignificant quantity of shell, deriving mainly from pit fill samples. This material has been fully recorded and catalogued, and bears limited potential for any further investigation; therefore, no further work is required.

By contrast, the assemblage from FAS 056 consists of small quantities of marine and terrestrial shell, which show a distinct pattern of distribution. Marine shell, which consists primarily of native oysters, was recovered in large quantities from quarry fills. The terrestrial shell, which consists primarily of infant terrestrial species, was recovered in larger quantities from ditch fills. This pattern is likely to be significant in relation to the function of the site or some of its features; therefore, it requires some discussion in the final volume. Before doing so, additional shell from the soil samples that have not been processed yet could to be included in the catalogue. Depending on the quantity and

nature of any additional material, the shell could be discussed in relation to its chronological distribution.

6.6.4 Plant Macrofossils

Anna West

In general, the samples examined as part of this report from both sites were fairly poor in terms of identifiable material. Charred cereal grains and pulses were present in small numbers. Although many of the remains were relatively sparse, they clearly indicate that agricultural, horticultural and domestic activities were taking place in the vicinity.

FAS 055

None of the samples examined during this assessment contained sufficient density of material (c.+100 specimens) to allow for quantification; however, examination of the remaining samples from FAS 055 may provide information regarding the agrarian economy and the utilisation of the natural environment during the Iron Age and medieval periods.

FAS 056

It is not recommended that any further work should be carried out on the flots from FAS 056 examined as part of this report; however, the remaining samples from this site should be rapid scanned and any flots containing sufficient material should be quantified as part of the analysis. Further samples from Bronze Age features may provide information regarding the transition from a subsistence to a more agrarian economy. Roman features may provide additional information regarding the Roman influence on agriculture practices and diet; of particular interest is the introduction and abandonment of species. Wood charcoal and the weed seed assemblage may provide evidence of land management and improved agricultural techniques.

6.6.5 Geoarchaeology, palaeo-environmental and organic residues

Michael Allen with Nigel Cameron, Julie Dunne, Richard P. Evershed & Catherine Langdon

FAS 055

Pollen concentrations and preservation was poor in all fourteen samples assessed from Iron Age pit 0510. Despite this, some broad and rather tentative statements can be made about the nature of the vegetation and environment, although it is not possible to make any particular inference about samples from Iron Age pit 0150.

FAS 056

The geoarchaeological and palaeo-environmental aims were clearly to provide details of the function and activities associated with the burnt mound complexes, and to place them in a wider chronological landscape and land-use context. Geoarchaeologically there remains significant potential, especially in relation to the soil micromorphology; however, the preservation of the palaeo-environmental remains (pollen and diatoms) is poor. The assessment questions embedded in this assessment report are presented below, and addressed:

1. Is there any evidence for the activities associated with the hollow and what organic materials they were processing?

The geoarchaeological record confirms the presence of water, and of silts in the pits settling in water. Assessment of the presence of lipids/residues in the soil is being undertaken and these provide some indications of the activities and of organic material processed. Diatoms, however, were not preserved, and minimise the potential to address the nature of the water within the sampled features.

2. What is the potential for further analysis to address these questions?

The lipid analysis has the potential to address the nature of fatty material specifically; the geoarchaeological record can address this in general terms, and the palaeo-environmental data is not preserved well-enough to make any significant contribution, though the assessment results (pollen) indicate wet conditions locally associated with the deep pits with marsh marigold and a dinoflagellate (freshwater plankton) present. These can be addressed in outline from the reported data and the assessment results.

3. What were the hollows (burnt mound complexes) used for, and are there primary and secondary functions?

There is the potential for the combination of soil micromorphology and lipid analysis to address these in outline.

4. Do both the hollows (burnt mound complexes) have similar functions?

Soil micromorphology conducted on both burnt mound complexes may address similarities and differences both within and between the burnt mound complexes if all three samples are prepared as thin sections and are examined.

5. What was the local environment like at the time?

The poor preservation of pollen and lack of diatoms significantly restricts the potential to examine detailed examination of the land-use history and landscape setting associated with the excavated activity. The poor pollen does, however, indicate pre-established open conditions and grassland, possibly pasture, with hints of arable in the Iron Age phases. This information can be gleaned and reported from the assessment data to provide an outline of the local environment.

6. What happened to the burnt mound complexes when they stopped being used for their primary function?

The lack of pollen evidence and of appreciable deposits sealing the burnt mound complexes restricted any detailed comments about the nature of the burnt mound complexes and the land-use on the cessation of their primary use. The scant pollen evidence does provide some indication of the general nature of the wider landscape and land-use.

7. Chronology: Can we determine how long they were in use? Were they in use at the same time?

The two chronological questions can be addressed in absolute and metrical terms by selection of appropriate identified charred plant or charcoal remains from appropriate contexts. This is beyond the scope of this assessment. There geoarchaeological evidence can only hint at the generic contemporaneity of the two complexes and this can be addressed in the final reporting.

8. How significant is the evidence?

The geoarchaeological evidence is significant in that the geoarchaeological record, soil micromorphological and lipid analyses have the potential to go some way to isolate the overall nature of the intensive activity associated with the burnt mounds. The fact that there are few obvious parallels (see Q10) only heightens the significance of these data.

9. Does it have the potential to contribute to our understanding of Bronze Age occupation in the area?

The geoarchaeological and palaeo-environmental programme addressed here has the potential to assist in defining the overall nature of the activity associated with the burn mound complexes, but cannot provide details of the precise nature of any complex activities, nor of spatial, nor chronological variations between nor within the two complexes. Without the evidence above, however, the identification of the activities undertaken here will have to rely solely on archaeological conjecture, especially in view of the lack of any obvious detailed parallels with good palaeo-environmental and geoarchaeological data.

10. Are there any comparable sites to help interpret this one?

There is a lack of any obvious detailed parallels with good palaeo-environmental and geoarchaeological data, but such evidence may be found in the post-excavation research, rather than assessment phase.

Overall the sampling and geoarchaeological approach has been correct to address the detailed questions posed. The survival of the palaeo-environmental evidence was poor, and this is a failure of preservation, not of the archaeological strategy. The combination of the data addressed makes this a significant and valuable programme, rather than any individual line of analysis.

7 Updated Project Design

7.1 Introduction

The following section presents the updated research aims that the results of the work have the potential to address, followed by an outline of the tasks required to complete the analysis and publication.

7.2 Revised research aims

The recent work at Fornham can contribute to both national and regional research themes related to the Bronze Age, Iron Age and Roman periods. The highly significant Bronze Age evidence has the potential to address research themes and topics identified in the Historic England Research Strategy for Prehistory (Historic England 2010, Themes CP1, CP2, PR2, 3, 5 and 6). Regional research priorities have been identified within a framework for the Eastern region (Brown and Glazebrook 2000, revised Medleycott 2011) and these are referenced in the research aims below.

During the assessment advice regarding the burnt mounds has been sought from the Historic England Regional Science Advisor, Zoe Outram, and Inspector, Will Fletcher. They have agreed the significance of these two features and provided names of a number of individuals who could act as Academic mentors during the publication phase of the project. Anwen Cooper who is currently working on the revised Bronze Age research framework has been contacted and is providing advice on this matter.

A revised Regional Research Framework is currently being compiled by period specific specialists, the revised research aims below for the project should be cross referenced and amended if necessary when new up-to-date literature is available (Brudenell, M, forthcoming).

7.2.1 Bronze Age

The most significant features from the excavations at Fornham are the two Burnt Mound complexes. Not only are they intrinsically rare and complex features but they also form part of a wider broadly contemporary landscape that includes a drove way, cremation burials, structures and scattered pits. This suggests a variety of land use, which typically for this part of East Anglia does not include an extensive field system (Medleycott, 2011, 20) (Cooper, A, forthcoming). Further analysis of these Bronze Age features offers

opportunities to examine the relationship between these different elements of settlement, craft activities and funerary events and to create an overall narrative for the occupation. This will address current national research themes relating to prehistoric landscapes and the context of significant prehistoric sites (Historic England 2010).

Whilst the pottery assessment has identified Middle Bronze Age forms it has also highlighted the difficulty of distinguishing some fabrics and types from early and later pottery. Typological identification of Bronze Age pottery linked to close radiocarbon dates has been identified as a regional research priority and the discovery of Early Bronze Age Beaker pottery in contexts with Middle Bronze Age ceramics will contribute to that discussion. The sheer volume of worked flint and tools can also be tied into the pottery and radiocarbon dating tasks, addressing regional research topics around the development, frequency and significance of flint-working throughout the Bronze Age (Medleycott 2011, 21). Research topics and specific questions are outlined below:

Dating and phasing

- Can we narrow down the dating to show that this is a contemporary landscape and that all activity falls within in a narrower timescale than merely middle Bronze Age (1800-1300BC)? And more specifically, how do the Burnt Mounds fit temporally with the other Bronze Age features? Can examination of the sequence and nature of pit fills across the site indicate how and when the debris from the burnt mound was redeposited in the features and thus the contemporaneity or not of these other features?
- Can micro-stratigraphy data, along with the finds distributions and geoarchaeological result suggest periods of use and/or disuse of the burnt mound complexes.
- Can we prove the assessment that BM1 precedes BM2 through a sequence of radiocarbon dating and Bayesian analysis?
- What is the longevity of use of the drove way?
- Over what length of time was the area being used for cremation burial, and how do these relate to the burials found to the south within the modern golf course?
- Can further research into regional and national comparison sites such as Feltwell Anchor, Norfolk (Bates, *et al*, 2001) help phase and date the burnt mound complexes.

Bronze Age craft and manufacture

- We have evidence that the pits within the Burnt Mounds were being used for 'cooking', and possible evidence of the processing of animal skins. Was that the cooking of food or preparation of the skins? Or both? If both, what does this tell us about the multi-functional use of the complex? Can we tell if such variation in use is consecutive or concurrent? Is there evidence for any other uses that have not yet been defined?
- What can further examination of the flint tools and the scientific examination of the lipids tell us about the animals being used and the processing methods?
- Does the evidence from the burnt mounds fit with the animal bone evidence from contemporary features? Is it possible to establish that the skin processing is complementary with the food preparation?
- Can we identify areas where the flint tools used within the Burnt Mounds, and found in such abundance, were being worked?
- Most burnt mounds have been found in valley locations and the wells indicate that water was an essential element of the activities taking place. These burnt mounds appear to be unique in their hill-top setting; why build here and not by the water's edge if water was essential? Are there any parallels for this? Do these vary in construction from those found in valleys? If so, how, and what does it tell us about how they were used?
- Can we identify the main source of fire fuel for the burnt mound activity?
- Late Suffolk archaeologist Colin Pendleton carried out a considerable amount of unpublished local research into burnt mounds. Can this be found in the SCCAS archaeological archives?
- How does this analysis develop our knowledge of Bronze Age craft and manufacturing processes on a regional and national scale?
- Is the Early Bronze Age pottery residual in the Middle Bronze Age contexts or is there overlap in the presence of each type? Can we closely date the sequence?

Landscape organisation

- How do the Burnt Mounds fit into the overall Bronze Age landscape? How were they being accessed?
- What do the small structures represent? A range of functions has been posited in the assessment. Can these be confirmed by more detailed analysis? Could they

represent long-term habitation or temporary seasonal structures associated with the burnt mound activity? Or other craft and manufacture processes? Or agricultural buildings and pens? Does their location reflect the natural topography, or prevailing winds?

- It must be assumed that the cremation burials were deliberately sited? How does this fit with regional patterns of contemporary cremation burial? How does it relate to the other activities identified within the FAS 056 site and the surrounding known sites from the HER data?
- How might any of the activity relate to the nationally significant prehistoric landscape (SF 114) in the valley floor? Are the burnt mounds placed purposely away from it and/or deliberately overlooking it?
- What do the scattered pits tell us about other use of this area in the Bronze Age? Do they reflect activity related to the burnt mounds?

Bronze Age agrarian economy

- The drove-way lies 75m east of the burnt mound 1. Where might it be going? Down to the river? Does it relate to the suspected Bronze Age features of the cursus complex (SF 114) in the valley floor?
- The landscape appears to be largely unbounded in this period. What do the small occasional ditches represent? Animal enclosures or other activity?
- What do the features tell us about Bronze Age animal husbandry?
- The assessed environmental evidence can only provide the most limited information about any agrarian activities. Given the ubiquitous evidence for burning is this surprising? Does it suggest that they were neither growing, processing nor cooking with grain up here? Is there any further evidence in the outstanding samples to develop this theory?

7.2.2 Iron Age

Whilst the Bronze Age activity was found almost exclusively in FAS 056, evidence of Iron Age occupation was found across both sites, with pitting predominantly found in FAS 055 and evidence for more mixed activity across FAS 056. The discovery of the pit groups, thought to be primarily for grain storage and four-post probable granaries suggests considerable agricultural output in the immediate area. This offers some opportunity to address regional research topics relating to the nature of the agrarian

economy, although the potential is tempered by the poor survival of environmental remains (Brudenell, M, forthcoming). The presence and distribution of placed deposits may offer some insight into the integration of ritual with more prosaic tasks. Comparison with other nearby similar sites (e.g. FSG 018, ERL 147, ERL 222) will allow some consideration of the uniformity, or not, of these inclusions. In addition, the hill-top enclosures, field systems and occasional structures at FAS 056 suggest habitation and perhaps animal husbandry offering the chance to investigate elements of social organisation and mixed farming. Specific questions are outlined below:

- Are the pits for grain storage? The assessed environmental evidence is limited. Do any of the other processed samples contain significant quantities of material?
- Are the four-posters for grain storage too? If so are they contemporary? What does one offer over another or are they different stages of the same process? How often are granaries found with storage pits? Might they be where grain was put after it was removed from the storage pits? Do they offer long and short-term storage?
- Is there any evidence to suggest that the location for the pits is deliberately selected and that it represents or reflects other markers in the landscape? How does this compare with contemporary sites in East Anglia?
- The pits are in quite clear groups in FAS 055. Can we tell if these groups are contemporary or sequential? The pit fills are different within each group, some single fills and some multiple fills-why? What is the difference? What does it signify? Can we infer that the single fill pits are at the beginning or the end of the sequence and that only the multiple filled pits were used for rubbish disposal and therefore open when the settlement was active?
- The pit groups are quite distinct. Why? Are the groups contemporary? Might they reflect different households? Or perhaps phases of seasonal activity?
- What might be the function of the groups associated with structures?
- What is the character, form, date and distribution of the placed deposits? What do they tell us about the nature of the overall activity? Three of these are articulated animal remains which have the potential for radiocarbon dating.
- Are the FAS 055 pits contemporary with the FAS 056 IA occupation? Does this represent continuous occupation with different activities in different places?
- Do the enclosures at FAS 056 represent habitation or agriculture?
- Is FAS 055 contemporary with other regional sites. Over what period does the practice of grain storage in pits take place? How does this develop the regional

pattern of Iron Age occupation, such as that recently excavated just east of Bury St Edmunds at Rougham (Sommers, 2017) or more nationally (Cunliffe, 2002, 411-413).

7.2.3. Roman

Whilst the Roman occupation is striking in plan and offers something to the discussion of Roman rural landscapes (Medleycott 2011, 33), the loss of the centre of the most regularly-shaped enclosure and the absence of structural features has impacted on the research questions that can be addressed, which in this case will revolve around discussion of the location of the activity, the character of the ditches and the nature of the finds assemblages.

- Can we define the period of Roman occupation better from closer examination of the pottery assemblage?
- Do the dumps of pottery represent clearing of the site at the end of the occupation? If so can we suggest a location for the centre of habitation within Enclosure 1?
- What can the lead finds from Enclosure 1 tell us about industry, craft and production?
- On the assumption that the wider Roman enclosure represents an agricultural field system can we find parallels for it within East Anglia? Are the field sizes uniform?
- The topographic location of the site is notable. What might they have been doing up here? Where is the nearest Roman site? Was the location chosen for lines of sight over the valley, or practical farming purposes. How does it compare with other sites? How might it relate to West Stow and Icklingham long the River Lark?

7.3 Stratigraphic analysis

The stratigraphic archive has been summarised within this document and is detailed in the archive. Further work is required only to support the research questions outlined above, in particular, to help define the form and function of the Burnt Mounds, the Bronze Age and Iron Age pits and the dating of the drove-way.

Tasks to support the analysis are:

Preparation:

- Revisit the phasing and adjust as necessary.

- Check that all numbering is consistent, integrating evaluation contexts as necessary. Unification and co-ordination of the numbering system with new annotative numbers for pit groups and enclosures as necessary.
- Check and update the numbered plan and phase plans. Ensure group numbers are also available as necessary.
- Ensure that all databases are up to date and complete, with all relevant data included to allow the specialist analysis to proceed.

Burnt Mounds

- Revisit and confirm the key stratigraphic relationships and event sequences associated with the Burnt Mounds.
- The stratigraphic sequence will need to be looked at in more detail to enable examination of the micro-stratigraphy and to complement the geoarchaeological and finds analysis.
- Select contexts for radiocarbon dating.

Pits

- Ensure that the fill details of all Bronze Age and Iron Age pits are defined within the database and that their stratigraphic relationships are correctly recorded.
- Identify deposit types across the pit groups and ensure that all pits can be grouped by fill type and that the nature of the pits in individual groups can be characterised and the origins of the fills identified. Create a usable table of pit groups, fills and finds to allow comparison between the groups and to suggest contemporary pits.
- Integrate the stratigraphic, finds and environmental archives to contribute to the discussion about the Iron Age pits in particular.
- Compare the fills, spatial location and any dating evidence of the putative granaries with the pit groups.
- Compare FAS055 and FAS056 Iron Age activities.
- Select contexts for radiocarbon dating.

Discussion text

- Research local, regional and national parallels to help understand the character of the Middle to Late Bronze Age, Middle to Late Iron Age and early Roman activity.

- Integrate the finds, environmental and scientific evidence for the Burnt Mounds and revise the suggested sequence, form and function as necessary. Discuss with reference to local, regional and national parallels.
- Describe the Bronze Age activity within its landscape context and as an integrated sequence of occupation and addressing the research questions.
- Discuss the nature, sequence, fill variations and date of the Iron Age pits, the granaries and the associated structures with particular reference to the origin of the pit fills, evidence for use and reuse and ritual deposits. Also discuss potential location bias towards landscape markers such as trees.
- Make comparison with similar known sites paying particular attention to the dating, the fill patterns and evidence for four-post granaries.
- Discuss the finds and environmental evidence from the Roman enclosure with particular reference to the degree of mixing of material, specific location and date.
- Identify the lines of sight from the main enclosure and make reference to nearby Roman (or visible earlier) occupation.
- Discuss the enclosures and field systems in a wider local and regional context.

Publication

- Prepare publication synopses and liaise with editors.
- Prepare publication text suitable for a paper in the Proceedings of the Prehistoric Society addressing the Bronze Age evidence.
- Prepare publication text suitable for a site report in the Proceedings of the Suffolk Institute of Archaeology and History.
- Select illustrations and photographic images to support the archive needs and publication reports.

7.4 Finds and environmental analysis

7.4.1 Bulk Finds

FAS055 Prehistoric and Roman pottery

- The pottery should be discussed in relation to its chronological and spatial distribution. Published material from various sites will be used for parallels and comparisons. Such study will require additional library reading.

- Fabrics and vessel typologies need to be analysed separately in relation to site function, and for understanding the evolution of ceramic technologies in the area.
- Nine prehistoric sherds have been separated for illustration and another twenty can be potentially illustrated or photographed.
- The pottery recovered from the 2011 evaluation samples needs to be included in the final catalogue, and should be discussed together with the rest of the material.

FAS056 Prehistoric pottery

- The pottery should be discussed in relation to its chronological and spatial distribution. Published material from various sites will be used for parallels and comparisons. Such study will require additional library reading.
- The Iron Age assemblage needs to be studied together with the pottery from FAS 055 in order to discuss the activities taking place at the site during this period.
- The Beaker and Deverel-Rimbury pottery needs to be further analysed in relation to their fabrics and form in order to produce a comparative technological and stylistic study of the two traditions at Suffolk. Such study will require additional library reading.
- Forty-three prehistoric sherds have been separated for illustration and another twenty-nine can be potentially illustrated or photographed.
- The pottery from the remaining soil samples needs to be analysed and included in the final catalogue.
- Radiocarbon dating of at least two contexts might be required.

FAS056 Roman pottery

- The pottery should be discussed in relation to its chronological and spatial distribution. Published material from various sites will be used for parallels and comparisons. Such study will require additional library reading.
- Fabrics and vessel typologies need to be analysed separately in relation to site function, and for understanding the evolution of ceramic technologies in the area.
- Six Roman sherds have been separated for illustration and another eleven can be potentially illustrated or photographed.

FAS055 and FAS056 Medieval and post-medieval pottery

- The pottery recovered from the 2011 evaluation samples needs to be included in the final catalogue.
- The pottery from the remaining soil samples needs to be analysed and included in the final catalogue.

FAS055 and FAS056 Fired clay

- A complete report needs to be produced by considering the spatial and temporal distribution of the material.
- The fired clay recovered from the 2011 evaluation samples needs to be included in the final catalogue and discussed together with the rest of the fired clay.
- The fired clay from the unprocessed soil samples needs to be analysed and included in the final catalogue.

FAS055 and FAS056 Worked flint

Sarah Bates

- A full catalogue of the flint assemblage needs to be produced, with attention to the possibility of refitting pieces identified during cataloguing.
- An analysis of the flint assemblage by area and context is necessary, with emphasis on the flint from the recorded soil layers, also considering earlier and later context assemblages where they may be significant (e.g. the burnt mounds at FAS 056).
- A summary examination of selected features, contexts and cross-context assemblages needs to be conducted for the presence of re-fitting pieces. Contexts will be confirmed (e.g. sample selection from FAS 055 Iron Age pits) as appropriate. The distribution of the recorded small finds from the burnt mound areas and other contexts need to be appropriately considered.
- A selection of pieces for preliminary assessment, potential microwear analysis and possible residue analysis (in consultation with Michael Green and a microwear specialist) needs to be included in the following stage of analysis.
- A final report by discussing the finds by site or period should be written for publication. Its detail will depend on the significance of the period and feature assemblages.

- Representative pieces or significant groups of flints need to be selected for a combination of illustration and finds photography. Selection will occur through cataloguing.
- The report will need to be edited.

FAS055 and FAS056 Heat-altered flint and heat-altered stone

- Natural and frost-affected flint should be separated and discarded, and the final material needs to be re-quantified.
- At least five pieces of heat-altered flint can be separated and sent from microscopic analysis.
- The material recovered from the 2011 evaluation samples needs to be included in the final catalogue.
- A new report needs to be produced, which will discuss the material in relation to its chronological and spatial distribution, and will include any microscopic analysis results.

FAS055 and FAS056 Slag

- The Slag needs to be examined by a specialist. The material should be discussed in relation to its chronological and spatial distribution in the final volume.

7.4.2 Small Finds

FAS055 Metal small finds

The stratified small finds assemblage primarily reflects late Iron Age activity on the site. The largest number of objects are of iron, many of which are unstable. With this in mind, and considering the future of the archival storage of the assemblage, the following recommendations are made:

Twenty- four objects should be illustrated or photographed to preserve a record for the archive and as illustration for future publication:

- Of the Roman and Iron Age objects SF 1001 and SF 1006 silver coins should be photographed.
- The querns, rubbing stone and whetstones of Iron Age date should be photographed.

- SF 1033, the iron involute brooch should be drawn, as should SF 1062, the antler tine handle and the ceramic bead/whorl, SF 1070.
- Of the Saxon and medieval periods, the following objects should be photographed: the three silver coins, SF 1005, SF 1012 and SF 1024; the copper alloy hooked tag SF 3052; the anthropomorphic mount SF 1010 and the buckle plate SF 3062.
- From the post-medieval and modern assemblage, it is suggested that the following objects are photographed: the coin weight SF1004; the two jettons SF 1003 and SF 1025; the hooked tag SF1008; the spherical pin head SF 3033, the Tudor button SF 3008 and the German coin SF 1002. Following photography of these items, it is then recommended that this assemblage is evaluated and only selected items retained for the archive; the bulk of this material can be discarded.

The following items should be cleaned and stabilised by a professional conservator to assist with identification in the case of the coin, and for the purpose of long-term preservation:

- SF 1006, Iron Age silver coin
- SF 1033, Iron involute brooch

SF 1001 and SF 1006, the Iron Age and Roman silver coins, should also be examined by numismatists and in the case of the Iron Age one, details should be sent to John Sills in order for them to be added to the Celtic coin register.

A report on the Iron Age and Roman small finds should form part of any future publications; it should consider the finds spatially and temporally on the site as well as relating the assemblage to others from similar sites regionally and nationally. The medieval and later material is fully recorded and warrants no further study.

FAS056 Metal small finds

The stratified small finds assemblage primarily reflects Late Iron Age and Roman activity on the site, and is significant for further research with this transitional phase. The largest number of objects are of copper alloy and lead, many of which are unstable. With this in mind, and considering the future of the archival storage of the assemblage, the following recommendations are made:

Approximately thirty-five objects or groups of objects should be illustrated or photographed to preserve a record for the archive and as illustration for future publication:

- Of the Iron Age objects: the iron hooked cutting tool, SF2033; iron punch, SF 2122 and chalk spindle whorl, SF 2496 should be drawn.
- The querns, rubbing stone and whetstones of Iron Age date should be photographed.
- The antler beams, SF 2161, SF 2180 and antler counter, SF 2030 should be photographed; as should the ceramic bead, SF 5138.
- Of the Roman objects SF 2001 coin, SF 2019 copper alloy brooch, and SF 2047 plate brooch should be photographed.
- An additional photograph grouping of all the remaining Roman coins should be undertaken.
- Of the medieval finds it is suggested that a photograph grouping of all the silver medieval coins is created.
- Individual photographs of the copper alloy balance SF 2004 and the lead stylus SF 2032 should be made.
- Amongst the post-medieval and modern material, it is recommended that the jettons and coinage are photographed in groups; similarly with the boy bishop tokens and the lead traders tokens. Following photography of these items, it is then recommended that this assemblage is evaluated and only selected items retained for the archive; the bulk of this material can be discarded.

The following items should be cleaned and stabilised by a professional conservator to assist with identification and for the purpose of long-term preservation:

- SF 2047, enamelled plate brooch of Roman date
- SF 5072, possible Saxon styca

Where possible Reece periods should be allocated to the Roman coins in order to look at coin loss on the site. SF5072, a possible saxon styca should also be examined by a numismatist for further identification.

A report on the Iron Age and Roman small finds should form part of any future publications; it should consider the finds spatially and temporally on the site as well as relating the assemblage to others from similar sites regionally and nationally. The Iron age assemblage will require further research.

FAS055 and FAS056 Loomweights

Possible loomweights that were identified as such during the fired clay assessment and were not given a small finds number need to be examined and added on the final catalogue. All loomweights need to be discussed in relation to their spatial and chronological distribution, and in conjunction with the pottery from the same contexts.

7.4.3 Environmental Evidence

FAS056 Human skeletal remains

Sue Anderson

- The bone from each of the two larger fractions will be sorted into five categories: skull, axial, upper limb, lower limb, and unidentified. All fragment groups will be weighed to the nearest tenth of a gram.
- Measurements of maximum skull and long bone fragment sizes will also be recorded.
- Observations will be made, where possible, concerning bone colour, age, sex, dental remains and pathology.
- Identifiable fragments will be noted.
- The cremated remains will then be discussed in terms of their context, and in comparison, with other Bronze Age cremation cemeteries in East Anglia.

Methods used will follow the Workshop of European Anthropologists (WEA 1980) and McKinley (1994 and 2004).

FAS055 and FAS056 Animal bone

Julie Curl

- Cataloguing the faunal assemblage requires further identifications of mammals, identification to species of birds and fish present using comparative reference material.

- Analysis would require the following work: recording metrical data where appropriate for species identification, stature and breed; quantifications and full catalogue of the sieved material; sorting of bone from samples and identifications of further vertebrate remains.
- Photographs of specimens of interest for the report and archive should be included.
- Analysis of data, comparisons with other sites locally and nationally, production of tables and catalogues and production of the written final analysis report needs to be conducted.

FAS056 Shell

- Additional shell from soil samples needs to be added on the final catalogue.
- The total material needs to be discussed in relation to its spatial and chronological distribution.

FAS055 and FAS056 Plant macrofossils

Anna West

- The remaining bulk samples should be rapid scanned and any suitable flots identified need to be included in the analysis.
 - Approximately 96 bulk samples remain to be scanned from FAS055 as part of the analysis stage.
 - Approximately 190 bulk samples remain to be scanned as part of the analysis stage from FAS056.

FAS055 and FAS 056 Geoarchaeology, palaeo-environmental and organic residues

Michael Allen with Nigel Cameron, Julie Dunne, Richard P. Evershed & Catherine Langdon

Soil micromorphology

- At least one soil thin section from each burnt mound complex should be made. These should be those already sampled for pollen (K574 and K726).
- Ideally, the third thin section (K475) should also be manufactured.
- Full soil micromorphological analysis is proposed on one sample from each burnt mound complex (K474 and K726), and the third (K474), should be

scanned for pedorelicts and other pedo-features that may not be present in K475.

Geoarchaeology

- The geoarchaeological evidence should be used to provide a report defining the nature of features types (to the level this assessment indicates) and to address the questions posed in outline for the FAS 056 assessment.

Pollen and diatoms

- There is no significant potential for further analysis of either pollen or diatoms.
- The assessment results, however, should be used in a more focussed way to address the questions outlined in the assessment report, rather than the assessment of their survival. This will assist in the overall reporting for both sites.

Organic residues

- The assessment demonstrated the survival of residues and lipids within deposit sediments, and on heat-altered flints, and thus the preservation on flint tools, if present, is assumed to be likely.
- A selection of the tools and selection of the 'microchips'/micro debitage, should be examined for organic residues.
- A selection of heat-altered flints from other pits (maximum ten) should be selected to increase the proportion of samples to provide a more representative selection from BMC1 and BMC2, and examination for variation within and between the two complexes.

Microwear analysis

- Out of the many flint tools from the burnt mound complex 1, six have not been washed and may contain residues; these should be examined for microwear after to any residue analysis. Similarly, micro-debitage or micro-splinters should be assessed for traces of any microwear.

Overall reporting

- The combination of the data assessed, and further background research will allow the generation of a report addressing at some level the overall questions

posed, and provide an important contribution to the understanding of the nature and complexity of the activity.

7.4.4 Scientific dating

The well-defined sequence of events that make up the Burnt Mound activity can be radiocarbon dated and Bayesian modelling applied to the results to provide tight absolute dates to the occupation here. This should allow determination of which mound was constructed first and the length of time that each was in use for. Ten AMS dates are required to allow the Bayesian Analysis to be applied to the fill sequences. A further five dates will be obtained from other Bronze Age activity (including cremation burials) to provide a dated sequence to compare with the burnt mounds. These will also support the ceramic analysis and exact choice of samples will be determined in consultation with the relevant specialist, but *in situ*, articulated bone or residues on pottery will be selected over charcoal fragments as they result in more secure dates.

A sequence of up to five dates across a selection of pits will also be obtained to support the analysis of the Iron Age occupation and ceramics.

8 Preliminary publication synopsis

It is proposed that the results of this work will be published via two vehicles, the Proceedings of the Prehistoric Society and The Proceedings of the Suffolk Institute of Archaeology and History. After discussion with SCCAS (Abby Antrobus) it has been agreed that a grey literature archive report is not required. Specialist reports will be archived in their entirety alongside this post-excavation assessment and a synthetic overview will place these in context and outline the implications for the interpretation of the site.

Publication 1 – The Burnt Mounds

The results of the detailed analysis of the nationally significant Bronze Age Burnt Mounds, including their landscape context should be published as a paper within the Proceedings of the Prehistoric Society. As a national specialist journal this should ensure that this highly important evidence reaches the right audience so that it can make a long-term contribution to the development of our understanding of these structures. Preliminary discussion with the editor has identified that the topic is suitable and that, subject to the peer review of the paper, they would be willing to publish a paper of c.8000 words. This paper will include:

- Introduction to the site, the geology, topography, proximity of the Fornham cursus site, and excavation background
- Description of the Bronze Age occupation on the site
- Detailed description of the morphology of the Burnt Mounds
- The results of the scientific and environmental analysis
- The flint report
- Other relevant finds and environmental data
- The scientific dating of the sequence of activity
- Discussion of parallels
- Conclusions

Figures will include location plans, Suffolk HER data, site plan, detailed illustrations of the Burnt Mounds, artefact drawings, specialist tables and diagrams.

Publication 2 – The Site Report

This will be a longer paper of c.10000 words covering the results of all the archaeological work at a level of detail appropriate to a local specialist and interested audience rather than period specialists. The editor has expressed an interest in carrying this report. Preliminary content is envisaged below:

- Introduction similar to above
- Summary of the periods represented on site
- Description and interpretation of the burnt mounds integrating the finds and environmental evidence
- Discussion of the Bronze Age landscape including the drove way, cremation burials, structures and pits and with reference to the Fornham Cursus.
- The Iron Age enclosures and pit groups
- The Roman farmstead
- Specialist worked flint and pottery reports

This may also include reference to the WWII finds and plough soil evidence if appropriate.

Figures will include location plans, HER data, phase plans, detailed plans of the Burnt Mounds, artefact drawings and a selection of photographs.

Optional project (possible article)

The volunteer project has the potential to add a different element to the normal archaeological publication or report. Preliminary content is envisaged below:

- Introduction to the project
- Personal views of the project, what was learnt and what could have been improved.
- Possible comparison tables created by the volunteers on finds retrieval throughout the project.
- Conclusions on the worth of the project and the data gathered.

Volunteer photos and finds photos may be included in this possible article.

9 Analysis and publication: resources and programming

9.1 Staff for analysis and publication

Name	Initials	Institution	Task
Ruth Beveridge	RB	SACIC	Finds Officer and Small Finds
Jo Caruth	JC	SACIC	Project management
Richenda Goffin	RG	SACIC	Finds and post-excavation manager
Michael Green	MG	SACIC	Stratigraphic analysis and Principal author
Rui Santos	RS	SACIC	Graphics
Ioannis Smyrnaio	IS	SACIC	Prehistoric and Roman pottery
Anna West	AW	SACIC	Environmental Officer
Ryan Wilson	RW	SACIC	Graphics
Mike Allen	MA	Freelance (Allen Environmental Archaeology)	Geoarchaeological co-ordinator
Sue Anderson	SA	Freelance	Human bone
Sarah Bates	SB	Freelance	Lithics
Anwen Cooper	AC	University of Manchester	Academic mentor
Julie Curl	JCu	Freelance	Animal bone
Randolph Donahue	RD	University of Bradford	Microware analysis
Charlie French	CF	University of Cambridge	Soil micromorphology
Pieta Greeves	PG	Dracon Conservation	Conservator
Lynne Keys	LK	Freelance	Slag
Ruth Parkin	RP	Freelance	Illustrator
Scottish Universities Environmental Research Centre	SUERC		Radiocarbon dating and Bayesian analysis
Queens University	QUB		Radiocarbon dating
Non-staff costs	NSC		Other tasks

Table 131. List of contributors to the analysis and publication

9.2 Task sequence for analysis and publication

Task no	Task	Initials
1 Preparation		
1.1	Check numbering, integrate evaluation contexts	MG
1.2	Check and update plans	MG
1.3	Revisit phasing and update as necessary	MG
1.4	Scan remaining soil samples for significant assemblages	AW
1.5	Integrate evaluation finds and data	IS/RB/MG
1.6	Integrate finds from samples	IS
1.7	Check and update databases	MG/RB
2 Project and finds management		
2.1	Project management	JC
2.2	Finds management	RG
2.3	Project meetings	All
2.4	Post and packing, equipment and consumables	NSC

Task no	Task	Initials
3 Stratigraphic analysis		
3.1	Confirm key stratigraphic relationships within burnt mounds	MG
3.2	Create tables of all FAS 055 and FAS 056 pit data, integrating finds and enviro data	MG
3.3	Research into parallels	MG
3.4	Discussion text	MG
4 Bulk finds analysis		
4.1	FAS 055 prehistoric pottery analysis	IS
4.2	FAS 056 prehistoric pottery analysis	IS
4.3	FAS 056 Roman pottery analysis	IS
4.4	FAS 056 Fired clay report	IS
4.5	Worked flint catalogue	SB
4.6	Worked flint analysis	SB
4.7	Heat-altered stone and flint	IS
4.8	Slag	LK
4.9	Lead	RB
5 Small finds analysis		
5.1	FAS 056 cleaning and stabilising of 2 finds	PG
5.2	FAS 055 Iron Age and Roman finds report	IS
5.3	FAS 056 Iron Age and Roman finds report	IS
5.4	Fired clay loomweights report	IS
6 Environmental analysis		
6.1	Human skeletal remains	SA
6.2	Animal bone	JCu
6.3	Shell	IS
6.4	Plant macrofossils, contingency for report	AW
6.5	Soil micromorphology	CF
6.6	Lipids analysis	MA
6.7	Microwear analysis	RD
6.8	Geoarchaeology report	MA
7 Graphics		
7.1	Additional graphics to complete the archive	RS
7.2	Pottery illustrations	RP
7.3	Worked flint illustrations and Worked flint photography	RP/RW
7.4	Small finds illustrations	RP
7.5	Small finds photography	RW
8 Scientific dating		
8.1	Selection of samples for radiocarbon dating	MG/AW
8.2	Radiocarbon dating	SUERC and QEB
8.3	Bayesian analysis	SUERC
9 Publication		
9.1	Production of synopses, liaison with editors	MG
9.2	Academic mentor	AC
9.3	Minor finds classes, publication notes	SA
9.4	Publication text 1, author 1	MG

Task no	Task	Initials
9.5	Publication text 1, author 2	TBC
9.6	Publication text 2, author 1	MG
9.7	Publication text 2, author 2	IS
9.8	Editing	RG
9.9	Production of specific illustrations and pasting up	RW
9.10	Publication in Proceedings of the Prehistoric Society	
9.11	Publication in Proceedings of the Suffolk Institute of Archaeology and History	
<hr/>		
<i>10</i>	<i>Archiving</i>	
<hr/>		
10.1	Production of synthetic text	MG
10.2	Preparation of archive for submission	RB

Table 132. Task sequence

9.3 Programming

The initial preparation for analysis is programmed to start on 1st September 2018. Whilst publication will be dependent on the schedules of the publishers, draft texts will be submitted to the editors of the relevant journals by the end of March 2020, which allows 18 months for the analysis to be undertaken, graphics and text produced and the draft reviewed internally and by the academic advisor. A gantt chart is included in Appendix 21. Internal meetings will allow an assessment of progress, and this will be reported on at four review points throughout the project. The timetable is currently achievable, but the review points will offer opportunities to consider possible amendments due to unavoidable and unforeseen external circumstances. This should ensure minimal impact on the overall programme.

9.4 Archive deposition

The archive is currently held with Suffolk Archaeology in the Needham Market offices. Once the analysis and dissemination is completed, the entire archive will be deposited with Suffolk County Council Archaeological Service, in accordance with their current guidelines for archive deposition (SCCAS 2017). A charge will be levied by them on acceptance of the archive.

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Project management was undertaken by Joanna Caruth who also provided advice during the production of the report.

Post-excavation management was provided by Richenda Goffin and Ioannis Smyrnaio. Finds processing and analysis was undertaken by Jonathan Van Jennians, Ruth Beveridge and Clare Wooton. The specialist finds report was produced by Ioannis Smyrnaio with additional specialist contributions provided by Sue Anderson, Sarah Bates, Julie Curl, Anna West (SACIC), Ruth Beveridge (SACIC) and Michael Allen(AEA) with Nigel Cameron, Julie Dunne, Richard P. Evershed & Catherine Langdon

The report illustrations were created by Rui Santo and the report was edited by Joanna Caruth and Richenda Goffin.

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