POST EXCAVATION ASSESSMENT AND UPDATED PROJECT DESIGN – ARCHAEOLOGICAL EXCAVATION

Land east of Loraine Way, Bramford, Suffolk

Site Code: BRF159

Planning Ref: DC/18/00233

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Abstract

This post-excavation assessment describes and assesses the results of an archaeological excavation at Land East of Loraine Way, Bramford, Suffolk. The work was commissioned by RPS Consulting Ltd, on behalf of Bellway Homes, in advance of the redevelopment of the site. The archaeological work was undertaken as a requirement of planning consent, between 06 April to 14 September 2021 and 17 to 28 January 2022.

A preceding geophysical survey of the site in 2017 indicated an elevated magnetic background, considered to be a result of the spreading of organic matter due to agricultural practices and identified no potential archaeological anomalies within the site. A subsequent trial trench evaluation, carried out in May–June 2018 by Headland Archaeology, investigated a number of cropmarks, potentially defining the presence of below-ground archaeological remains, identified within the site itself and in the surrounding vicinity that included ring-ditches and linear features (BRF 003 and BRF 008). The evaluation also identified what was posited to be three phases of colluvium across the site, dating to the post-Saxon, medieval/ post-medieval and modern periods.

On the basis of the trial trenching, three areas of excavation were investigated (Areas 1-3), totalling 18,393sq m in extent. A range of features and deposits of prehistoric, early medieval, high medieval and post-medieval date were recorded.

The earliest tangible evidence of occupation on the site was identified in the Prehistoric period, with a low density scatter of pits occurring in Area 1 and Area 3 of early to middle Neolithic date, as well as broadly prehistoric. A large ring-ditch was identified within Area 3 and, although no firm dating evidence or burial was recovered, is posited to be the remains of a round barrow of earlier Bronze Age construction.

Unenclosed, dispersed early medieval (5th–7th century) settlement activity was evidenced by up to 17 sunken-featured buildings, two possible post-built buildings, associated pitting and artefact/debris-rich soil layers. These layers are posited to comprise levelled/spread midden deposits that were preserved in the tops of natural hollows in the landscape. They contained significant quantities of both early Saxon and reused Roman material, including animal bone and metalwork, that attest to a variety of domestic and craft activities being undertaken within the settlement. Some high status metalwork items are included in the recovered assemblage. It is further posited that the Bronze Age barrow was reused in this period, with early Saxon material recovered from the ring-ditch upper fills.

During the high medieval period a multi-phase rectilinear field system was established, aligned approximately ENE/WSW, positioned perpendicular to the River Gipping. The positioning of a field corner directly over the prehistoric barrow remains hints that the field system may have been laid out with reference to it. A further part of this fieldscape had previously been found in excavations to the south-west in 2016–17. Other elements seem to be the precursor of the northern boundary of the Bishop's Hop Ground, depicted on the 1848 Bramford Tithe Map.

Post-medieval and modern remains included a few field boundaries, one of which persuisted into the modern period and was incorporated into the northern boundary of allotment gardens, shown on the 1926 Ordnance Survey map and on 1945 aerial photographs.

This report is written and structured to conform to the standards required of post-excavation analysis work as set out in the National Planning Policy Framework *(DCLG 2012) and* Management of Research Projects in the Historic Environment (MoRPHE), Project Planning Notes 3 (PPN3): Archaeological Excavation *(Historic England 2015). Assessment of the stratigraphic, finds and environmental material has indicated a provisional chronology and considered the potential of the site archive to address the original research agenda for the projject, as well as assessing the significance of those findings.*

The early Saxon settlement remains are judged to be of regional significance, with identified potential for further analysis and research that will culminate in the production of a Final Archive Report and a probable monograph publication.

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1.0 INTRODUCTION

Archaeology South-East (ASE), the commercial arm of UCL's Institute of Archaeology, was commissioned by RPS Consulting Ltd, on behalf of Bellway Homes, to conduct archaeological investigations at land east of Loraine Way, Bramford, in advance of its redevelopment and the construction of up to 190 residential homes, a pre-school facility and associated amenities, drainage and infrastructure, and new access onto Loraine Way. The fieldwork took place between 06 April to 14 September 2021 and 17 to 28 January 2022, and was undertaken in fulfilment of an archaeological condition attached to planning consent.

1.1 Site Location

1.1.1 The site is located approximately 5.5km northwest of historic Ipswich and 0.5km northwest of the village of Bramford, in Mid Suffolk District. The site is centred on National Grid Reference (NGR) TM 1205 4746 (Figure 1).

1.1.2 The site comprises a roughly rectangular parcel of land measuring *c.*13ha in extent, bound to the north by residential properties (some under construction at the time of this investigation), to the east by Loraine Way (B1113) and residential properties lining this, to the south by Suffolk Water Park and fishing lakes, and to the east by the River Gipping.

1.1.3 Within the development site, archaeological mitigation works were undertaken within three excavation areas totalling *c.*1.84ha extent.

1.2 Geology and Topography

1.2.1 The mapped geology by the British Geological Survey (UKRI 2023) comprises Lowestoft Formation sands and gravels, with a band of undifferentiated River Terrace Gravels fringed by Holocene alluvium in the north and east floodplain. The underlying solid geology comprises Newhaven Chalk Formation sedimentary bedrock.

1.2.2 Evaluation trial-trenching (Headland Archaeology 2018) identified deep deposits of then suspected colluvium across the centre and east of the site, up to 1.4m thick in places. Geoarchaeological attendance during the evaluation established significant variances in the natural deposit across the site, largely caused by periglacial processes.

1.2.3 At its centre, the site sits at *c.*10m OD, sloping down to8m OD north, 7m OD east, and 6m OD to the south. It comprises one large arable field, with its eastern flank located within fallow wetland and floodplains.

1.3 Planning Background

1.3.1 Outline planning consent (ref. DC/18/00233) was granted by Mid Suffolk District Council for the development of 190 residential homes, a pre-school facility and associated amenities, drainage and infrastructure, and formation of new access onto Loraine Way, subject to conditions. Conditions 27 and 28 of the consent related to archaeology and stated:

Condition 27:

"No development shall take place until the implementation of a programme of archaeological work has been secured, in accordance with a Written Scheme of Investigation which has been submitted to and approved in writing by the Local Planning Authority. The Scheme of Investigation shall include an assessment of significance and research questions to define the scope of the investigation; and:

a. The programme and methodology of site investigation and recording.
b. The programme for post investigation assessment.
c. The provision to be made for analysis of the site investigation and recording.
d. The provision to be made for publication and dissemination of the analysis and records of the site investigation.
e. The provision to be made for archive deposition of the analysis and records of the site investigation.
f. The nomination of a competent person or persons/organisation to undertake the works set out within the Written Scheme of Investigation.
g. That the site investigation shall be completed prior to development, or in such other phased arrangement, as agreed and approved in writing by the Local Planning Authority.

REASON – To safeguard archaeological assets within the approved development boundary from impacts relating to any groundworks associated with the development scheme and to ensure the proper and timely investigation, recording, reporting and presentation of archaeological assets affected by this development, in accordance with Core Strategy Objective SO4 of Mid Suffolk District Council Core Strategy Development Plan Document (2008) and the National Planning Policy Framework (2019). This condition is required to be agreed prior to the commencement of any development in accordance with proper planning principles to ensure no significant adverse harm results.

Condition 28:

"No building shall be occupied until the site investigation and post investigation assessment has been completed, submitted to and approved in writing by the Local Planning Authority, in accordance with the programme set out in the Written Scheme of Investigation approved under Condition 27 and the provision made for analysis, publication and dissemination of results and archive deposition.

REASON – To safeguard archaeological assets within the approved development boundary from impacts relating to any groundworks associated with the development scheme and to ensure the proper and timely investigation, recording, reporting and presentation of archaeological assets affected by this development, in accordance with Core Strategy Objective SO4 of Mid Suffolk District Council Core Strategy Development Plan Document (2008) and the National Planning Policy Framework (2019).

1.3.2 An Archaeological Desk-Based Assessment (Archaeology Collective 2017) was prepared as part of the planning application, which identified the potential for prehistoric and medieval archaeological remains to be located within the site. In their capacity as archaeological advisors to the Mid Suffolk Council, Suffolk County Council Archaeology Service (SCCAS) recommended that a programme of archaeological trial trenching be undertaken in order to inform the decisions regarding the need for, and extent of, any further archaeological works that may be required in order to mitigate the impact of the development upon the archaeological resource and fulfil the planning conditions.

1.3.3 Headland Archaeology carried out an archaeological trial trench investigation from May to June 2018. Eighty-three trenches, of which twenty-four contained archaeological features, were excavated across the site. The remains were seemingly concentrated along a north/south alignment in the east of the development site (Figure 2).

1.3.4 A subsequent phase of archaeological mitigation work was recommended by SCCAS, based on the results of the evaluation, comprising the open area excavation of three areas.

1.3.5 Consequently, Archaeology South-East was commissioned by RPS Consulting Ltd, on behalf of Bellway Homes, to undertake the required archaeological excavation. This was carried out in accordance with a Written Scheme of Investigation (WSI), prepared by ASE (ASE 2021) and approved by SCCAS prior to the commencement of the fieldwork. The excavation was monitored on behalf of the LPA by Rachael Abraham, SCCAS Archaeological Advisor.

1.4 Circumstances and Dates of Work

1.4.1 The location and extent of the mitigation areas within the site was determined by SCCAS, based on the results of the preceding evaluation. Area 1 was situated around Trench 75, Area 2 incorporated Trenches 28-31, 46-50, 59 and 60, and Area 3 was centred upon Trenches 45, 52, 54-56 and 57. The work was undertaken in fulfilment of the archaeological conditions attached to planning consent.

1.4.2 The fieldwork was undertaken by ASE between 06 April to 14 September 2021 and 17 to 28 January 2022. It was managed by Andy Leonard, supervised by James Alexander, and carried out by ASE archaeologists.

1.5 Archaeological methodology

1.5.1 The excavation methodology, as detailed in the WSI (ASE 2021), comprised the investigation of three excavation areas (Fig. 2); Area 1 measured 1,263m², Area 2 measured 11,854m², and Area 3 measured 5,276m². Areas 1 and 2 were located in the centre of the site, targeted on trenches containing remains of possible Anglo-Saxon settlement and agricultural activity. Area 3 was targeted on a potential Bronze Age barrow and possible Anglo-Saxon trackway. The excavation areas were clearly marked out with flags and no machine tracking took place within these until formally signed off by SCCAS.

1.5.2 Provision was made to enlarge the main excavation areas should significant remains be shown to continue beyond the initially agreed extents. Consequently, it was agreed to extend the north edge of Area 2, within the overhead buffer zone area. This extension covered an area measuring 1,190m² and was undertaken once a Principal Contractor was appointed. The barrow identified from aerial photography, located within the overhead buffer zone ("retained heritage asset"), was to be preserved in situ and was not included in this extension.

1.5.3 A parish site code was requested from the Suffolk HER. This code, BRF159, was used as the unique site identifier for all finds and reports relating to the excavation.

1.5.4 All excavation work was carried out in accordance with the WSI, as well as with the Chartered Institute for Archaeologists' (CIfA) standards and guidance, and Code of Conduct (CIfA 2014a, 2014b), the *Standards for Field Archaeology in the East of England* (Gurney 2003), and the *Requirements for Archaeological Excavation* (SCCAS 2012, updated 2021). ASE is a registered organisation with CIfA.

1.5.5 The areas were excavated using a tracked 20-tonne mechanical excavator fitted with a toothless ditching bucket, under the constant supervision of an experienced archaeologist. Topsoil, subsoil and any modern made-ground deposits were removed in no more than 0.20m spits, with artefact recovery and metal detecting taking place after every scrape until archaeological deposits or the top of the underlying natural sediments were reached, which generally occurred simultaneously.

1.5.6 A full pre-excavation plan was prepared as the stripping progressed using Digital Global Positioning System (DGPS) planning technology, which was available in AutoCAD and PDF format and was printed at a suitable scale (1:20 or 1:50) for on-site use. The plan was updated on a regular basis by the Archaeology South-East Surveyor.

1.5.7 A metal detector was used throughout the programme of topsoil/subsoil removal and again during subsequent hand excavation with a log of its use being kept. Metal detecting was undertaken principally by Mr Graham Brandejs with support from ASE staff when unavailable. All metalwork and other small finds had their location recorded by GPS.

1.5.8 Archaeological features and deposits were excavated using hand tools, except where they could not be accessed safety or when a machine-excavated trench was the only practical method of excavation. All machine-excavation of archaeologically significant features was agreed with SCCAS and RPS ahead of implementation.

1.5.9 With the exception of modern disturbances, a minimum 50% of all discrete features and 10% of non-structural linear features were excavated, generally in 1m-interventions. The ring-ditch within Area 3 was 50% excavated as a minimum. Structural features, including pits, postholes, beam slots, foundation trenches, etc., were excavated in full after half-sections were recorded. Modern disturbances were only excavated as necessary in order to properly define and evaluate any features that they may cut. Details of the

precise excavation strategy and any alterations to it were discussed with SCCAS when particularly significant archaeology was revealed. All excavated deposits and features were recorded on standard context record sheets used by ASE.

1.5.10 Where necessary or appropriate, features were hand planned at a scale of 1:20 and then digitised to be included on the overall plan. Datum levels were taken where appropriate with sufficient levels taken to ensure that the relative height of the archaeological/subsoil horizon could be extrapolated across the whole of the development area. Sections were hand drawn at a scale of 1:10 and later digitised.

1.5.11 A full photographic record comprising colour digital images was made, which aimed to provide an overview of the excavation and the surrounding area. A representative sample of individual feature shots and sections were taken, in addition to working shots and elements of interest (individual features and group shots). The photographic register included: shot number, location of shot, direction of shot and a brief description of the feature photographed.

Finds/Environmental Remains

1.5.12 In general, all finds from all features were collected. Where large quantities of 19th-century and later finds were present and the feature was not of intrinsic or group interest, a sample of the finds was collected, being sufficient to date and characterise the feature.

1.5.13 All finds were retained according to ASE guidelines and the CIfA *Standard and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials* (2014c).

1.5.14 Any finds believed to fall potentially within the statutory definition of Treasure, as defined by the Treasure Act (1996, amended 2003), were reported to RPS (who were responsible for informing the landowner) and the Suffolk County Council Finds Liaison Officer.

1.5.15 Bulk soil samples were taken from suitable, sealed deposits that were deemed to have potential for the preservation/survival of environmental material and/or small finds recovery. Details of each sample were recorded on *pro forma* sheets. The minimum sample size per deposit was 40 litres, or 100% if the total volume of the deposit was less.

1.6 Organisation of the Report

1.6.1 This post-excavation assessment (PXA) and updated project design (UPD) has been prepared in accordance with the guidelines laid out in *Management of Research Projects in the Historic Environment (MoRPHE), Project Planning Notes 3 (PPN3): Archaeological Excavation* (Historic England 2015) and the *Requirements for Archaeological Excavation* (SCCAS 2012, updated 2021).

1.6.2 The report seeks to place the results from the excavation areas (hitherto referred to together as 'the site') within the local archaeological and historical setting; to quantify and summarise the results; specify their significance and

potential, including any capacity to address the original research aims, listing any new research criteria; and to identify what further analysis work is required to enable their final dissemination, and what form the latter should take.

1.6.3 Following on from the previous archaeological evaluation in 2018, work at the site ran as a single project, with the finds and environmental archives all recorded under a single site code: BRF159.

1.6.4 Where pertinent, the results of the Headland Archaeology evaluation (2018) are incorporated into the results of this report in order to present and understand the full distribution and significance of the archaeological remains recorded within the excavation areas. Reference is also made to other features in surrounding previous evaluation areas as required.

2.0 ARCHAEOLOGICAL BACKGROUND

2.1 The following archaeological and historical background information is drawn from the DBA (Archaeology Collective 2017), WSI (ASE 2021), and the evaluation report (Headland Archaeology 2018), all of which incorporate data derived from a search of records with a 1km radius of the site held on the Suffolk Heritage Explorer. The locations of the most pertinent/closest sites and findspots mentioned in the text are illustrated on Figure 1.

2.2 Prehistoric

2.2.1 There are no records for the early prehistoric periods (Palaeolithic, Mesolithic or Neolithic) within the vicinity of the site.

2.2.2 A Bronze Age cinerary urn (BRF 010) was found in the area in 1904, NNE of the Angel Inn in Bramford, believed to be close to The Street.

2.2.3 Archaeological investigations by Oxford Archaeology on land 200m to the south of the site identified Bronze Age land use in the form of a pit scatter, one which contained a domestic Beaker assemblage and contemporary flintwork (BRF 126). Part of a possible Bronze Age field system was also encountered.

2.2.4 To the west of the site, during works for East Anglia One (EA1), Area 46, an early to middle Bronze Age pit was encountered containing fragments of a collared urn. Fifteen pieces of retouched late Neolithic to early Bronze Age flints were also recovered (BRF 133).

2.3 Iron Age

2.3.1 There are no records for Iron Age activity in the site boundary and evidence for Iron Age activity within the vicinity of the site is sparse.

2.3.2 Two metal-detected coins and one sherd of pottery was found to the west of the site (BRF 017).

2.3.3 To the east of the site, a gold quarter stater, fairly worn and bent, was recovered through metal detecting (BRF 029).

2.3.4 During EA1 site works, a probable post-built structure was identified at Area 46, dated to the early Iron Age through pottery (BRF 133).

2.4 Roman

2.4.1 Loraine Way, which forms the western boundary of the site, broadly follows the line of the Roman Pye Road (BRF 023), which linked the legionary fortress and later major town at Colchester, 25km to the southwest, with Caistor St Edmund towards the Norfolk coast. Possible evidence for road metalling was found during archaeological monitoring of a gas pipeline to the south of Bramford village (BRF 108).

2.4.2 Little Roman material has been identified within the vicinity of the site. The

finds are exclusively find-spots. To the east, a silver *denarius* of the Emperor Domitian (AD 88-89) was recovered from metal detecting, whilst to the west abraded sherds of Roman pottery was found during works for the Bramford to Wattisham gas pipeline in 1989 (BRF 085).

2.4.3 Also to the west, an artefact scatter of generally Roman dated finds is apparent. During field-walking carried out in 1976, a scatter of pottery, coins and brooches was identified, whilst metal detecting carried out in 1982 discovered a further four coins, brooches, and lid type object. A watching brief in 1988 revealed additional metal detected finds including gold, silver and bronze coinage, brooches and pottery. Latterly, in 1997 and 1998, a plate brooch and a further four silver and bronze Roman coins were recovered (BRF 017).

2.5 Early medieval (Anglo-Saxon)

2.5.1 Although there is little record on the SHER for Saxon material within the area, Bramford is recorded as a relatively large settlement by the time the Domesday Book was compiled in 1086, suggesting that there had been occupation of the area prior to the Norman Conquest.

2.5.2 The site is located to the north of the historic core of the present village and consequently was considered to have low potential for Saxon remains by the DBA (Archaeology Collective 2017).

2.5.3 To the east, an Anglo-Saxon gilded disc brooch with cloisonne decoration was discovered (BRF 033), close to a late Saxon cross-shaped disc brooch and coin of Cnut (BRF 030).

2.5.4 To the west, a bronze pin of middle Saxon (650-849 AD) date, with a decorated, facetted head, was recovered through metal detecting (BRF 017)

2.5.5 South of the site, just east of Loraine Way, an Anglo-Saxon dated urn was recovered in 1896 (BRF 154), whilst an artefact scatter comprising pottery sherds, including Ipswich and Thetford ware, was recovered further south (BRF 040).

2.6 Medieval

2.6.1 Bramford is recorded in the Domesday Book as being a large settlement which included two manors, the principal being held by the king that comprised 10 carucates or hides of land, nineteen plough-teams and thirty acres of meadow. The smaller manor of thirty acres was held by Brown, a freeman under the patronage of King Edward. The village was predominantly an agricultural settlement developing close to the ford of the River Gipping and centred upon St Mary's Church, dating to *c.*13th Century (BRF 024).

2.6.2 A concentration of medieval pottery is recorded on the SHER in the field immediately north of the site (BRF 021). These sherds were described as 'generally abraded', suggesting they were residual/imported rather than from an *in situ* context.

2.6.2 To the west, metal detecting unearthed a medieval artefact scatter comprising a lozenge shaped seal matrix with rear suspension loop, coin of William I of Scotland (1195-1214), buckles, shoe buttons, jews harp shaped object, rings, and a bronze purse bar (BRF 017).

2.6.3 To the east, a further medieval artefact scatter has been recorded comprising a bronze seal matrix with a central figure of Virgin and Child of late 13th- to 14th-century date, a gilt bronze buckle plate, and gold finger ring (BRF 033). Nearby, a medieval-dated copper-alloy buckle and ring brooch were also recovered (BRF 112)

2.6.4 Geophysical survey and archaeological investigations undertaken immediately south of the site identified a medieval field system of 11th- to 14th-century date, aligned NW/SE / NE/SW, demonstrating the land lay in the agricultural hinterland of the medieval village (BRF 126). Ovens, pits and a number of postholes representing agricultural structures such as fences, animal pens and shelters were also identified, probably belonging to working yards and market gardens for toft dwellings fronting the roadside.

2.7 Post-medieval and modern

2.7.1 Bramford Hall (BRF 038) and its associated park (BRF 180) were built in the 17th century, approximately 1km southwest of the site. Its eastern boundary lay 570m west of the southwest boundary of the site. During the Second World War, the site was used as a temporary camp and as a marshalling area for the D-Day landings in 1944 (BRF 099), being visible in RAF aerial photographs taken in March of that year. Bramford Hall was demolished in the middle of the 20th century and its associated park no longer survives.

2.7.2 Various industries are depicted on Hodskinson's 1783 map of Suffolk, including a watermill to the southeast (BRF 048).Lime kilns (BRF 144) and an 18th-century granary and farm buildings (BRF 078) are located on the east bank of the river.

2.7.3 The site itself has been common land and later farmland through the post-medieval and modern periods with little alteration aside from a couple of cottages in the northeast corner dating from 1848–1956.

2.8 Cropmark evidence

2.8.1 Investigation of cropmark morphology through National Mapping Programme (NMP) aerial photography has identified several features both within, and surrounding, the site. A concentric ring-ditch *c*.30m in diameter is present in the central east of the site (BRF 008) and a smaller ring-ditch (20m in diameter) is present close to the southern boundary (BRF 003). These ring-ditches are thought to represent the remains of ploughed-out Bronze Age barrows.

2.8.2 To the south, a number of cropmarks representing ring-ditches are recorded, including evidence for a double ring-ditch (BRF 007) and two single ring-ditches (BRF 006, BRF 027), all of an unknown date.

2.8.3 East of the site and on the eastern banks of the River Gipping, cropmarks indicate the presence of a NW/SE aligned trackway with an associated small field system to the northeast (BRF 045). This is possibly linked to a small rectangular enclosure and ring-ditch (BRF 043 and BRF 044).

2.9 Previous Archaeological Work

2.9.1 A geophysical magnetometer survey of the site was conducted in 2015; however, an elevated magnetic background precluded identification of any anomalies across much of it (Stratascan 2015). An archaeological DBA was then undertaken by Archaeology Collective (2017), which collated data from the Suffolk HER and maps and documents held by the Suffolk Records Office. Investigation of cropmark morphology identified discrete features, enclosures, linear features and ring-ditches within the site. The potential for prehistoric and medieval archaeological remains was highlighted for the site.

2.9.2 An archaeological evaluation was carried out at pre-determination stage by Headland Archaeology (2018), which comprised eighty-three trenches, twenty-four of which contained archaeological features. The evaluation indicated that archaeological remains were concentrated along a north/south alignment in the east of the site (Figure 2).

2.9.3 The majority of features recorded during the evaluation dated to the Saxon period, comprising the remains of both settlement and field systems. The presence of the smaller ring-ditch near the southern boundary (BRF 003) was confirmed, whilst the larger ring-ditch (BRF 008) was not investigated owing to its location below high voltage overhead power cables. SCCAS recommended that this feature be preserved *in situ*.

2.9.4 Archaeological investigations were carried out south of the site (BRF 126) by Oxford Archaeology East (OAE), revealing evidence of prehistoric land use in the form of a Bronze Age pit scatter and possible field system; additionally, the site produced an abundance of evidence for activity within the early to high medieval periods. This included features that were posited to relate to a dispersed settlement or homestead located close to the northwest corner of the site. A large boundary ditch was also recorded, within which a smaller enclosure was positioned closer to the road. These enclosures were superseded, probably in the 13th century, by at least three rectangular ‘plots’ laid out perpendicular to the road, bounded by a large enclosure ditch. Settlement-related features included ovens, various pits, a well and numerous postholes —the latter representing the poorly-defined remains of agricultural structures such as fences, pens and shelters. These plots probably formed the working yard/back plot areas and market gardens for peasant ‘toft’ dwellings, with the houses presumably located on the road frontage to the west (OAE 2019).

3.0 RESEARCH AIMS

3.1 General Aims

3.1.1 The general aims of the archaeological excavations were to determine the presence or absence of any archaeological remains and to establish their character, location, extent, date, quality, and significance, preserving these by record. Moreover, they aimed to assess all archaeological remains against the wider background of previous fieldwork in the area. These were set out in the WSI (ASE 2021) as follows:

- To sample, excavate and record all archaeological deposits and features within the proposed excavation areas.
- Produce relative and absolute dating and phasing for deposits and features recorded on the site.
- Establish the character of these deposits in attempt to define functional areas on the site such as industrial, domestic, etc.
- Produce information on the economy and local environment and compare and contrast this with the results of other excavations in the region.
- Understand how the site fits into the local and wider HER context and adds to our understanding of activity in different periods in Suffolk.

3.2 Project-specific aims

3.2.1 The site-specific research aims of the excavation and the post-excavation project, as set out in the WSI (ASE 2021), were as follows:

- To set out the archaeological background to the site, drawing together the results of previous archaeological work in the vicinity of the site.
- Confirm the posited Bronze Age date for the ring-ditch at the south of the site. If the feature is a barrow do any burials survive? Does the feature sit in isolation in the immediate landscape, a smaller echo of the large, preserved *in situ* ring-ditch?
- Determine the extent and nature of the Anglo-Saxon settlement.
- To understand the relationship between the Bronze Age and Saxon activity on the site.
- Establish the purpose of the parallel northwest-southeast Saxon ditches at the southern end of the site; do these represent continuations of the field systems to the south of the site or are they part of a track/roadway as suggested by the evaluation report?
- The location of the Anglo-Saxon settlement adjacent to the River Gipping cannot be chance. What evidence is there for water management, fishing, transport, etc.?
- Complete a site archive of all project records, artefacts, ecofacts, any other sample residues, and summaries of the context, artefact and environmental records.
- Complete an assessment report on the site archive and its potential to answer the research questions and for further analysis.
- Disseminate the results of the project to the public realm.

3.3 Regional Research Questions

3.3.1 With particular reference to *Research and Archaeology: a framework for the Eastern Counties, 2. Research agenda and strategy* (Brown and Glazebrook 2000), *Research and Archaeology Revisited: a revised framework for the East of England* (Medlycott 2011), and the *East of England Regional Research Framework* (Research Frameworks 2021), the excavation aimed to address the following regional research objectives:

Bronze Age

- The possibility that significant [Bronze Age] sites remain hidden under colluviation requires further study (2011, 21).
- Patterns of burial practice need further exploration. This should include the relationship between settlement sites and burial, and the development and use of monuments, including burial mounds as key elements in determining and understanding the landscape. Later Bronze Age burial practices are now known to be variable, however we do not know why this is the case (2011, 20).

Anglo-Saxon

- The development of Anglo-Saxon fieldscapes needs further investigation. How far can the size and shape of fields be related to the agricultural regimes identified? To what extent are Roman field systems re-used? What is the evidence for open field systems in the region in the Anglo-Saxon period? (2011, 58).
- What forms do the farms take, what range of building-types are present, and how far can functions be attributed to them? (2011, 58).
- The extent and nature of late Anglo-Saxon landscape reorganisation, village nucleation, field systems, etc. needs further exploration (2011, 58).
- The main communication routes through the region need to be established. This would include main routeways, secondary routes, valley corridors, rivers and marine transport (2011, 58).

4.0 ARCHAEOLOGICAL RESULTS

4.1 Introduction

4.1.1 The locations and extents of the three excavation areas (Areas 1, 2 and 3) are shown on Figure 2. Various constraints and the nature of the archaeology altered the planned size of the areas, as per the WSI (ASE 2021). This included:

- Expansion of Area 2 to the east, west and north to reveal the extent of archaeological deposits.
- Expansion of Area 3 to the south and northeast to reveal the extent of archaeological features and deposits.
- Reducing the southeast extent of Area 3 to avoid an extant drainage ditch.

4.1.2 Area 1 (1,263sq m) was situated around Evaluation Trench 75. Area 2 (11,854sq m) incorporated Trenches 28-31, 46-50, 59 and 60. Area 3 (5,276sq m) was centred upon Trenches 45, 52, 54-56 and 57 (Figure 2). Where relevant, results from the preceding Headland evaluation have been incorporated into the excavation results.

4.1.3 The recorded archaeological features consisted of a ring-ditch, linear ditches, pits, and postholes, as well as sunken-featured buildings, a post-built structure and a possible grain-dryer. A number of silted-up natural hollows were also encountered that contained artefact-rich deposits/layers in their upper parts. These remains displayed a low to moderate intercut complexity. Excavation area plans, showing context numbers of all recorded features and their excavated segments, are presented in Figures 3, 4 and 5.

4.1.4 Individual contexts, referred to thus [0000], have been sub-grouped and grouped together during post-excavation analysis; features are generally referred to by their group label (G00). In this way, linear features, such as ditches which may have numerous individual slots and context numbers, are discussed as single entities, and other cut features such as ring-ditches, pits and postholes are grouped together by structure, common date and/or type. Environmental samples are listed within triangular brackets <00>, and registered finds thus: RF<0>. References to text sections within this report are referred to thus (3.7.1). A context list, including assigned phasing, can be found in Appendix 1. A list of groups and their component features is presented as Appendix 2.

4.1.5 The recorded archaeological remains are discussed under provisional date-phased headings, their dating/phasing having been determined primarily through assessment of dateable artefacts — predominantly the pottery, and secondarily through the creation of relative chronologies where stratigraphic relationships and meaningful alignments/distributions exist. The following phasing scheme has been applied:

- Period 1: Prehistoric
- Period 2: Roman
- Period 3: Early Saxon (5th–7th centuries)

- Period 4: Medieval (11th – 13th centuries)
  - Phase 4.1
  - Phase 4.2
- Period 5: Post-medieval and modern
- Period 0: Undated

4.1.6 Successive phase plans for each period with group numbers can be found in Figures 6–16. Selected sections and photographs of features are presented in Figures 17–29.

4.2 Site Summary

Period 1: Prehistoric

4.2.1 There is a background of residual finds spread throughout the site, which broadly dating from the Mesolithic to the late Bronze Age, suggestive of ephemeral and perhaps transient use of the site.

4.2.2 A lower to middle Palaeolithic hand-axe was retrieved from the base of a G6 pit in Area 1. This pit was adjacent to an early Saxon sunken-featured building (SFB) and posited to be of contemporary date, suggesting that the hand-axe was a curated artefact.

4.2.3 The earliest tangible evidence of prehistoric land use on the site is evidenced by eight pits of a general Neolithic to Bronze Age date scattered across Areas 1 and 3, and a ring-ditch in Area 3. Alongside the suspected Bronze Age barrow cropmark to the north (BRF 008), this appears to represent land use predominantly comprising funerary activity and monument building.

Period 2: Roman

4.2.4 No tangible evidence for Roman land use was apparent within the site. However, a moderate assemblage of diagnostically Roman CBM, bronze coins, and other metalwork items were recovered from later dated features and posited midden-derived deposits preserved in the tops of natural hollows in Areas 2 and 3.

4.2.5 This Roman material appears to have been brought to the site and reused during the early Saxon period, being obtained from an as yet unknown site presumably in the surrounding vicinity. At least some of the CBM was evidently used in fire-proof structures, while personal items such as bracelets and brooches, but also more functional items, were intentionally collected and some possibly curated.

Period 3: Early Saxon

4.2.6 During the early Saxon period, dating from 5th to 7th centuries, a dispersed and unenclosed settlement was established on the site, this activity seemingly concentrated in Area 2. Ten certain sunken-featured buildings (SFBs) were apparent, as well as a further six possible SFBs, along with

associated rubbish pits and postholes. A post-built structure was situated within Area 3.

4.2.7 A number of naturally-occurring hollows were located in Areas 2 and 3 which appear to have accumulated midden-derived artefact-rich deposits within their upper parts. In the west of Area 2, a tile-built structure such as a grain-dryer was constructed in/on one of these deposits, presumably where a remnant hollow in the land surface provided some shelter.

4.2.8 The probable Bronze Age barrow in Area 3 appears to have been re-used, as indicated by the middle fills of its ring-ditch containing Saxon pottery. The mound subsequently collapsed on its west side, slumping into the west of the ring-ditch and adjacent hollow. Whether a number of high-status metalwork artefacts recovered from deposits to the east and southeast of the barrow originated from an inserted early Saxon burial that was subsequently dispersed through ploughing and agricultural processes, or from occupation of nearby buildings, is unclear.

4.2.9 By middle Saxon period (7th century +) the settlement fell out of use, presumably in favour of the developing middle Saxon settlement at *Gippeswic* (Ipswich), located *c*.5km southwest at the junction of the Rivers Gipping and Orwell.

Period 4: Medieval

4.2.10 By the high medieval period, the village of Bramford was established at its present location, close to the ford of the River Gipping and centred on St Mary's Church, the earliest elements of which date to the 13th century.

4.2.11 Within the confines of the site, a multi-phase, rectilinear field system was imposed on the landscape. This field system is orientated perpendicular to the River Gipping. It is likely that the land belonged to one of the two manors recorded in the Domesday Book. In Area 3, the corner of one of the boundary ditches directly overlaid the barrow ring-ditch, suggesting that the field system was deliberately placed /set-out with reference to the visible remnant earthwork. A parallel boundary ditch seems to have an enduring influence on subsequent landscape development, with former field boundaries depicted upon the 1848 Bramford Tithe Map and the 1880 to 1980 Ordnance Survey (OS) mapping aligning upon it.

Period 5: Post-medieval and modern

4.2.13 During the post-medieval period, a substantial boundary ditch was imposed across the centre of the site, first depicted on the 1848 Bramford Tithe Map and lasting until at least the 1902. It is noteworthy that this boundary ditch respects the ENE/WSW line of the previous medieval field system, again perpendicular to the River Gipping.

4.2.14 By 1926, allotment gardens had been constructed on site, with the northern extent following the line of the above boundary ditch, though whether this was still extant at the time is not apparent. Evidence of the allotment plots were apparent within Area 2, aligning with aerial photographs taken in 1945. A

modern deposit, recorded in the centre of Area 2, contained refuse and metal signage dating approximately to the late 1940s and early 1950s.

4.2.15 A curving ditch was recorded in the east of Area 3 that conforms to the line of the extant field boundary ditch. The recorded ditch appears to be part of the existing boundary, which has been filled in on its western side, narrowing the ditch to its current width.

4.3 Deposit Sequence

4.3.1 The stratigraphic sequence uncovered during the excavations was variable across the site. Within Area 1, a straightforward sequence of 0.28–0.34m thickness of topsoil, generally comprising a dark brown sandy silt with occasional sub-angular stones, and 0.05–0.11m thickness of a mid greyish brown silty sand subsoil with occasional sub-angular gravel stones was recorded. These overlay the natural deposit comprising mid reddish brown and yellow sand and gravels of the Lowestoft Formation.

4.3.2 Area 2 revealed a more complex/variable stratigraphic sequence comprising 0.32-0.37m thick topsoil and 0.06–0.28m thick subsoil, consistent with those recorded in Area 1. A modern deposit and a post-medieval ditch appeared to be cut through the subsoil in the centre of the excavation area. Underneath the subsoil, nine deposits were identified. These deposits ranged from *c*.0.50m to 1.0m thick and filled what have been characterised as naturally-occurring hollows, probably being a mix of natural accumulation overlain by re-worked midden material. The natural deposit within this excavation area varied from that of the Lowestoft Formation to River Terrace Deposits (BGS 2023), evident in the east as light greyish yellow fine sands and sub-rounded to rounded gravels.

4.3.3 Area 3 demonstrated a straightforward stratigraphic sequence with 0.33–0.54m thick topsoil, thicker in the east of the excavation area, overlying a 0.04–0.24m thick subsoil, again thicker in the east but absent towards the south. These were identical in composition to that described above. The natural deposit here comprised a mid reddish brown and yellow sand with gravels to the north and west whilst a coarse gravel with yellow sandy patches was evident in the south and east.

4.3.4 No archaeological features were visible in the topsoil or subsoil, with the exception of the modern deposit and boundary ditch in Area 2. Feature legibility was generally good once the overburden had been removed, with the truncated tops of features observed to be cut directly into the exposed surface of the natural deposit. Features truncating the deposits in the hollows were harder to distinguish as their fills were generally homogenous.

4.3.5 No modern disturbance was observed across the site with the exception of plough scarring, generally seen only within the subsoil. Three modern test pit-like features were observed in the south of Area 2, perhaps relating to recent geotechnical investigations.

4.4 Natural geological hollows

4.4.1 In both Areas 2 and 3, a number of large natural geological hollows were encountered that appeared to be filled with naturally accumulated, possibly colluvial, deposits. The majority were of distinctly elongated shape, extending on NNW/SSE, or occasionally a north/south orientations – essentially following the sloping topography. A few hollows appeared to have subsequently been utilised; for example hollows G13 and possibly G14 potentially being re-worked in the prehistoric period in order to enhance the prominence of barrow monument G12. Others (G60, G61, G62, G64, G65, G68/G69, G70) seem to have accumulated rubbish-rich deposits during the early Saxon period, that are posited to be the surviving parts of midden material that had been spread across the land surface within the settlement. A number of these hollows were discerned to contain only a single fill, though the recovered artefacts were noticeably distributed within their upper portions. These later, archaeological, layers preserved in the tops of such hollows are described further in their perceived phasing, below. A few less extensive hollows did not appear to accumulate later deposits – presumably not surviving as negative features in the land surface (e.g. G63, G66, G89, G92).

4.4.2 Hollow G60 (segs [2005, 2101, 2111, 2112, 2113, 2114]) was located in the west of Area 2, extending *c*.88m north/south and 23m east/west, and ranging in depth from 0.32m in the centre up to 0.92m in the south. A naturally accumulated basal fill was recorded ([2004] and [2427]) comprising a firm and friable mid yellowish grey silty sand with occasional gravel stones. Two sherds of Saxon pottery were recovered from this, though are considered intrusive. The upper fill of G60 was of a different, finds-rich, nature and is described as a Period 3 deposit in section 4.7.41.

4.4.3 Hollow G61 (segs [2008, 2218, 2256]), extended from the north end of Area 2 on a NNW/SSE alignment for *c*.50m and was approximately 12m wide, ranging in depth from 0.30m at the NNW end to 0.86m in the SSE. A basal fill [2007] was recorded at its south end, comprising a loose light greyish brown silty sand with some charcoal flecking and gravels, from which seven worked flints of undiagnostic prehistoric date were retrieved. The upper fill was of a different, finds-rich, nature and is described as a Period 3 deposit in section 4.7.42.

4.4.4 Natural hollow G62 (segs [2012 / 2068 / 2222 / 2252 / 2265]) was situated in the northeast of Area 2, adjacent to G61. G62 conformed to the general trend of an elongated oval, measuring at minimum 36m by 15m wide, continuing beyond the north and east area limits. It had gently sloping sides breaking to a flat base at a maximum depth of 1.12m. It contained up to three recorded fills. Its naturally accumulated basal infill comprised a 0.28m-thick, loose mid brownish grey sandy gravel, with no finds. Its upper fills were finds-rich and are described as Period 3 deposits in section 4.7.43.

4.4.5 To the southwest of G62 was G63 (segs [2032 / 2118]), which appeared to be cut/overlain by hollows G61 and G64 and their occupying deposits. This hollow was irregular in plan and had gently sloping sides breaking imperceptibly to a flattish base, and was 0.26–0.35m deep. It contained a soft

and friable mid greyish brown silty sand, [0000], from which two sherds of early Saxon pottery, four pieces of CBM and forty-two fragments of animal bone, likely intrusive from surrounding hollows G61, G62 and G64, were retrieved. No overlying deposits of later date were identified within this hollow.

4.4.6 Hollow G64 (segs [2036, 2105, 2116, 2204, 2280, 2318]) was situated along the east edge of Area 2 and measured *c.*58m NNW/SSE and at minimum *c.*23m ENE/WSW, extending beyond the excavation area. It varied in depth from 0.25m to the ESE to 0.63m to the WNW. No distinct naturally accumulated basal fill was identified. Instead, a single fill comprising soft and friable mid brownish grey silty sand contained a quantity of Roman and early Saxon finds. This described as Period 3 deposits in section 4.7.44.

4.4.7 To the south of G64 was hollow G65 (segs [2056, 2057, 2058, 2071, 2166]), covering an area measuring *c.*20m+ NNW/SSE and 26m+ ENE/WSW, and extending beyond the SE corner of Area 2. It varied in depth between 0.33m and 0.58m. No distinct naturally accumulated basal fill was identified, it containing a single fill of soft to friable dark brownish grey silty sand with occasional flints and stones that was finds-rich (4.7.45).

4.4.8 Deposit G66 ([4010]) was aligned NNW/SSE in the north of Area 2 and truncated by possible SFB G85. This measured 28m+ long by 10m wide and comprised a light greyish yellow sandy silt from which two sherds of early Saxon pottery, four pieces of animal bone, and a single fragment of Roman CBM were recovered, all of which are considered intrusive within this naturally accumulated deposit. G66 was similar in composition to G69 and G89. Small rounded hollow G92 was positioned just south of the end of G66 and was probably in effect a part of the same natural feature. This also contained a naturally accumulated fill and no finds

4.4.9 Naturally accumulated deposit G69 ([2153]) underlay G68 and consisted of soft and friable mid reddish brown silty sand. No finds were recovered. This was similar to G91 / [2369] which underlay G64.

4.4.10 In the southwest of Area 2, continuing beyond the west and south limits of excavation, was hollow G70 ([2022]). This measured 36m+ NNW/SSE and 15m+ ENE/WSW, with moderately sloping, slightly convex sides, breaking to a flattish base at a maximum depth of 0.90m. It contained two fills. The 0.30m-thick basal fill was a mid yellowish brown silty sand with moderate flints and stones, with no finds being recovered. The more substantial upper fill, contained a quantity of early Saxon finds. This is described as a Period 3 deposit in section 4.7.47. Undated pits G98 were recorded at the base of G70, though their stratigraphic relationship is uncertain.

4.4.11 Naturally accumulated deposit G89 ([4036]), situated in the northeast of Area 2, measured 11.5m by 2.9m+ and comprised a soft mid brownish grey sandy silt. It was probably another hollow deposit that mostly extended north of Area 2. Intrusive finds recovered from this comprised four pieces of Roman CBM and RF<754>, a copper Radiate coin of Tetricus I/II (AD 271-274).

4.4.12 Hollow G13 (segs [3196, 3406, 3247, 3205, 3328, 3362, 3135, 3449, 3437, 3449]), located in Area 3, measured *c.*29m long N/S and 15m wide E/W, was

cut at its southeast edge by ring-ditch G12. It was relatively shallow at its north end, 0.39m in depth, and became deeper nearer to the ring-ditch, where it was 0.65–1.04m. The primary fill of G13 was a soft and friable dark brown grey silty sand frequent charcoal occasional flint gravels. It was bulk soil sampled <15> which produced a moderate amount of charcoal, burnt and unburnt bone, alongside a small quantity of early Saxon finds judged to be intrusive. It is possible that this naturally occurring hollow was re-worked during the Bronze Age in order to emphasise the barrow's position in the landscape, and later accumulated Saxon material being washed south from the settlement activity in Area 2.

4.4.13 Hollow G14 (segs [3008], [3034], [3259], [3268], [3125], [3403], [3437]), situated to the north of G12, measured 26m+ N/S by 13.5m E/W. Although relatively shallow, between 0.20–0.54m in depth, the hollow was similarly truncated by ring-ditch G12. G14 contained two recorded fills, both of which appeared to have accumulated naturally. The upper fill comprised loose dark brownish grey silty sand with moderate flints and stone, its bulk soil sample <30> producing small amounts of unburned and burnt bone, cereal grains, and charcoal, whilst the basal fill comprised friable dark brownish grey silty sand and gravels. Residual flint flakes and a Mesolithic/Neolithic blade, as well as 73g of intrusive early Saxon pottery were also recovered from the soil sample.

4.4.14 Throughout Area 3, a number of gravel deposits (G26, G27, G37, G38) were recorded. These are considered to be natural geological variation in the natural deposits. Towards the south, deposit G25 (segs [3282, 3482]) was identified, measuring 11.5m by 9.7m and 0.24m deep. It contained a firm mid yellowish grey sandy silt sampled as <36>. This sample yielded charcoal, animal bone and burnt bone, a nail, natural stone and five sherds of early Saxon pottery, likely intrusive from G22. This is posited to be a natural colluvial deposit that accumulated in a geological hollow; it contained five sherds of early Saxon pottery, seven pieces of animal bone, and one iron nail, which were mostly likely surface material that washed in.

4.5 Period 1: Prehistoric (Figs. 6-7)

4.5.1 During the prehistoric period the nature of landuse appears to have been of a transient nature prior to the Bronze Age when funerary monuments were established along the western bank of the River Gippng. Evidence for prehistoric land use on site was relatively sparse with regards to securely dated features, though a total of 719 worked flints were recovered from across the site. These ranged in date from the Mesolithic to the late Bronze Age with the majority occurring residually in later dated features. With the exception of ring-ditch G12, a light distribution of prehistoric features was recorded in Areas 1 and 3, consisting of eight pits and a possible ditch terminus.

4.5.2 Ring-ditch G12, investigated within Area 3, is posited to be a Bronze Age barrow, based on its morphological characteristics. The fills produced 311 struck flints of a broadly Mesolithic to late Bronze Age date range. A further ring-ditch, identified from aerial photography and not investigated as part of these works, is located north of Area 2. Similarly, this is also of a suggested

Bronze Age date. Given the location of the site on the western bank of the River Gipping and in an area of relative prominence within the Gipping Valley, the two probable barrows appear to represent parts of a monumental landscape in use during the Bronze Age. However, no securely dated Bronze Age features were identified.

Area 1

4.5.3 Three pits were recorded in Area 1, G1 ([1058]) and G2 ([1034]). G1 was situated to the east and was oval in plan, measuring 2.55m by 1.30m with a steeply sloping WNW side and moderately steep ESE side and a concave base (Fig. 17, Section 2). Its 0.66m thick single fill, comprising a soft and friable mid brownish grey silty sand, contained seven sherds of probable early Neolithic pottery and three contemporary worked flints. This pit represents the earliest tangible activity on site.

4.5.4 Pit G2 was located in the southwest corner and was similarly oval in plan, measuring 1.6m by 1.3m with moderately steep sloping, slightly convex sides, breaking to a concave base (Fig. 17, Section 1). Single, 0.5m thick fill [1033] comprised a friable mid brown silty sand with occasional flint inclusions and produced two sherds of middle Neolithic pottery and a single, likely contemporary flint flake.

4.5.5 A further pit, circular pit G6 ([1056 / 1060]), measured 4.89m by 4.72m with gentle to moderate sloping sides breaking imperceptibly to a flat base. It was relatively shallow, containing a single, 0.27–0.30m thick fill of soft and friable mid yellowish grey silty sand with occasional charcoal flecking, moderate gravels and flint. It contained two sherds of high medieval (12th to 13th century) pottery, thought to be intrusive, and twenty-three undiagnostic prehistoric worked flints, including a Mesolithic to early Neolithic bladelet, likely residual. A single lower to middle Palaeolithic hand-axe, RF<52>, was also recovered and is posited to be a residual artefact. The worked flints recovered comprised a multiplatform core used to remove blades and thin flakes, 10 flakes, 3 blade-like flakes, 4 blades, a bladelets and 3 core face/edge rejuvenation pieces.

Area 3

4.5.6 Ring-ditch G12 ([3012, 3025, 3037, 3045, 3058, 3119, 3144, 3187, 3190, 3202, 3211, 3236, 3297, 3317, 3325, 3341, 3348, 3352, 3355, 3367, 3379, 3408, 3501, 3506]) was situated in the centre of Area 3 and measured *c*.25m in outer diameter with varying widths from 1.88–2.5m on its north and east sides to 3.5–4.67m on its southwest side. The depth of the ring-ditch was also variable, tending to be much shallower to the north and east, between 0.54–0.68m, and considerably deeper to the west and south, between 1.26–1.35m. The ring-ditch exhibited moderately steep sloping sides breaking gradually to a rounded base (Fig. 23, Sections 22–25; Fig. 28, Section 40). One to nine fills were recorded within the interventions, though on average they contained two to three. The G12 ring-ditch fills are predominantly described in Sections 4.7.56–60, as most appeared to have accumulated during Period 3.

4.5.7 However, of particular note was a basal/ fill/deposit that had accumulated in its west and southwest segments (G36). The same deposit was recorded as the basal fill of adjacent hollow G13. Within the ring-ditch itself, G36 was present within segments [3144, 3202, 3297 3211, 3297, 3408, 3506] and comprised compact mid yellowish grey sandy gravel, generally ranging in thickness between 0.10–0.38m in the west, up to 1.36m thick fill in the south ([3211]). G36 is posited to be the remnants of the Bronze Age barrow mound that subsequently eroded and slumped into these parts of the ring-ditch. A single worked flint was recovered from G36 with a broad Mesolithic to early Bronze Age date.

4.5.8 Hollow G13 (see 4.4.12) measured *c.*29m long and 15m wide, cut at its southeast edge by G12. It was relatively shallow at its north end, 0.39m in depth, and became deeper nearer to the ring-ditch, where the depth was between 0.65m and 1.04m. The primary fill of G13 was sampled as <15> and comprised a soft and friable dark brown grey silty sand frequent charcoal occasional flint gravels. A moderate amount of charcoal, burnt and unburned bone were present in the fill, alongside slag from a forge bottom and 62g of early Saxon pottery. It is possible that this naturally occurring hollow, situated on the western side of G12, was re-worked during the Bronze Age in order to emphasise the barrow's position in the landscape, which later accumulated Saxon material being washed south from the settlement in Area 2.

4.5.9 This may also have occurred in similar hollow G14, situated to the north of G12 (see 4.4.13). Although relatively shallow, between 0.20-0.54m in depth, the hollow was similarly truncated by ring-ditch G12. G14 contained two recorded fills, both of which appeared to have accumulated naturally. The upper fill comprised loose dark brownish grey silty sand with moderate flints and stone, its bulk sample <30> containing small amounts of unburned and burnt bone, cereal grains, and charcoal, whilst the basal fill comprised friable dark brownish grey silty sand and gravels. Residual flint flakes and a Mesolithic/Neolithic blade, alongside 73g of early Saxon pottery, were also recovered from the bulk sample.

4.5.10 No inhumation or cremation burials of a Bronze Age date were detected within, or surrounding, the ring-ditch. However, later ditches G18 and G19 both truncated the suspected barrow. The latter appeared to have been purposefully positioned over its centre, potentially disturbing any associated burials.

4.5.11 Six pits (G9) of a general prehistoric date were identified within Area 3, three southwest of ring-ditch G12 and three to the northwest. Three of these pits, [3156, 3160 and 3417], were oval in plan and measured between 0.75m and 1.5m long by 0.6m to 0.7m wide. They generally exhibited gentle to moderately sloping sides breaking to concave bases (Fig. 17, Sections 3-5). Pit [3156] contained a single Mesolithic to early Bronze Age flint, recovered from its 0.15m thick single fill of loose, friable dark grey to black silty sand and gravels, with abundant charcoal, likely the result of backfill. This was bulk sampled (<12>) and yielded a small amount of charcoal, as well as fire-cracked flint.

4.5.12 Similarly, pit [3160] also produced four worked flints dating broadly from the Mesolithic to early Bronze Age, including a bladelet, two blade-like flints and a flake, from its single 0.46m thick fill comprising a soft and friable dark brown silty sand with occasional gravel inclusions. Pit [3417] contained a single blade-like flint of Mesolithic to earlier Bronze Age date within its 0.4m thick fill, similar in consistency to that of [3160] which are both likely the result of natural accumulation.

4.5.13 Sub-circular pit [3433], measuring 0.72m by 0.67m, exhibited steeply sloping, straight sides, breaking gently to a concave base (Fig. 17, Section 5). Its 0.25m thick single fill, a soft and friable dark brown sandy silt with occasional gravel stones, produced a Mesolithic to early Neolithic single platform core.

4.5.14 Only two pits from G9 contained pottery. Elongated, slightly sinuous, pit [3399] measured 3.8m by 1.25m with moderately steep, slightly concave sides. It contained five sherds of early Neolithic pottery and three broadly Mesolithic to Iron Age flints, retrieved from its 0.4m thick single fill of friable mid reddish brown silty sand. Pit [3399] appeared to be cut into hollow G14.

4.5.15 Oval pit [3177], situated in the southwest of Area 3, contained three sherds of possible Bronze Age or early to middle Neolithic pottery. Measuring 2.06m by 1.3m with gentle to moderately sloping straight sides and a slightly concave base, the pit contained a 0.47m thick single fill comprising a loose dark brownish grey silty sand with abundant gravels (Fig. 17, Section 4). The bulk soil sample (<16>) yielded a single hazelnut shell fragment, three pottery sherds, and a flint flake of a broad Neolithic to Iron Age date. A further three contemporary flints were hand-retrieved. If the Bronze Age date of the pottery is established, pit [3177] represents the only tangible remains of that date on site and situated within close proximity of the suspected Bronze Age barrow.

4.5.16 In the north of Area 3, a NNW/SSE aligned, possible ditch terminus [3442]/G10 was recorded. Only measuring 2.4m long and 1.01m wide, having been truncated by evaluation Trench 58 and undated ditch G24, it exhibited moderately sloping, straight, sides breaking gently to a concave base. Its 0.29m thick single fill, comprising a friable mid yellowish brown silty sand with moderate quantities of natural flint and gravels, contained a single Mesolithic to early Bronze Age blade-like flint. G10 was not identified extending into Area 2.

4.6 Period 2: Roman

4.6.1 Whilst no archaeological features of Roman date were identified, a significant amount of Roman artefactual material was recovered from the site. A total of 799 pieces of Roman CBM was recovered from ninety-three individual contexts (fifty-eight features), thirty sherds of Roman pottery were retrieved from twenty contexts, whilst forty-nine coins of a generally mid to late Roman date were collected from twenty-seven individual contexts (fifteen features). Further small finds comprising brooches, bracelets, a copper bead and a probable penannular ear-ring were also recovered from seven individual contexts (five features).

4.6.2 The majority of the Roman finds were recovered from deposits occupying the upper parts of natural hollows G60, G61, G64, G65 and G68, all in Area 2. These finds-rich deposits have been interpreted as possible midden-derived material that was spread across the land surface and subsequently, due to later cultivation activity, became preserved only in the hollows. Roman finds were also recovered from pit and SFB fills and a possible hearth/dryer structure. In all these deposits, the Roman finds are intermixed with those of early Saxon date. This Roman material therefore appears to have been brought to the site and reused during the early Saxon period, being obtained from an as yet unknown site presumably in the surrounding vicinity. At least some of the CBM was evidently used in fire-proof structures, while personal items such as bracelets and brooches, but also more functional items, were intentionally collected/used and some possibly curated.

4.6.3 The stratified Roman artefact assemblages recovered from Period 3 and later features and deposits are included in Sections 4.7-4.9, where relevant.

4.6.4 Five Roman coins were also recovered through metal-detecting of the overburden deposits. In Area 1, the topsoil produced a Sestertius of uncertain 1st to 2nd-century date (RF<1>), whilst the subsoil yielded a nummus of the House of Constantine AD 317-363 (RF<4>). Radiate coin RF<104>, of broad AD 260-296 date, was recovered from the subsoil in Area 2. A nummus of the House of Constantine RF<13> (AD 317-363), and a radiate of Victorinus, RF<40> (AD 269-271) were retrieved from the subsoil in Area 3.

4.7 Period 3: Early Saxon (5th–7th centuries) (Figs. 8-10)

4.7.1 During the early Saxon period a small dispersed settlement, comprising sunken-featured buildings, was established on the western banks of the River Gipping. As the River Gipping appeared to be the focus of Bronze Age land use in the form of funerary monuments, it appears to similarly be focus of activity for occupation during the early Saxon period. Situated *c*.6.5km up-river from the town of Ipswich and the River Orwell, the settlement would have had excellent transport and communication links throughout East Anglia. The early Saxon features on site comprised sunken-featured buildings (SFBS), pits, postholes, and the remains of a post-built hall structure. Period 1 ring-ditch G12 is posited to have been re-used during the early Saxon phase due to contemporary finds found within its fills, as well as the presence of high status early Saxon metal artefacts in the south and east of Area 3 – which have been speculated to have derived from a since ploughed-out and destroyed/dispersed burial perhaps inserted into it.

Area 1

4.7.2 A single SFB ([1051 / 1054] and posthole ([1048]) G3, was located within Area 1. The SFB was sub-square in plan, and seemingly orientated NW/SE, measuring 5.2m long by 4.8m wide and 0.47m deep, with gentle to moderately sloping, concave sides breaking imperceptibly to a slightly concave and undulating base (Fig. 18, Sections 6 and 7). Two fills were recorded. The basal fill, 0.47m thick, consisted of soft and friable mid greyish brown silty sand with occasional charcoal flecking and sub-angular stones. Bulk sample <3> yielded charcoal, charred plant remains, animal bone. No

finds were recovered from either fill. Circular posthole [1048] was identified immediately east of the SFB and appeared to be structurally associated. It measured 0.53m by 0.51m and had steeply sloping, slightly concave sides, breaking imperceptibly to a concave and rounded base (Fig. 18, Section 8). Its single recorded fill comprised a friable mid brownish grey silty sand with occasional charcoal flecking, 0.34m thick, and contained a single sherd of early Saxon pottery.

4.7.3 Northwest of G3 were two pits, [1036] and [1038] (G4). These were both sub-circular to circular in plan, measuring 1.6m by 1.6m and 1.84m by 1.46m, and exhibited moderately sloping, concave sides breaking imperceptibly to concave bases (Fig. 18, Section 9). The single recorded fill of [1036], 0.27m thick, consisted of a friable mid reddish brown silty sand whilst the 0.51m thick single fill of [1038] comprised a soft and friable dark brownish grey silty sand with frequent charcoal and occasional chalk. Bulk sample <2>, from the latter deposit, yielded charcoal, animal bone, burnt bone, fired clay and pottery. Three sherds of early Saxon pottery were recovered from [1036], whilst [1038] contained a single sherd of early Saxon pottery and forty-nine pieces of animal bone.

4.7.4 Oval pit [1042] (G5), measuring 2.15m by 1.5m, was located west of SFB G3. Its single recorded fill, 0.65m thick and comprising a friable dark grey to black silty sand with occasional rounded stones, contained three sherds of early Saxon pottery, one piece of Roman CBM, a single fragment of fired clay, and eighty-four pieces of animal bone (Fig. 18, Section 10). Bulk sample <47> produced charcoal, charred plant remains, animal bone, burnt bone, glass, iron and fire-cracked flint. RF<35.1>, a spearhead dating from the 6th to 7th centuries and RF<35.2>, a middle to late Bronze Age socketed axe fragment were also recovered. The latter appears likely to have been a curated artefact during the early Saxon phase.

Area 2

4.7.5 Across the broad expanse of Area 2 were situated ten sunken-featured buildings and another six possible SFBs. These were predominantly located in the north of Area 2 whilst the majority of contemporary pitting was evident within the south. No Period 3 ditches were apparent, and it is likely that the early Saxon settlement was unenclosed.

Sunken-featured Buildings

4.7.6 SFB G71 ([4019]) was situated in the north of Area 2, and was rectangular in plan with rounded corners, and orientated east/west, measuring 4.6m east to west and 3.4m north to south with moderately sloping sides breaking gently to a flat base. A single fill, 0.19m thick, consisting of a soft dark greyish brown sandy silt with occasional stones and charcoal flecking was recorded. Although no dateable pottery was recovered, 183 pieces of animal bone, four Roman brick fragments, and 22 pieces of fired clay were collected. RF<751>, a piece of a broadly dated Saxon bone pin was also retrieved. No structural postholes were evident.

4.7.7 Also situated in the north, 34m east of G71, was SFB G72 ([4027]). Similarly rectangular in plan with rounded corners, G72 measured 3.4m long by 2.4m wide, orientated ENE/WSW, and exhibited moderately steep sides breaking gently to a flat base. Its single, 0.30m thick, fill of soft dark greyish brown sandy silt contained 34 sherds of early Saxon pottery and 114 pieces of animal bone. Three fragments of residual Roman CBM were also recovered. RF<753>, a very broadly dated AD 43–1540 copper sheet fragment was recovered by metal-detecting. An absence of structural postholes was also noted, similarly to SFB G71.

4.7.8 Approximately 6m southwest of G72 was possible SFB G73 ([2305 / 4017], and evaluation [3010]), which appeared to be cut into natural hollow G61. This was roughly oval in plan, orientated NW/SE, and measured *c*.6.8m by 4.6m with gently to moderately sloping sides breaking to a flattish base. Whilst no structural postholes were immediately apparent, undated posthole G97 was located to the east and may be contemporary to G73. Two fills were recorded. Its basal fill, 0.2m thick, contained three sherds of pottery, two intrusive pieces from the high medieval to post-medieval periods, and a single sherd of early Saxon, as well as two pieces of post-medieval CBM and 464 pieces of animal bone. It is likely that this mixed assemblage of finds is the result of backfill of the evaluation trench segment [3010]. The upper fill of G73 comprised a soft and friable dark grey silty sand, 0.24–0.35m thick, from which 39 sherds of early Saxon pottery, one piece of Roman CBM, Roman iron pennanular ear-ring RF<716>, 17 pieces of fired clay representing a fragmented loomweight, and 3125 pieces of animal bone were hand-collected.

4.7.9 SFB G74 ([2157 / 2159], evaluation [3008]) was situated immediately east of G73, appeared broadly oval in plan, and measured 4.1m by 3.6m with diffuse edges. No clear orientation was apparent. This had moderately sloping sides leading to a flat base. A single fill comprising naturally accumulated soft, friable, mid grey silty sand, 0.20–0.26m thick, contained 18 sherds of early Saxon pottery, one piece of Roman CBM, one fragment of fired clay, and a single small piece of intrusive clay tobacco pipe. Likewise to SFB G73 no structural postholes were apparent, though undated posthole G97 was located immediately to the west and may be contemporary to G74.

4.7.10 SFB G75 ([2053 / 2060]) was located 14m southeast of G71. Oval in plan and measuring 6.1m long by 4.5m wide, G75 was aligned east/west and had moderately sloping sides breaking gently to a slightly concave to flat base. No structural postholes were identified within or adjacent to G75. The SFB contained two fills of a total 0.64m depth (Fig. 19, Sections 11 and 12). The basal fill comprised a soft, friable, mid greyish yellow silty sand with frequent rooting, gravels and no finds, consistent with natural slumping. Its upper fill consisted of a soft and friable dark brownish grey silty sand with occasional flint, which appeared to be the result of intentional backfill. This contained an abundance of material culture that included 176 sherds of early Saxon pottery as well as two residual Roman sherds and 70 fragments of residual or re-used Roman CBM, 2281 pieces of animal bone, 16 burnt flints, seven pieces of fired clay, and 161 pieces of metalwork. Eleven registered finds were also recovered, several of which were undated or broadly Roman to post-medieval iron work and an undated copper coin. However, of particular note were five

finds of a general Saxon date: a copper decorative applique (RF<76.2>); a drawknife (RF<78>); a knife (RF<79>); a bone comb (RF<756>); a bone needle (RF<757>); and two dated more specifically to the early Saxon period: RF<452>, a loop-headed pin; and RF<505>, a copper strap end. Bulk sample <26> yielded charcoal, animal bone, burnt bone, a small piece of copper and pottery.

4.7.11 SFB G76 ([2227 / 2250] and posthole [2229]) were located in the northeast of Area 2 and was cut into natural hollow/ G62. G76 was sub-rectangular in plan, being orientated ENE/WSW, and measured 5.15m by 3.75m with gentle to moderately sloping sides breaking gently to a flat base (Fig. 19, Sections 13 and 14). A single fill, 0.28m thick, was recorded, comprising a soft and friable dark greyish brown silty sand with frequent flints. Twenty-five sherds of early Saxon pottery and an intrusive post-medieval sherd were recovered as well as seven pieces of Roman CBM and a late Saxon loom-weight (RF<778>). A knife and a bone pin, dated to the general Saxon period, were also retrieved (RFs <711> and <713>). On the west edge was oval posthole [2229], measuring 0.60m by 0.49m, which appeared to cut the SFB. This had steeply sloping sides breaking sharply to a concave base and contained a 0.6m thick single fill of a soft and friable dark greyish brown silty sand with abundant flints. Two early Saxon pottery sherds and one iron nail fragment were collected.

4.7.12 G77 ([2345] / postholes [2346], [2356] and [2383]) was situated on the west boundary of Area 2, extending slightly beyond the excavation area, and aligned NE/SW. Measuring 4.1m NE/SW by 3.35m NW/SE, the rectangular SFB had moderately sloping sides breaking to a flat base (Fig. 19, Sections 15 and 16). Two fills were recorded with a total depth of 0.36m. The basal fill comprised a firm, light brown sand with moderate flint; bulk soil sample <49> yielded charcoal fragments, animal bone and burnt bone and a very small amount of glass. The fill contained twenty pieces of animal bone and one worked flint, dating generally from Mesolithic to the Iron Age. The environmental sample contained a very small piece of intrusive post-medieval blue glass. The upper fill of G77 comprised a firm and friable mid yellowish grey silty sand with moderate amounts of charcoal and flint. This was sampled as <48> and contained fourteen sherds of early Saxon pottery, two residual pieces of Roman CBM, and 325 pieces of animal bone, as well as two broadly prehistoric worked flints. Loomweight RF<24> was also recovered, dating to AD600-900. The environmental sample, <48>, produced charcoal, animal bone, burnt bone and fired clay.

4.7.13 Structural postholes were uncovered internally on either side of SFB G77 and were integral to the structure, located along the long axis of the SFB. On the southwest edge, circular [2383] measured 0.22m in diameter, with steeply sloping, almost vertical sides breaking to a concave base. The posthole was recorded as 0.68m deep and contained a single fill, comprising firm, mid to dark yellowish brown silty sand with occasional charcoal flecking. Bulk sample <53> produced charcoal, charred plant remains and some animal bone. No finds were encountered. On the northeast side was circular posthole [2356], 0.25m by 0.25m (Fig. 19, Section 16). This had steeply sloping sides and a tapered base, containing a single fill, 0.30m thick, of firm mid greyish brown silty sand with occasional charcoal flecks. This was sampled as <50>

which produced charcoal and charred plant remains, as well as animal bone, burnt bone, fired clay and a residual Early Neolithic pottery sherd. Posthole [2356] appeared to have replaced earlier posthole [2346], which was square in plan, measuring 0.28m by 0.28m with moderately sloping sides and a flat base. The remnants of a single fill comprising firm, friable, mid reddish greyish brown silty sand were recorded up to 0.16m in thickness. No finds were recovered.

4.7.14 SFB G78 ([2246]) was located 2.6m northwest of G77. The building was sub-rectangular in plan, orientated NW/SE, but truncated by a modern, likely geotechnical pit through its north half, and by roughly contemporary pit [2244]/G99 on the southeast edge. G78 measured 3.5m by 2.0m, and aligned NW/SE, cutting geological hollow G60. It displayed gentle to moderately sloping sides breaking imperceptibly to a flat base and contained a 0.20m thick single fill of firm/friable mid to dark brownish grey mottled reddish brown sandy silt with rare gravels. Bulk soil sample <44> yielded charcoal fragments, animal bone and burnt bone, fish bones and microfauna, flint and fire-cracked flint. Two sherds of early Saxon pottery were recovered, as well as five fragments of residual/re-used Roman CBM. RF<714>, a bone pin of a general Saxon date was retrieved. No structural postholes were evident within or surrounding the SFB.

4.7.15 NE/SW aligned SFB G79 ([2197 / 2200]) was situated in the centre of Area 2 and was sub-rectangular in plan, measuring 4.2m by 3.2m and orientated NE/SW. Fairly shallow with gentle to moderately sloping sides and a flat base, it contained a single 0.18-0.35m thick fill of soft, friable, dark grey mottled light brown silty sand with frequent flints. Eight sherds of early Saxon pottery and a fragment of animal bone, as well as a broadly Mesolithic to Neolithic flint core were recovered. G79 was truncated on its NW side by roughly contemporary pit G99.

4.7.16 SFB G84 ([4007]) was encountered at the north extent of Area 2, 7.5m north of SFB G75. Rectangular in plan with rounded corners, and appearing to align north/south, measuring at minimum 6.3m east/west by 3.3m+ north/south, G84 extended north beyond the excavation limit. It had moderately steep sides, breaking imperceptibly to a flat base and contained two recorded fills to a total depth of 0.35m. Its basal fill comprised a soft, light greyish brown sandy silt with very occasional charcoal flecks, which contained 392 pieces of animal bone. The upper fill consisted of a soft, dark greyish brown sandy silt from which twelve sherds of early Saxon pottery, four pieces of Roman CBM, and 193 fragments of animal bone were recovered.

Possible SFBs

4.7.17 In addition to the above ten SFBs, another six possible SFBs were identified across Area 2, G80-83 and G85-86, based on their morphological traits or general shape, measurements and profile.

4.7.18 Located in the south of the area, possible SFB G80 ([2165]) was oval in plan, aligned NE/SW, and measured 5.2m by 3.2m. It had gently sloping sides breaking gently to a slightly concave base and contained a soft and friable mid brownish grey silty sand single fill, 0.30m thick. Twelve sherds of early

Saxon pottery were recovered as well as two fragments of Roman CBM, two nails of uncertain date and four Mesolithic to Neolithic worked flints. Twenty-three amorphous German lava stone fragments were also recovered, likely from a quern. Intrusive RF<374>, a post-medieval copper decorative mount, was retrieved through metal detecting.

4.7.19 Possible SFBs / pits G81 and G82 were situated adjacent to one another towards the southern-most limit of Area 2. Oval G81 ([2131]) measured 4.2m long by 3.5m wide, seemingly orientated east/west, and had moderately sloping straight sides breaking imperceptibly to a slightly concave base (Fig. 20, Section 19). Its single fill, 0.30m thick, consisted of a firm and friable dark grey to black silty sand with moderate flints and gravels. Bulk soil sample <39> produced charcoal, animal bone and burnt bone, slag, burnt stone and fire-cracked flint. It also contained five Mesolithic to Early Bronze Age worked flints, eleven sherds of early Saxon pottery, a single sherd of later Roman pottery, thirteen pieces of Roman CBM, 236 fragments of animal bone, and six pieces of fired clay. RF<636>, a broadly Saxon dated copper mount and RF<764>, an unidentified type of antler-fabricated artefact were also recovered.

4.7.20 G82 ([2120]) was similar in plan and morphology to G81 (Fig. 20, Section 20), located immediately east, and measuring 4.8m by 4.2m, appearing to align north/south.. Its single fill, comprising a friable dark brownish grey silty sand with frequent flint, was 0.30m thick and produced thirty-seven sherds of early Saxon pottery and a single residual later Roman sherd. It also contained a single residual Roman piece of CBM and fifty-seven fragments of animal bone.

4.7.21 Possible SFB / pit G83 ([2125]) was situated near the centre of Area 2 with moderately sloping, straight sides, breaking gently to a flat base and measuring 3.2m by 2.8m. No clear orientation was evident. It appeared oval in plan with diffuse edges, and contained a single 0.35m thick fill comprising soft dark brownish grey sandy silt with frequent charcoal and sub-angular stones, bulk sampled as <38>. The sample contained charcoal, animal bone and burnt bone. The fill contained 12 sherds of pottery, two fragments of CBM, and 25 pieces of animal bone. Circular posthole [2127] was recorded on its east side, measuring 0.28m by 0.26m with steeply sloping sides and a concave base. Its 0.31m thick single fill consisted of a soft, friable, mid greyish brown sandy silt with frequent gravels and contained no finds.

4.7.22 Possible SFB G85 ([4025]), adjacent to G84, was an elongated oval in plan with rounded corners. Measuring 8.5m east/west by at minimum 2.5m+ north/south, it continued beyond the Area 2 north limit of excavation, with a posited east/west orientation. G85 had moderately steep sides, breaking imperceptibly to a flat base and contained two recorded fills to a total depth of 0.41m. Its basal fill, 0.15m thick, comprised soft mid grey sandy silt, which contained eight pieces of animal bone, a single sherd of pottery, one fragment of Roman CBM, and a loom-weight, RF<25>, dated to AD600-900. The upper fill, 0.25m thick, consisted of soft, light greyish brown sandy silt and contained 17 sherds of early Saxon pottery, five pieces of Roman CBM, 352 fragments of animal bone, and five pieces of fired clay/daub. Situated on the west side of G85 was a posited structural posthole [4035]. Likely circular in plan,

measuring at minimum 0.70m by 0.20m+ with steeply sloping sides and a concave base, it continued beyond the excavation limit. A 0.86m thick single, sterile fill of soft light greyish brown sandy silt was recorded.

4.7.23 Possible SFB G86 ([4029 / 4031]) was situated towards the northeast corner of Area 2, continuing beyond the excavation limits. Sub-rectangular in plan and measuring 8.0m E/W by 1.9m+ N/S, it displayed moderately sloping, slightly concave sides and a flat base and appeared to orientate east/westG86 was truncated by Period 4 high medieval ditch G56, but itself cut hollow G62. A 0.22-0.54m thick single fill was identified, comprising soft mid greyish black silty sand. This contained eight sherds of early Saxon pottery and 71 fragments of animal bone.

Pits

4.7.24 A number of pits were recorded throughout Area 2, which is not unexpected within an area of settlement activity. These were mainly situated in the south. It is posited that rubbish was also middened in the Period 3 settlement, the upper deposits of the natural hollows located across the area preserving the levelled/spread midden material, otherwise subsequently removed/reworked by later cultivation activity elsewhere across the landsurface.

4.7.25 Refuse pit G87 ([2147 / 2216]) was located in the north of Area 2, adjacent to SFBs G73 and G74. Oval in plan, measuring 4.5m NW/SE by 3.3m NE/SW, it had moderately sloping, concave sides breaking gently to a slightly concave to flat base (Fig. 20, Sections 17 and 18). Four mid to dark silty sand fills were recorded to a total depth of 1.10m; all appeared to be the result of intentional backfill events. The lower two fills contained small amounts of animal bone fragments, alongside a residual prehistoric flint flake and two sherds of early Saxon pottery. The upper two fills contained significantly larger finds assemblages. Eighty sherds of early Saxon pottery, 13 pieces of Roman CBM, four pieces of German lava stone (from a quern?), and 809 fragments of animal bone were retrieved from the third fill, alongside a contemporary needle case and comb fragment both made of bone (RFs <763>, <770>). The upper fill contained 87 fragments of animal bone and two pieces of Roman CBM. An iron buckle pin (RF<519>), bucket binding (RF<705>), and curled headed pin (RF<706>), dating to the Saxon period, alongside a medieval knife (RF<535>), and post-medieval iron binding, shoe iron, and copper cuff link (RFs RF<533>, <534>, <536>) were all found through metal-detecting. The latter four items are intrusive, likely through agricultural processes.

4.7.26 Situated between SFBs G73 and G74 was rectangular pit G95 ([2161 / 2302]). It measured 2.1m long (NW/SE) by 1.4m wide (NE/SW) and displayed steeply sloping straight sides breaking sharply to a flat base. G95 contained a 0.34m thick, single fill consisting of soft and friable mid brown silty sand from which five sherds of early Saxon pottery, a single piece of Roman CBM, and forty-one fragments of animal bone were collected.

4.7.27 A short, slightly curving linear or elongated pit G92 ([2054 / 2298]), was situated near the centre of the excavation area. It measured 6.2m long and 3.3m wide, aligned ENE/WSW, and was cut by high medieval field boundary

ditch G45 at its ENE end. G92 appeared to abut natural hollow/deposit G60 on the WSW edge, whilst its relationship to deposit G68 was not determined, though the fills were fairly homogenous with those of the hollows. G92 exhibited moderately sloping, straight sides breaking imperceptibly to a concave base; it contained a 0.71m-thick single fill of friable dark greyish brown silty sand from which seven sherds of early Saxon pottery, 117 fragments of animal bone, a Mesolithic to Neolithic flint awl, and three broadly Mesolithic to earlier Bronze Age flints were recovered.

4.7.28 Sub-circular pit G93 ([2347]) was located in the centre of the area and appeared to be cut into deposit G68, but was underlying modern deposit G67. Measuring 2.4m by 2.1m, the pit displayed moderately steep sides breaking to a rounded base. Its five recorded fills totalled 0.74m deep. The basal fill comprised firm and friable dark brown silty sand and contained 40 fragments of animal bone, 82 pieces of fired clay, and RF<704>, an animal bone spindle whorl of early to middle Saxon date. Bulk soil sample <52> yielded charcoal, animal bone and burnt bone, fired clay, pottery and fire-cracked flint. Three intermediate fills were recorded. The first comprised friable dark greyish brown silty sand from which ninety pieces of animal bone were recovered. Above this was soft and friable grey greenish greyish brown silty sand contained seventy-four fragments of animal bone. This was followed by friable dark greyish brown silty sand with occasional flints, sampled as <51>. Sample <51> produced charcoal, animal bone, burnt bone, fire-cracked flint and fired clay. The upper fill consisted of soft/friable dark greyish brown silty clay with frequent flints, produced seven sherds of early Saxon pottery, five pieces of Roman CBM, one small slag fragment, four pieces of unworked burnt stone, 34 pieces of fired clay, and 171 fragments of animal bone.

4.7.29 Eleven pits of early Saxon date were distributed across the southern half of Area 2 (G94, [2016], [2087], [2137], [2254], [2272], [2375], [2400], [2403], [2408], [2413], [2414]). These were all generally oval in plan, ranged from 1.0m by 1.9m up to 3.99m by 3.04m in size, and exhibited moderately sloping sides and concave bases. Most G94 pits contained single fills, generally comprising firm and friable dark brownish grey silty sand, ranging in thickness from 0.22m to 0.77m. Each pit contained early Saxon dated pottery, the majority with only a single sherd, though [2272], [2137], and [2403] contained six, eight, and eleven sherds respectively. Small quantities of animal bone were also encountered.

4.7.30 A notable exception was pit [2016] which contained two fills. A basal fill, comprising firm dark brown sandy silt with occasional charcoal flecking contained 26 sherds of early Saxon pottery and 84 fragments of animal bone. Bulk soil sample <19> yielded charcoal, animal bone and burnt bone, fish bones and microfauna, and fired clay, alongside an early Saxon constricted glass bead, RF<754>. Its upper fill, a firm dark grey to black sandy silt, contained six contemporary pottery sherds and 189 pieces of animal bone.

4.7.31 Oval pits G99 ([2199] and [2244]) were recorded as truncating SFBs G79 and G78 respectively. Pit [2199] truncated SFB G79 on its north-east side, was similarly aligned NE/SW. Measuring 2.15m long by 1.6m wide, it had moderately steep sides breaking gently to a rounded base and contained a 0.75m thick single fill comprising soft, friable, dark brownish grey silty sand

with occasional flint. This produced three burnt flints, one piece of fired clay, a single fragment of Roman CBM, and 20 sherds of early Saxon pottery. Bulk sample <41> contained charcoal, animal bone and burnt bone and fired clay.

4.7.32 Oval pit [2244]/G99 was recorded as cutting SFB [2246] and may be an associated structural element. It measured 1.14m by 0.91 with moderately sloping, slightly concave sides breaking imperceptibly to a slightly concave base. A 0.15m thick single fill, comprising firm and friable mid greyish brown sandy silt, contained a single sherd of early Saxon pottery, three pieces of fired clay, and one piece of Roman CBM.

4.7.33 Five pits (G100 and G101) were situated within the east part of Area 2, cutting deposit G64. Oval pits G100 ([2170] and [2172]) had moderately sloping sides and concave bases, measuring 0.8m by 0.56m and 1.28m by 0.96m respectively (Fig. 26, Section 37). Their single fills, 0.38m and 0.78m thick, consisted of firm and friable dark brownish grey silty sand with occasional charcoal flecking. [2170] produced 49 sherds of early Saxon pottery, a single Roman CBM fragment, and one piece of fired clay whilst [2172] produced 12 sherds of early Saxon pottery and two pieces of CBM. Cross-fits are present within the collective pottery assemblage.

4.7.34 Adjacent to G100 were three further oval pits G101 ([2176], [2178] and [2196]), which were truncated by Period 4 pit G102. G101 pits ranged in size between 2.02m by 1.46m and 3.03m by 1.53m and exhibited moderately steep sides and concave bases (Fig. 26, Section 37). Their single fills ranged from 0.24m-1.06m thick and generally comprised firm and friable mid greyish brown silty sand. The only material recovered was from pit [2196] which produced two sherds of early Saxon pottery and three pieces of German lava stone fragments, as well as a single Mesolithic to Earlier Bronze Age residual flint flake.

4.7.35 Positioned in the centre portion of the area was a possible elongated pit G103 ([2288]), cut into deposit G68. G103 measured at minimum 8.4m ENE/WSW and 1.9m+ NW/SW, being heavily truncated on its south edge by Period 4 ditch G40. It had moderately steep sides breaking gently to a flat base and contained a 0.75m thick single fill of firm and friable dark yellowish brown silty sand from which twenty sherds of early Saxon pottery, two fragments of Roman CBM, and at least two loomweights, RF <20> and RF<779>, dating to AD600-900, and a whetstone were recovered. A likely Roman or Saxon iron strip from horse furniture, RF<615>, was retrieved as well as RF<621>, an iron stud of uncertain date. Its eastern side was truncated by a machine excavated trench which was positioned in order to investigated the large deposits G65, G68 and G69.

4.7.36 Posthole G104 ([2292]) was identified at the base of G103 and was oval in plan, measuring 0.53m by 0.44m with steeply sloping, almost vertical, sides breaking to a rounded base. Its 0.30m thick single fill, comprising firm and friable dark brown silty sand with occasional large angular flints, contained no finds, but is posited to relate to pit G103.

Possible structure G59

4.7.37 Situated in the west of Area 2, possible structure G59 appeared to have been purposefully constructed within / on natural hollow G60, possibly as a form of shelter from the elements. This comprised components [2090], [2091], [2092], [2093], [2094], [2095], [2096], [2097], [2098], [2099], and [2100]. The structure itself was sealed by deposit G58, a soft and friable mid greyish brown silty sand which contained three sherds of early Saxon pottery and 62 fragments of animal bone.

4.7.38 G59 was approximately 3.7m by 3.5m and was square in plan, though was truncated on its west side by evaluation Trench 63 (Fig. 20, Section 21 and Fig. 21). G59 comprised a series of deposits ([2093], [2094], [2095], [2096] and [2097]) that consisted of a mix of mid pinkish white crushed CBM and mortar, suggested to be the remains of structural foundations. Contained within the foundations was floor/surface [2092] / [2098] consisting of compact mid to dark reddish grey flint cobbles. A mixed deposit of re-used Roman bricks, flue tile, tegula, and imbrex fragments ([2091]) and quern stone [2090] were found on top of the floor surface, which are posited to be the remains of the collapsed structure. Surrounding the southwest side was a further deposit [2093] of compact dark red crushed CBM with white mortar flecking throughout.

4.7.39 The possible structure appears to have been heavily damaged through subsequent agricultural land use activities. Its use and function is unknown, though the presence of German lava rotary quern-stone fragments (*c.*10kg; 46 pieces) may hint at a grain processing structure. Deposits [2091] and [2097] produced sixty-seven pieces of re-used Roman CBM.

Deposits

4.7.40 Throughout Area 2, there were a number of natural geological hollows containing colluvial deposits, as described in Section 4.5. However, the majority of these contained early Saxon dated (along with reused Roman) material in their upper parts that is posited to have derived from middens generated by the settlement activity (G60, G61, G64, G65, and G68), as described below.

4.7.41 The upper fill of hollow G60 was a firm and friable mid brownish grey silty sand that contained 20 sherds of early Saxon pottery and 42 fragments of reused Roman CBM, as well as 262 pieces of hand-collected animal bone. A number of registered finds were recovered; of particular note were the following early or broadly Saxon items: iron Francisca axe-head RF<87>, iron knife RF<258>, iron cast expanded spatulate-headed pin RF<259>, disc-headed and loop-headed pins RF<303> and <306>, buckle RF<314> and spiral-headed pin RF<702>.

This deposit also produced the following finds of diagnostic Roman date: forty-two pieces of CBM, six copper coins (RFs <260>, <308>, <310>, <311>, <321>, <530>) ranging in date from AD 96-98 to AD 260-402, two sestertius of Faustina II (AD146-161) and Commodus (AD180-192), copper bracelet RF<307>, bow and fantail brooch RF<523>, copper allow bow brooch RF<527> and iron knife or modelling tool RF<529>. This deposit was

truncated by later medieval (Period 4) ditches G40 and G45, and modern ditch G41. Posited grain-dryer G59 was also constructed within or on the hollow deposit, at its south end. Within hollow G60 (seg [2101]) the incomplete remains of an infant skeleton were identified. The skeletal remains comprised fragments of the cranium, spine and ribs, as well as complete long bones of the right humerus and left femur, allowing identification of the remains as those of a new-born infant.

4.7.42 The upper deposit occupying hollow G61 ([2006, 2217, 2255, 4015]), a soft/friable mid brownish grey sandy silt with moderate sub-angular flints, contained copper radiate coin RF<120>, copper As RF<136> (both of indeterminate date), copper bracelet RF<117, 1st century AD Colchester two-piece brooch fragment RF<142> and 33 pieces of Roman CBM. This deposit was truncated by Period 3 SFBs G73 and G87.

4.7.43 The recorded fills within hollow G62 (section 4.4.2) produced 59 sherds of pottery (41 early Saxon, six late Saxon, two medieval, one post-medieval, and one modern), 21 pieces of CBM, and 706 fragments of bone, as well as a lead piece RF<155>. Further metal finds included: broadly Saxon iron pin RF<147>, copper Barbarous Radiate coin RF<154>, iron tool RF<156>, copper strip RF<157> and copper nummus of Theodosius RF<299> (AD 388-402). The fill of segment [2068] was sampled as <33> and yielded charcoal, animal bone and burnt bone, fishbones and microfauna, land snail shells, fired clay, slag, fire-cracked flint, iron and a small amount of modern glass and post-medieval pottery. The hollow appeared to be truncated by multiple features, including two possible SFBs and the Period 4 field system.

4.7.44 The mid brownish grey silty sand fill of hollow G64 contained 73 sherds of early Saxon pottery and 598 fragments of animal bone, with 1568 pieces of bulk metalwork recovered through metal detecting. Early Saxon registered finds of note were: copper alloy strip fragment RF<331>; iron latch-lifter RF<334>, copper buckle plate RF<335>, copper wrist clasp RF<403>, copper tag fragment RF<501>, iron pin RF< 509>, iron buckle RF<511>, iron draw-knife RF<672>, iron and silver pin RF<680> and iron hook-headed pin RF<707>.

Diagnostically Roman finds comprised 125 pieces of CBM and three sherds of Roman pottery. Ten copper coins were recovered through metal-detecting, six of which could be dated: radiate of Tetricus I/II RF<414> (AD 271-274); nummus of Magnentius RF<476> (AD 350-353); nummus of Constantius II RF<499> (AD 337-361); nummus of the House of Constantine RF<587> (AD 353-361); minim RF<589> (c. AD 296-402); and Greek copper coin RF<656> (228-280 BC, minted in Ephesos, Ionia). Coins RFs <328>, <404>, <406>, and <586> are of unknown Roman date. G64 was truncated by later ditches G40, G41, G42, G47 and G48 and pits G98, G100, G101 and G102.

4.7.45 The dark brownish grey silty sand fill of hollow G65 contained 67 sherds of early Saxon pottery, 418 pieces of animal bone, and eight Saxon registered finds: iron hook-headed pin RF<221>, copper strip fragment RF<437>, iron pin RF<439>, iron latch-lifter RF<473>, copper box-catch RF<480>, two iron knife blades RF<492> and RF<495>, and copper buckle backplate RF<633>. Bulk soil samples <27>, <28>, and <29> contained small amounts of uncharred seeds, charcoal, and charred wild plant seeds.

215 pieces of Roman CBM were also recovered, the majority from excavated segment [2057]. This included ninety-seven pieces of brick and tile, fourteen pieces of roof tile, and 104 tessera.

4.7.46 The soft and friable mid greyish brown silty sand deposit in hollow G68 produced 96 sherds of early Saxon pottery, 18 fragments of Roman CBM, and 115 pieces of animal bone, as well as eleven pieces of metalwork, recovered by metal detecting of which a Saxon copper plate fragment (RF<217>) was identified. Bulk soil sample <46> yielded small amounts of burnt and unburnt bone, ash charcoal fragments, charred wheat and barley seeds as well as a hazelnut shell.

Forty-eight pieces of Roman CBM and a single sherd of Roman pottery were also recovered, as well as seven copper alloy coins: nummus of Constantine II RF<169> (AD 337-340); nummus RF<188> of a broad AD 296-402 date; nummus of Constantine I RF<202> (AD 307-337); nummus of the House of Constantine RF<612> (AD 317-363); nummus of Constantine I RF<613> (AD 310-312). As's RF<610> and RF<630> are of uncertain date.
G68 was recorded in the field as sealing ditches G49, G50, G51, G52, G55, G88 and G90, as well as pit cluster G94. However, the fills of these ditches and pits were similar to, almost homogeneous with, deposit G65 and it is considered that these ditches in fact cut G65, due to finds evidence and spatial relationships.

4.7.47 The 0.60m-thick upper fill of hollow G70 was a firm and friable mid greyish brown sandy silt with occasional flints. Fifteen sherds of early Saxon pottery, forty-four fragments of animal bone and a piece of German lava stone were recovered from it, along with Roman Dolphin brooch RF<110>. Early Saxon pit [2016] cut the deposit.

Area 3

4.7.48 Within Area 3 five features were deemed to be of an early Saxon date and comprised a post-built hall structure (G29) with associated deposit G15; a further posited deposit and hall building (G22); deposit G16; pit G17; and the Bronze Age barrow G12, which is suggested to have been re-used during Period 3. Natural hollows (G13, G14 and G25) were also encountered within Area 3, as well as further natural deposits G26, G27 and G37.

4.7.49 Cut feature G15 [3053 / 3055 / 3162 / 3164 / 3175], posited to be the remains of a pit or large SFB, was situated in the east of Area 3, measured 17.0m in length and 11.8m wide. The cut was fairly shallow, with gently sloping to moderate sides breaking imperceptibly to a flat and regular base (Fig. 23, Section 26). Two fills were recorded with a combined thickness between 0.20m to 0.42m. The basal fill, recorded throughout as a possible occupation surface or levelling deposit, comprised a loose mid brownish grey silty sand gravel. This contained no material culture and is likely the result of naturally accumulation. This was sampled as <13> and produced charcoal, animal bone, burnt bone, fish bones and microfauna, fired clay and fire-cracked flint. The upper fill was extremely finds rich and comprised a friable dark greyish brown silty sand. Bulk environmental samples <6>, <10> and <13> yielded charcoal, animal bone, burnt bone, fish bones and microfauna, fired clay, slag and fire-cracked flint The fill contained 71 sherds of early Saxon pottery, ten

pieces of Roman CBM, 1207 fragments of animal bone, and 58 pieces of fired clay. A single piece of slag was also retrieved, alongside nine pieces of stone and 647 pieces of metalwork. Eleven registered finds were recovered from G15. These included: RF<14>, a copper harness mount with a garnet setting; RF<15>, a copper hobnail or tack; RF<66>, an animal bone comb; RF<601>, a copper radiate coin; RF<602>, an iron crook-headed pin; RF<604>, an iron bell clapper; RF<614>, an antler tine; RF<644>, an iron key; RF<715>, an animal bone thread picker; RF<761>, a scapula, possibly bovine, showing deep repetitive knife marks; and RF<765>, a possible tool made from a modified fish dentary bone, serrated on one side with a man-made point. All of these were early medieval in date with the exception of RF<601> (Roman), RF<604> and RF<644> (high medieval). RF<15> was undated.

4.7.50 Pits G30 ([3027], [3497 / 3541], [3539]), which appeared to be cut through deposit G15, were roughly aligned NE/SW and situated adjacent to the northwest side of posited post-built structure G29. Pit [3497 / 3541] measured 2.78m by 2.42m and had moderately sloping sides breaking imperceptibly to a concave base. Its single recorded fill, 0.54m thick, comprised a friable mid brownish grey silty sand with rare flints and contained ten sherds of early Saxon pottery, 129 pieces of animal bone, and a piece of slag.. Pits [3027] and [3539] were both fairly shallow, at 0.24-0.3m thick, and displayed moderately to gentle sloping sides breaking to concave bases. Singles fills of soft and friable dark grey to black sandy silt and gravels were recorded but contained no finds.

4.7.51 Seemingly sealed by G15 were a group of twenty-one undated postholes (G29; [3064], [3066], [3108], [3112], [3114], [3116], [3182], [3307], [3499], [3510], [3512], [3514], [3516], [3518], [3520], [3522], [3524], [3529], [3543], [3545] and [3547]). Although recorded as being sealed by G15 the fills appeared homogeneous and therefore the intercutting relationships are uncertain. These postholes appear to align ENE/WSW and are posited to be the remains of an early Saxon post-built structure, given the material culture recovered from the overlying deposit, G15. This structure was rectangular in plan and measured approximately 15m long by 6.5m wide, aligned NE/SW. G29 postholes were circular to oval in plan, measuring between 0.45m by 0.45m to 1.0m by 0.70m and generally exhibited moderately to steeply sloping sides breaking to concave, pointed, bases. The majority of these contained a single fill, generally comprising a firm and friable dark brownish grey silty sand with moderate rounded stones, likely the result of natural disuse accumulation. No finds were recovered from any with the exception of [3499], which contained a Roman or later, general purpose nail. Two postholes were recorded with three fills.

4.7.52 Posthole [3108] contained a basal fill of loose mid to light brownish yellow sand, above which was a fill of post-packing material comprising firm and friable mid brownish grey silty sand and gravel. A post-pipe was evident, containing organic material, and soft and friable mid brown silty sand, from which bulk sample <11> yielded charcoal. An upper fill, almost homogenous with G15, of friable mid brownish grey silty sand was recorded. No finds were recovered. Posthole [3112] also had three recorded fills. Its basal fill comprised a loose mid greyish yellow silty sand whilst above this was a fill of loose mid grey gravels. Its upper fill consisted of a loose mid brownish grey

silty sand and gravel, homogenous with G15. Again, no finds were encountered.

4.7.53 Situated 13m northwest of G15 and G29 was oval pit G17 ([3021]). Extending beyond the northeast excavation limit, it measured at minimum 3.5m long by 1.84m wide and contained two fills with a total depth of 0.68m. The pit exhibited a steeply sloping southwest side and a moderately sloping northeast side, breaking to a concave base. Its 0.40m thick primary fill consisted of a soft and friable light yellowish brown silty sand with large flint nodules, consistent with naturally slumped material, and contained a single early Saxon pottery sherd and one piece of animal bone. The upper fill, a 0.27m thick, loose dark brownish grey silty sand with frequent stones, contained ten sherds of early Saxon pottery, a piece of Roman CBM, and 16 fragments of animal bone.

4.7.54 At the southeast corner of Area 3, and continuing beyond the excavation limits, was deposit/pit G16 ([3453 / 3465 / 3488]). This was fairly irregular and had gently sloping sides leading to a concave base, and measured 12.5m+ long by 5.0m+ wide. It generally contained a 0.17m to 0.30m thick single fill comprising loose mid brownish grey sandy silt with rare flint inclusions. Segment [3488] contained two recorded fills, the upper of which was consistent with the above. The basal fill consisted of a 0.33m thick loose and friable mid yellowish brown silty sand with moderate gravels and flints. Twenty-six sherds of early Saxon pottery, a piece of Roman CBM, 446 pieces of animal bone, and two pieces of fired clay were collected. A single general-purpose nail of uncertain date was also retrieved.

4.7.55 Towards the south of Area 3 was possible SFB / pit G22 ([3148 / 3255 / 3373 / 3478]. This was roughly rectangular in plan, measured approximately 12m long by 6m wide, and displayed moderately sloping, straight sides, breaking imperceptibly to a fairly flat base (Fig. 23, Section 27). Up to three fills were recorded throughout its entirety to a total depth of 0.46-0.80m. Its basal fill comprised a firm light yellowish brown sandy gravels with occasional large flint nodules, a naturally accumulated deposit within central portion of the feature. This contained no finds. Above this was a firm/friable mid to dark reddish grey- brown silty sand and gravels. This contained a Roman, or later, general-purpose nail, ten pieces of animal bone, and six pieces of Mesolithic to earlier Bronze Age worked flint. RF<42>, a copper penannular brooch dated to 300-450AD, and RF<380>, an early Saxon wrist clasp were recovered through metal-detecting. Bulk sample <37> produced charcoal, animal bone and pottery. The dominant upper fill consisted of firm and friable mid to dark greyish brown sandy silt with sub-rounded stones from which 28 sherds of early Saxon pottery, as well as a single sherd of intrusive high medieval (presumably from ditch G20) pottery sherds were recovered. Eight pieces of worked flint of a broadly Mesolithic to Bronze Age date, four fragments of Roman CBM, and 131 pieces of animal bone were also retrieved. Five registered finds were also recovered through metal-detecting: RF<36>, an early Saxon girdle hanger; RF<43>, an intrusive iron stiletto blade (1300-1600AD); RF<72>, a broadly Saxon copper bucket fitting; RF<420>, an iron fitting of uncertain date; and RF<681>, a broadly medieval, likely intrusive iron binding strap. This was sampled as <35> which produced charcoal, animal bone and burnt bone, pottery, flint and fire-cracked flint.

4.7.56 Although ring-ditch G12 is posited to have Bronze Age origins, the results of the excavation suggest that it was re-used during the early Saxon period. Although no remnants of a Saxon burial inserted into the mound could be discerned, its presence seems possible due to the high-status artefacts recovered from adjacent deposits G15 and G22 – this material having been dispersed when the barrow mound was ploughed-out. However, given the possible post-built structure G29 to the east and a further, possible structure (G22) to the south, it seems more likely that this was a prominent feature within the landscape around which these structures were placed and that high status artefacts in its vicinity instead relate to their occupation. The morphology of ring-ditch G12 has been described in Section 4.4.3. However, other than its basal fill G36 (section 4.4.4), all other recorded fills, ranging from a single fill in the east and nine in the south and west, seem to have accumulated within the early Saxon period. Those considered pertinent are described below.

4.7.57 The basal fill of G12, stratified above fill G36 on the west side of the ring-ditch, comprised a naturally accumulated, firm and friable mid reddish brown sandy silt with occasional angular flints. Six pieces of animal bone and one sherd of residual Roman pottery was recovered, as well as two general purpose nails and 44 worked flints of a broadly Mesolithic to Iron Age date. This was bulk sampled (<14>) and yielded charcoal, animal bone and a small amount of burnt bone and fire-cracked flint.

4.7.58 The main fill of G12, a firm and friable mid yellowish brown silty sand with angular flints, contained only a small assemblage of finds, which included 14 middle Neolithic to Iron Age worked flints and 17 pieces of undated fired clay, suggestive of a naturally accumulated deposit. A second intermediary fill, comprising friable mid greyish brown silty sand with sub-angular stones, contained 17 sherds of early Saxon pottery and 130 pieces of animal bone, indicating that it was during the accumulation of this deposit that the barrow began to be re-used in Period 3.

4.7.59 The upper fill of G12, comprising a firm and friable dark brownish grey sandy silt with small flints, contained 76 pieces of worked flints of a broadly Mesolithic to Iron Age date, 49 pottery sherds (five residual, including three high medieval, and forty-one early Saxon), nine pieces of Roman CBM, four general purpose nails, not closely dated, 321 pieces of animal bone, and five fragments of fired clay. This was sampled as <21> and produced abundant charcoal, some animal bone and a small amount of burnt bone, as well as pottery and flint This upper fill, only present within the northern and eastern portions of the ring-ditch seems to be a general accumulation of domestic detritus within the upper portions of the barrow ring-ditch.

4.7.60 The upper fill on the west side of the ring-ditch (G11; [3133 / 3185 / 3188 / 3296 / 3415 / 3502]) was distinct from the rest and may be the result of the barrow mound weathering and slumping in that direction. This comprised a firm and friable mid brownish grey silty sand with occasional charcoal and gravels and produced 19 sherds of pottery, 18 of an early Saxon date and a single sherd of high medieval, two fragments of Roman CBM, and 161 fragments of animal bone.

4.8 Period 4: High Medieval (11th–13th centuries)

4.8.1 Following the early Saxon period, the settlement had fallen out of use, perhaps with occupation relocating to nearby *Gippeswic* (Ipswich). No further evidence of occupation or land use is evident until the High Medieval period. During the high medieval period, the land use within the site appears to be entirely agricultural in nature, as evidenced by the remains of NNW/SSE and ENE/WSW ditches that define a cohesive, multi-phase field system extending across Areas 2 and 3. It is important to note the scarcity of high medieval dated finds, thus these ditches and field systems have been phased to this period based on their stratigraphic relationships and morphological characteristics, as well as their similar alignments to field systems recorded to the south of the site by Oxford Archaeology East (Fig. 12; OAE 2019). Two phases of high medieval field system are identified (Phases 4.1 and 4.2).

Phase 4.1 (Figures 11 and 12)

4.8.2 The earliest phase of field system comprised ditches G48, G56 and G57, and may have included G18, all of which appear to have a meandering course, rather than a straight and regular alignment. No discrete features are identified to occupy the fields defined.

4.8.3 NNW/SSE aligned ditch G56 ([2066 / 2263 / 4033]), in the northeast of Area 2, measured *c*.32m+ long and 0.60–0.70m deep, continuing beyond the area of excavation. It exhibited moderately sloping, straight sides breaking imperceptibly to a concave base. Up to three fills were recorded along its length. A 0.30m-thick basal fill in segments [2066] and [2263] comprised a firm and friable dark yellowish grey silty sand and gravels, from a single piece of Roman CBM and two flint blades of Mesolithic/Neolithic date were retrieved. Sixty-five pieces of animal bone and two horseshoe nail fragments were also retrieved. This deposit was bulk sampled as <32> and contained charcoal, animal bone and burnt bone, fishbones and microfauna, slag, pottery and fire-cracked flint. The middle fill recorded in segment [2066] comprised a friable mid yellowish brown mottled grey sandy silt with sub-rounded stones, 0.20m thick, and contained no finds. The upper fill comprised a friable mid to dark yellowish brown sandy silt with rare sub-angular flints and stones, 0.4m thick, and produced 17 sherds of early Saxon pottery and five pieces of animal bone. In segment [4033], the single fill of soft mid greyish black sandy silt contained a single sherd of early Saxon pottery and one piece of Roman CBM, as well as 87 pieces of animal bone. Ditch G56 was recorded as cutting natural hollow G62 and early Saxon possible SFB G86.

4.8.4 Although the SSE continuation of G56 was not visible due to the excavation area constraints, it is likely that similarly aligned ditch G48 ([2182 / 2184 / 2283 / 2314 / 2421] is part of the same boundary. G48 varied in width between 1.8m and 2.82m along its 34m+ length and had moderately sloping, slightly concave sides breaking gradually to a concave base (Fig. 26, Section 37). It varied in depth from 0.26m to 0.49m. Although slightly sinuous, the ditch continued SSE beyond the limit of excavation and is posited to have extended at least as far as a junction with perpendicular ditch G18 in Area 3. Its single fill, of firm and friable mid greyish brown silty sand, contained twenty-one sherds of pottery; seventeen early Saxon and four high medieval. Two pieces

of Roman CBM were also recovered as well as sixty pieces of animal bone, three burnt flints, and three fragments of fired clay.

4.8.5 At the northeast corner of Area 2, ditch G57 ([2209 / 2212 / 2214 / 2234] extended perpendicularly ENE from G56. Traced for a distance of 29m+, it continued beyond the eastern limit of excavation. It varied in width from 1.0m to 1.6m and in depth from 0.35m to 0.41m, with moderately sloping straight sides breaking gently to a rounded base. An upper fill, 0.31-0.35m thick, recorded in segments [2209] and [2212], was firm and friable mid brownish grey sandy silt with occasional gravels and no finds. The basal fill recorded in these segments, a soft light to mid brownish grey silt with gravels, 0.06-0.08m thick, also contained no finds. A single fill recorded in segments [2214] and [2234] was consistent with the upper fill seen elsewhere. This produced two sherds of early Saxon pottery and one piece of undiagnostic prehistoric worked flint.

4.8.6 It is posited that the Phase 4.1 field system extends south-east where it is represented in Area 3 by ditch G18. Roughly ENE/WSW aligned ditch G18 ([3023 / 3032 / 3068 / 3121 / 3192 / 3245 / 3270 / 3337 / 3376 / 3468]) extended across a distance of 70m and continued beyond the excavation area limits in both directions. The ditch ranged in width from 0.85m to 1.4m and in depth from 0.20m to 0.78m, becoming deeper towards the WSW. G18 exhibited generally gradual to moderately sloping, slightly concave sides breaking imperceptibly to a concave base (Fig. 25, Sections 28-30). Its single fill comprised firm and friable dark greyish brown sandy silt and gravels that contained very few artefacts along its entire length. Two sherds of ?middle Saxon pottery were recovered from segment [3023], whilst a single body-sherd of a broad Roman date, an irregular waste flint flake of undiagnostic prehistoric date and two Roman coins (radiate of Victorinus RF<18> AD 269-271; uncertain coin RF<17> AD 260-402) were also retrieved. G18 was recorded as truncating the Period 3 upper fills of ring-ditch G12 and could be seen in plan truncating G13, despite its fill being very similar to the deposit.

Phase 4.2 (Figures 11 and 12)

4.8.7 During Phase 4.2 the Phase 4.1 enclosure/field-system was replaced by a more regular rectilinear field system. This was orientated on a NNW/SSE by ENE/WSW alignment, with some evidence for modification and re-parcelling of the fieldscape identified. NNW/SSE orientated ditches G45 and G46, and ENE/WSW ditches G40, G43 and G47, defined the boundaries of at least five land use entities – presumed to be fields – in Area 2. In Area 3, right-angled ditches G19 and G20/G21 constitute a further part of this enclosed landscape. Much of the material culture that was recovered from these field boundaries was residual in nature, not surprisingly, given that these ditches were cut through early Saxon settlement remains and natural hollows containing mixed Roman and Saxon finds assemblages. Only two pits (G102) are identified to occupy this fieldscape. The paucity of contemporary features within the Phase 4.2 field system further implies that the site is part of the agricultural hinterland of Bramford during the high medieval period.

Area 2

4.8.8 Ditch G45 ([2050 / 2133 / 2296 / 2308 / 4004 / 4012 / 4014]) ran NNW/SSE across the north of Area 2 for *c*.88m, continuing beyond the north limit of excavation. At its south end, it formed a T-junction with perpendicular ditch G40 and was evidently integral with it. Ditch G45 ranged in width from *c*.1m to 2.04m and 0.25-0.50m depth, with moderately sloping, slightly concave sides breaking imperceptibly to a concave base (Fig. 26, Sections 32-33). Its single fill, comprising a soft and friable mid greyish brown sandy silt with abundant sub-angular stones, contained two sherds of early Saxon pottery, and eleven pieces of CBM that included four pieces of post-medieval brick, a piece of medieval/post-medieval tile and one piece of Roman tegula. Ditch G45 truncated natural hollow G60 and early Saxon ditch/elongated pit G92.

4.8.9 A sign of possible re-working/re-alignment of G45 was evident towards its NNW extent. Two parallel ditch cuts, [4012] and [4014], were recorded, although the sequence of their intercutting relationship could be established. Each were 0.90m wide and exhibited moderately sloping sides with shallow, concave bases and contained single fills, homogenous with one another, fills comprised of soft mid to dark brown sandy silt with occasional charcoal flecking. No dateable finds were recovered from either segment, with one piece of animal bone being retrieved from [4012].

4.8.10 ENE/WNW orientated ditch G40 ([2040 / 2079 / 2151 / 2232 / 2286]) extended across the middle of Area 2. It measured 98.4m+ long and varied in width along its length between 1.25m and 2.3m, with moderately sloping, slightly concave, sides breaking to a concave and rounded base (Fig. 26, Section 31). It varied in depth from 0.36m to 0.84m and contained a single fill, comprising firm and friable mid greyish brown silty sand. This produced seven sherds of early Saxon pottery and a number of Roman items, including: two pieces of Roman CBM, radiate coin of Claudius II RF<616> (AD268-270), brooch spring RF<185> and copper alloy bead RF<350>). G40 was recorded as cutting hollow deposits G60, G64 and G68, and Saxon pit G103. Modern deposit G67 truncated the ditch towards the centre.

4.8.11 NNW/SSE orientated ditch G46 ([2045 / 2122 / 2206 / 2224 / 2275 / 2405]) extended southwards from ditch G40 for 50m to a junction with ditch G43. G46 was fairly uniform in width, between 1.1m and 1.5m, with moderately steep sides breaking gradually to a concave base (Fig. 26, Section 34). It was 0.10-0.36m deep. A single fill, was recorded along its length, comprising firm and friable mid greyish brown silty sand with occasional flints and stones, from which four sherds of early Saxon pottery, one piece of Roman CBM, a single general-purpose nail, and two prehistoric flint flakes were collected. Within segment [2275], a basal fill of soft and friable, dark greyish brown silty sand with rare gravels was also noted.

4.8.12 ENE/WSW ditch G43 ([2028 / 2220 / 2326]) appears to have formed the southern extent of the Phase 4.2 field-system in Area 2. It ran parallel with ditch G40, *c*.50m to its south, and extended for 67.3m, continuing beyond the excavation area in both directions. It varied in width between 1.11m and 1.6m, with gentle to moderately sloping, concave sides, breaking imperceptibly to a concave base. The ditch increased in depth along its length, from 0.15m at

the ENE to 0.54m at the WSW. The single fill of G43 produced two iron nails, one a horseshoe nail and the other a general purpose nail of uncertain date. Though recorded in the field as being overlain by deposit G65 at the east edge of the site, the single fill was very similar and, due to stratigraphic relationships with the other Period 4.2 ditches, it has subsequently been judged to have cut through G65.

4.8.13 Slightly sinuous, ENE/WSW orientated ditch G47, extended perpendicularly from a junction with G46 and is interpreted to constitute a subdivision of the SE field defined within Area 2. G47 ([2110 / 2155 / 2312 / 2323 / 2329 / 2335]) was *c*.41m long, extending beyond the eastern limit of excavation. It varied in width from 1.35m to 2.2m, with moderately sloping, slightly convex sides breaking gently to a slightly concave to flat base (Fig. 26, Section 35). It was 0.24m to 0.37m deep. A single fill was recorded along the majority of the ditch's length, comprising a soft and friable, mid brownish grey silty sand with occasional inclusions of flint, shell and gravels. This was bulk soil sampled as <40> and produced charcoal, animal bone and burnt bone, pottery and flint. Four sherds of Saxon pottery were recovered; three of early Saxon (6th-7th century) date and one middle Saxon (7th-9th Century). Within segment [2110] a basal fill was identified, consisting of a friable mid greyish brown silty sand. No finds were retrieved from it. The ditch cut Phase 4.1 field boundary ditch G48. It also truncated currently undated and unphased ditches G51, G52 and G90 and was in turn cut by modern ditches G53 and G54.

4.8.14 Two pits, [2174] and [2316] (G102), of possible High Medieval date were recorded within the east of Area 2. Pit [2174] was oval in plan, measuring 3.68m long by 2.5m wide and 0.94m deep, with moderately steep, slightly convex, sides breaking to a concave and rounded base. Its single fill comprised a friable mid brown grey silty sand with occasional flints and gravels. Four sherds of pottery, three being early Saxon and one medieval (11th/12th century), a single piece of Roman CBM, two Mesolithic to early Bronze Age flints, two rectangular nails and medieval harness pendant RF<426> were recovered from it. Pit [2174] appeared to truncate early Saxon pits G101.

4.8.15 Situated *c*.4.0m north of [2174], oval pit [2316], measuring 1.34m by 1.07m and 0.22m deep, truncated Phase 4.1 ditch G48. This pit had gently sloping sides, breaking imperceptibly to a shallow concave base. Its single fill, 0.22m-thick, comprised a soft and friable dark brownish grey silty sand with occasional flint inclusions. This produced a single sherd of 12th-century medieval pottery and two circular nails of uncertain date.

Area 3

4.8.16 In Area 3, two right-angled ditches G19 and G20/G21, seemingly conform to the alignment of the high medieval field system identified in Area 2, which suggests they are contemporary.

4.8.17 Right-angled ditch G19 ([3030 / 3039 / 3074 / 3081 / 3168 / 3283 / 3320 / 3350 / 3355 / 3439 / 3470 / 3508]) ran NNW/SSE from the south excavation limit for *c*.40m before turning ENE and continuing 47m beyond the east excavation limit. The ditch varied in width between 2.2m and 3.2m, displaying

moderately sloping, straight sides breaking to a concave base (Fig. 25, Section 29; Fig. 28, Sections 38-40). Between one and three fills were recorded within the fairly uniform, 0.93m to 1.15m deep, ditch. In segments [3030 / 3081 / 3283 / 3355], an upper fill of naturally accumulated soft/friable mid reddish brown silt was recorded, containing five pieces of ?intrusive post-medieval CBM. Within these segments, a basal fill of friable mid reddish brown silty sand with abundant small sub-angular stones was also recorded. This was bulk soil sampled as <1>, which produced animal bone, traces of burnt bone and some pottery. Elsewhere, where a single fill was identified, it consisted generally of a soft and friable mid brownish grey silty sand with moderate inclusions of flint and gravel and rare charcoal flecking. Six sherds of high medieval pottery, and five pieces of CBM, including two small fragments of Roman tile and three broadly medieval to post-medieval pieces, were collected. Two general purpose nails were also recovered, of uncertain Roman to post-medieval date. The southward continuation of G19 was recorded in evaluation Trench 53 ([5304]), where a single sherd of early Saxon pottery was retrieved.

4.8.18 G19 is interesting due to its apparent deliberate placing over the remains of ring-ditch G12, with its corner occurring in the centre of the probable Bronze Age barrow. This suggests that the monument was still an obvious earthwork feature on the landscape during the high medieval period.

4.8.19 A second right-angled ditch, G20/G21, on the same orientation, was positioned 'inside' (i.e. south and east of) ditch G19. It is uncertain as to whether this constitutes a directly contemporary boundary or an augmentation or replacement of G19, or *vice versa*. G20 ran *c*.34m WSW from beyond the east limit of excavation before turning SSE for *c*.16m before terminating in a rounded terminal end. After a 1.6m-wide gap, the boundary ditch continued to the SSE as G21 for a further *c*.6m and extending beyond the south excavation limit. The gap between the termini of G20 and G21 is assumed to have been an access point. The southward continuation of G21 was also recorded in evaluation Trench 53 ([5307]).

4.8.20 Ditches G20 (segs [3242 / 3260 / 3323 / 3332 / 3370 / 3420 / 3475 / 3491 / 3495]) and G21 (segs [3481 / 3485]) varied in width from 2.75m to 4.4m and in depth between 0.60m and 1.38m, exhibiting moderately steep sloping, slightly convex sides breaking to a V-shaped base (Fig. 28, Section 41). Up to five fills were recorded in the various segments excavated along its length. A single fill was recorded in all segments except [3242] and [3260]. This comprised a friable mid greyish brown silty sand with occasional gravel stones, which produced a single Roman CBM fragment, six pottery sherds of early Saxon date and a one of high medieval. Segment [3242] had five fills whilst segment [3260] contained four fills, all seemingly naturally accumulated with scarce material culture present. These produced a single sherd of early Saxon pottery, one piece of post-medieval CBM, one general-purpose nail, three prehistoric flints and a forty-seven pieces of animal bone. Intermediate fill [3262] of segment [3260] was environmental bulk sampled as <23> and contained a single sherd of early Saxon pottery as well as charcoal, animal bone and a small amount of burnt bone, fish bones and microfauna, flint and fire-cracked flints.

4.8.21 Further parts of both ditches G19 and G20/G21 were encountered in the adjacent OAE excavation (Fig. 12). G19 was recorded as ditch [1000 / 1011] and demonstrated to narrow slightly to a rounded terminal. G21 was recorded as ditch [1004 / 1019]) and similarly ended in a rounded terminal. Both were undated here. Both ditches appeared to terminate just short of the corner of another field boundary.

4.9 Period 5: Post-medieval and Modern (Figures 13 and 14)

4.9.1 No archaeological remains were uncovered within the excavation areas that demonstrate further land use activity following the high medieval period, until the post-medieval period. The Period 5 landscape is evidently agricultural in nature, land use activity being predominantly demonstrated by ditches that define part of a wider historical field system that extends across the site, as depicted on the 1848 Bramford Tithe and later Ordnance Survey mapping and archaeologically evidenced by ditches (principally G28, G41, G42, G44) that follow the same orientation as the high medieval period field system.

Area 2

4.9.2 Boundary ditch G41 (segs [2043 / 2083 / 2149 / 2367 and eval [4907] / 6305]) extended across Area 2 on a ENE/WSW alignment for 102m and was 2.1-2.5m wide and 0.54-0.80m deep. It had moderately sloping, straight sides breaking to a concave base (Fig. 26, Section 31). Its single fill was a soft and friable mid brownish grey silty sand with occasional large sub-rounded stones and flints, from which fifteen sherds of late post-medieval and modern pottery (1850-2000) and nine pieces of glass (1850-1950) were recovered. Twenty-one pieces of mostly post-medieval CBM, range of bulk metalwork (barbed wire, iron strip and two sheet fragments, fourteen nails) and five residual early Saxon pottery sherds were also recovered along with sixty-eight pieces of animal bone. Twenty-six registered finds were also collected from the ditch, much of this of post-medieval to modern date: iron shoe patten RF<98>, copper button RF<99>, copper castor RF<100>, shoe irons RF<241> and RF<549>, copper thimble RF<256>, copper coin of George IV (1825) RF<322>, iron hinge RF<354>, copper button RF<358>, white metal alloy sheet fragments RF<397>, white metal decorative applique RF<398>, iron lid RF<418>. Further less chronologically diagnostic metalwork included: an iron key RF<96>, iron wire RF<97>; iron flesh hook RF<102>, an iron ferrule RF<190>, iron handle RF<203>, iron ring RF<207>, iron wire RF<353>, iron handle RF<357> and iron plate fragment RF<550>, all of which could equally have been of earlier date.
Four clearly residual Saxon registered finds were also recovered: iron arrowhead RF<103>, iron seax RF<192>, copper spatualate expanding headed pin RF<194> and bone handle RF<642>. A single object, copper alloy backplate RF<624>, was of diagnostically High Medieval date.

4.9.3 G41 is depicted on the 1848 Bramford Tithe Map, where it forms the boundary between the Upper Common Field and the Parish Pond Field. The Tithe Map shows that a parallel ditch was present north of Area 2, which formed the north boundary of the Upper Common Field. The boundaries are visible on historic documents until the 1926 Ordnance Survey (OS) map, which depicts

allotment gardens being imposed across the Area 2 location on an ENE/WSW alignment with ditch G41 forming the northern boundary.

4.9.4 Two further ENE/WSW aligned ditches G42 and G44, running parallel with G41, are posited to be of post-medieval, Period 5, date. Although neither produced definitive dating evidence, G42 truncated Period 4 field boundaries G46 and G48. Along with ditch G41 these are interpreted to define two linear land entities areas that extend ENE/WSW across Area 2. G41 and G44 appear to roughly perpetuate part of the preceding Phase 4.2 field layout here.

4.9.5 G42 ([2062 / 2075 / 2186 / 2188 / 2192 / 2226 / 2236 / 2364 / 2384] measured *c*.78m, extending beyond the excavation area in both directions, with a slight curve at its ENE extent. The ditch varied in width along its length from 1.32m to 2.02m, displaying moderately sloping, straight sides breaking gently to a concave base (Fig. 26, Section 36). It was 0.21-0.71m seep and contained a single fill of soft and friable dark greyish brown sandy silt with rare sub-angular stones and flints. Two sherds of early Saxon pottery, three pieces of Roman CBM, fragments of German lava quern stone, two pieces of animal bone, and two prehistoric flint flakes were retrieved from it. All are presumed to be residual.

4.9.6 Ditch G44 (segs [2328 / 2379 / 2419] and eval [5904]) extended across the south of Area 2 for a distance of 67m. It varied in width from 1.0m to 1.8m wide and was 0.22-0.49m deep. The ditch had moderately sloping straight sides and a concave base and contained a single fill of a friable dark greyish brown silty sand with abundant flint and gravel inclusions. A single sherd of early Saxon pottery, an early Saxon D-shaped copper buckle (RF<376>), one piece of Roman CBM, 35 pieces (329g) of animal bone, and prehistoric worked flints were collected from it. All are judged to be residual.

4.9.7 Parallel ditches G53 ([2260 / 2331] and eval [4705]) and G54 ([2321] and eval seg [4707]) extended from G41 on a perpendicular NNW/SSE orientation, and might constitute subdivisions within this Period 5 land division system. Each measured 16m long by 1.13-1.53m wide and 0.14-0.30m deep. They had gentle to moderately sloping, slightly concave sides breaking imperceptibly to a concave base. Both contained a single, sterile fill of firm and friable mid yellowish grey silty sand with occasional gravels. One nail fragment was recovered from G53. These ditches correspond to allotment garden boundaries/bedding trenches depicted on the 1945 aerial photograph of the site. It is also possible that some of the undated and unphased features within the vicinity of G53 and G54, and south of ditch G41, may be related to this early 20th-century allotment activity (Fig. 16), in particular right-angled gully/ditch G49 that aligns with G54.

4.9.8 A deposit of modern material G67 was investigated in the centre of Area 2. G67 ([2046, 2103, 2198] comprised a large irregular oval-shaped deposit of friable dark grey silty sand with stones and rooting that contained numerous modern artefacts. This deposit extended for 16.7m NNW/SSE by 10.8m ENE/WSW and was 0.18-0.20m thick, overlying ditches G40/G45 and G41. The rubbish observed in G67 included enamel advertisement signage for

Shell Motor Spirit and the *East Anglian Daily Times*, as well as *Rowntrees Chocolate and Pastilles 'Makers to H.M The King'*, pre-dating 1952.

4.9.9 A number of modern pits were distributed across Area 2, primarily in the south and east of the site. The majority of these appeared to be modern geotechnical investigation pits, rectangular in plan and measuring between 2.3m long by 0.75m wide and 3.3m long by 1.3m wide. Two of these geotechnical pits truncated archaeological features/deposits, including the northern portion of SFB G78 and deposit G65. Two other pits [2311] and [2377] (G96) were phased to this period. In the south of Area 2, rectangular pit [2377] measured 2.3m by 1.1m and contained a single fill comprising a soft and friable mid yellowish grey silty sand from which a modern spanner was noted and thus was not excavated. North of G41, sub-rectangular pit [2311] measured 2.9m by 1.85m and had steep, almost vertical sides breaking sharply to a flat base (Fig. 29, Section 44). A single fill of soft dark grey to black silty sand with yellowish brown sandy silt lens with abundant inclusions of charcoal flecks and stones was recorded, 0.28m thick, from which five pieces of post-medieval/modern CBM and small glass fragment were recovered, as well as five animal bone pieces.

Area 3

4.9.10 Period 4 ditch G20 appears to have been maintained and in use into the post-medieval period as it corresponds with a former field boundary depicted on the Bramford Tithe Map. This seems to be an extension of the ditch line depicted on the Bramford Tithe Map defining the southern boundary of the Parish Pond Meadow and the upper northeast boundary of the Bishop's Hop Ground. It is likely that prior to 1848 these field boundaries were re-worked based on land ownership and the size of land parcels changing.

4.9.11 On the eastern edge of Area 3, curving ditch G28 truncated ditch G20. This ditch measured *c.*23m long by 4m+ wide and 1.50m+ deep, continuing beyond the north, south and east excavation limits. G28 exhibited gentle to moderately steep sides, its base was not exposed (Fig. 29, Sections 42-43). It contained three fills. Three pieces of post-medieval CBM, two late Roman coins RF<17> and RF<18>, a Saxon copper alloy harness mount and two fragments of animal bone were recovered. G28 follows the position of the extant field boundary ditch located alongside and was likely in-filled to narrow and modify this field boundary.

4.9.12 A localised modern layer G39 ([3550]) was identified overlying ditch G20 (not illustrated), comprising moderately loose light grey silty sand with moderate stones and loose light yellowish brown sand. This may have been upcast from the excavation of boundary ditch G28.

4.10 Unphased and undated features (Figures 15 and 16)

4.10.1 Many features on site contained little to no dating material and lacked meaningful spatial relationships with dated features, or else their intercutting relationships were unresolved. These have not been phased. Indeed, while some of these are of clear archaeological origin, others are less convincing. Some of these unphased/undated features produced small quantities of

artefacts, generally one or two fragments of pottery or CBM. As these could easily be residual in nature, they have not been relied on for dating. With the most prevalent land use activity occurring during the early Saxon and high medieval periods, it is likely that these features belong to one or other of these. It may be possible to phase these undated features, at least tentatively, at a later stage through further analysis. Historic mapping from the 1800s to 20th century shows the site having been divided into three parcels of land. Some of these pits and postholes may relate to post-medieval activity and some ditch/gully features to its use as allotment gardens in the earlier 20th century.

Area 1

4.10.2 Fourteen undated postholes G7 ([1004, 1006, 1008, 1010, 1012, 1014, 1016, 1020, 1022, 1024, 1030, 1032, 1040] and eval [7504]) were scattered throughout Area 1. These were circular to oval in shape, ranged in size from 0.62m by 0.56m to 0.92m by 0.97m and varied in depth from 0.09m to 0.34m. They generally exhibited moderately sloping, concave sides breaking to concave bases and contained a single disuse fill of soft light brownish grey silty sand. Posthole [1040] contained a single sherd of early Saxon pottery, whilst posthole [7504 also contained early Saxon pottery. Whilst these sherds of pottery are likely residual or intrusive, it cannot be discounted that at least some of these postholes are of Period 3 date.

4.10.3 Six undated pits G8 ([1018, 1026, 1028, 1044, 1046, 1062]) were present in Area 1, mainly in the west. These pits were oval in plan, measuring 1.2m by 0.90m to 2.06m by 1.5m, and 0.15-0.47m deep. They generally had moderately sloping sides leading to concave bases and contained single fills of friable mid greyish brown silty sand. Whilst none of these pits contained dateable artefacts, the majority appear to be archaeological in origin. However, the diffuse nature of [1044], which was truncated by early Saxon pit [1042] / G5, suggests that this may be a tree-throw or natural geological variation.

Area 2

4.10.4 Nine undated pits and possible postholes G97 ([2073, 2248, 2257, 2267, 2269, 2300, 2306, 4009, 4021]) were located north of ditch G40. These varied in plan, from oval and circular to sub-circular, and in size, ranging from 0.50m by 0.20m to 5.08m by 4.85m and in depth from 0.19m to 0.64m. These generally exhibited moderate to gently sloping sides breaking imperceptibly to concave bases. Fills of varying consistency were recorded and are detailed in Appendix 1.

4.10.5 South of G40, nine undated pits and possible postholes were recorded (G98; [2024, 2026, 2030, 2190, 2194, 2276, 2354, 2381, 2417]). Similar to G97, these ranged in shape from circular and sub-circular to oval, displaying gentle to moderately sloping sides and concave to flat bases, varying in size from 0.66m by 0.48m to 2.35m by 1.59m and in depth from 0.12m to 0.70m. The fills also varied in composition (Appendix 1).

4.10.6 In the southeast of Area 2, seven ditches are undated and unphased – none of which have meaningful arrangement in relation to other phased features around them. The most extensive, ditch G51 ([2333 / 2337 / 2372 / 2386 / 2392]) extended for *c*.34m on a roughly NNW/SSE alignment and was fairly sinuous in plan. It varied in width between 1.35m and 1.57m and exhibited moderately sloping, slightly concave sides breaking to a concave base. A single fill comprising mid to dark greyish brown silty sand with occasional gravels was recorded, from which three sherds of early Saxon pottery and thirteen fragments of animal bone were retrieved. Ditch G51 was truncated at its NNW end by post-medieval ditch G53, whilst the relationship with G49 at its SSE end could not be established, the fills being homogenous and possibly contemporary. It was cut by medieval ditch G47 and by post-medieval ditch G42.

4.10.7 Ditch G52 ([2107 / 2163 / 2180 / 2281 / 2360 / 2394 / 2423 / 2426]) extended ENE from G51 and appeared to be integral with it. It extended for *c*.23m, continuing beyond the east limit of the excavation. The ditch varied in width from 1.05m to 1.76m, with moderately steep, straight sides breaking to a concave base, and a depth of 0.27-0.51m. It contained a single soft and friable mid greyish brown silty sand with occasional charcoal flecking. Three pieces of animal bone, three early Saxon pottery sherds, a piece of Roman tiles, and a single worked flint blade of Mesolithic/Neolithic date were recovered. It seemed to be cut by medieval ditch G48.

4.10.8 NE/SW aligned short ditch length G50 ([2319 / 2370 / 2388 / 2406]) was *c*.23m long, 1.03-1.41m wide and 0.44-0.56m deep. It had moderately steep, slightly concave sides which led imperceptibly to a concave base. A rounded, shallow terminus was recorded at each end. Its single fill produced five sherds of high medieval pottery and a single sherd of early Saxon. The intercut relationship between G50 and G51 was not clear, both containing similar fills of a friable mid to dark greyish brown silty sand with occasional gravels. G50 was recorded to cut angular ditch G49.

4.10.9 Right-angled gully/ditch G49 ([2339 / 2390 / 2396]) possibly extended northwards from a junction with ditch G43 for 19.6m NNW/SSE before turning ENE for a further 6.1m before terminating. It was 1.33-1.86m wide and 0.45-0.67m deep, with a single fill of firm and friable dark greyish brown silty sand with occasional gravels. The ditch had moderately steep, slightly convex sides breaking to a concave base. Three sherds of early Saxon pottery, four fragments of German lava stone, 49 pieces of animal bone and four prehistoric flints were recovered. The SSE end was truncated by medieval ditch G43, and did not continue beyond it. Whilst the phasing is uncertain, it is possible that this may be the remnants of a field sub-division contemporary with G43.

4.10.10 A second right-angled ditch formed by G88 ([2070 / 2399]) and G90 ([2202 / 2238]) was located 15m west of G49. It ran 18.2m NNW/SSE from G47 then cornered towards the WSW at its SSE end. It varied in width from 0.40m at its terminal end up to 1.2m and had moderately sloping sides breaking imperceptibly to a concave base. It was 0.21-0.30m deep. The ditch contained a single fill of soft and friable mid brownish grey sandy silt with occasional flints, from which a single sherd of high medieval pottery, a

fragment of Roman CBM and two pieces of animal bone were recovered. G88/G90 was seemingly truncated by medieval ditches G46 and G47, and by post-medieval ditch G42. It might be contemporary with angled ditch G49.

4.10.11 A short length of ditch G55 ([2358 / 2362]) was recorded running for 3.6m NNE/SSW between undated ditches G51 and G52, and was recorded on site as being truncated by G52 and G42. However, the fills are rather homogenous and these recorded relationships might not be reliable. G55 was 0.85m wide and 0.31m deep, with moderately sloping sides breaking imperceptibly to a concave base. Its single fill of firm and friable mid yellowish grey silty sand with occasional flint and gravel inclusions produced a small sherd of high medieval pottery, perhaps likely intrusive from G42, and a single piece of animal bone.

Area 3

4.10.12 The majority of discrete archaeological features within Area 3 were undated and unphased and comprised 53 pits and postholes, as well as several gullies and gravel deposits.

4.10.13 Slightly sinuous gully G23 ([3372 / 3427 / 3493]) was situated in the southeast of Area 3 and aligned ENE/WSW. It was truncated by Period 4 right-angled ditch G20 along its northwest side. G23 ran for 32.5m, terminating at either end in a rounded terminus, and had moderately sloping sides breaking imperceptibly to a concave base. It varied in width between 0.50m and 1.10m and was 0.14-0.28m deep (Fig, 28, Section 41). Its single recorded fill, comprised a firm and friable dark greyish brown silty sand with inclusions of small flints and stones. A William III sixpence RF<56> (AD 1695–1699) and a piece of post-medieval copper strip were recovered that are considered to be intrusive. A residual Roman object RF<446> was also retrieved from it. It is likely that this was a precursor of the G20 ditch (Phase 4.2).

4.10.14 Undated gully G24 ([3014 / 3194 / 3455]) was located in the northwest of Area 3. This extended 34.6m SW from the north excavation limit, ending in a rounded terminus and truncating natural hollow deposits G13 and G14. G24 was slightly sinuous or curving in nature, varying in width between 1.5m and 2.9m, and displaying gentle to moderately sloping straight sides and a slightly concave base. It was 0.16-0.30m deep. Its single recorded fill, comprising friable mid greyish brown silty sand with occasional sub-angular stones, and contained no finds. Notably, G24 does not follow the typical ENE/WSW alignments of most of the other ditches on site and could suggest an earlier date than the Period 4 or 5 field systems.

4.10.15 A cluster of undated pits G32 and postholes G31 were recorded underneath deposit G25, in the south of Area 3. However, the fills of G31 and G32 were homogenous with G25 and the intercutting relationships are uncertain. G32 comprised three pits ([3290], [3293] and [3371]) that were fairly uniform in size, between 2.73m by 1.0m and 2.0m by 1.33m, but varied in morphology. Pits [3290] and [3293] had moderately steep sides leading to concave bases whilst [3371] had gently sloping sides and a flat base. Each recorded pit contained between two and three fills, details of which are provided in

Appendix 1. These contained no finds, with the exception of one fragment of animal bone from [3293].

4.10.16 Postholes G31 comprised [3286], [3288], [3526], [3535], and [3537], all of which were circular to oval in plan and varied in size between 0.37m by 0.37m and 1.1m by 0.75m. Their profiles were similar, exhibiting moderately steep sides breaking to concave bases, and all contained a single recorded fill similar to deposit G35, varying in thickness between 0.16m and 0.46m. No finds were recovered. The fill of [3526] was sampled as <45> and produced only fire-cracked flint

4.10.17 Further undated postholes and pits were situated east of deposit G25 and possible SFB G22, in the SE of Area 3. G33 comprised eight postholes ([3152, 3215, 3219, 3221, 3226, 3228, 3230, 3257]) and two pits ([3150, 3224]). Of these, the majority appeared to be sealed by the fills of G22 whilst [3150], [3152], [3215] and [3230] were situated on its eastern edge. They ranged from sub-circular to oval and varied in size from 0.28m by 0.28m to 0.50m by 0.45m, exhibiting moderately sloping sides and a concave base. Most contained a single fill, though [3215], [3219] and [3224] contained two fills, all varying in depth from 0.15m to 0.48m. The compositions of these fills are contained in Appendix 1. None contained dateable artefacts. The fill of [3257] was sampled as <22>. This contained some charcoal only.

4.10.18 An additional 13 postholes and 25 pits had no discernible spatial relationships and were dispersed throughout Area 3. G34 comprised postholes [3062, 3090, 3092, 3094, 3096, 3098, 3100, 3198, 3249, 3251, 3266, 3329, 3444] and pits [3004, 3006, 3016, 3041, 3047, 3049, 3051, 3072, 3088, 3102, 3104, 3123, 3129, 3131, 3154, 3158, 3179, 3184, 3272, 3277, 3279, 3301, 3305, 3401, 3430]. G34 pits [3041] and [3305] produced an uncertain coin dated to AD 260-402 (RF<22>) and uncertain radiate from AD 260-296 (RF<466>), respectively. Twelve bulk soil samples were obtained from G34 features (<4>, <5>, <7>, <8>, <9>, <17>, <18>, <24>, <25>, <31>). These samples contained charcoal, some charred botanical remains, animal bone and burnt bone, fishbones and microfauna, slag, fired clay and fire-cracked flints.

4.10.19 Five possible postholes G35 ([3137, 3139, 3141, 3170, 3172]) were recorded below the basal fill (G36) of hollow G13. However, G36 seemed homogenous with the fill of postholes G35, and the intercutting relationship is uncertain. These were oval in plan, measuring from 0.20m by 0.17m to 0.48m to 0.32m and were fairly shallow, between 0.06m and 0.17m. They ranged in morphology from moderate to gently sloping sides and concave bases and contained a sterile fill of loose mid brownish grey silty sand with occasional gravels and flint, similar to G36. It is posited that these may just be natural features in the base of the hollow, such as animal burrows, that have infilled over time.

5.0 FINDS AND ENVIRONMENTAL ASSESSMENTS

5.1 Summary

5.1.1 A large assemblage of finds was recovered during the excavation on land east of Loraine Way, Bramford. All finds were washed and dried or air dried as appropriate. They were subsequently quantified by count and weight and bagged by material and context. The hand-collected bulk finds are quantified in Appendix 3; material recovered from the residues of environmental samples is quantified in Appendix 9a. A large quantity of finds, primarily metal objects, were assigned unique registered finds numbers, detailed in section 5.15/Appendix 4. All finds have been packed and stored following CIfA guidelines (2014c). Required x-ray and conservation (cleaning and stabilisation) of objects has been carried out.

5.2 **Flintwork** by Karine Le Hégarat

5.2.1 The excavation produced 719 pieces of worked flint weighing 8,993g, together with a large quantity of unworked burnt flint fragments (35,142g). This includes 69 pieces of worked flint and just over 5.5kg of unworked burnt flint extracted from bulk soil samples (Table 1). The preceding trial-trench evaluation produced a further 429 pieces of worked flint; although this included 293 chips measuring less than 10mm^2 (Headland Archaeology 2018). Although the evaluation flintwork has not been re-examined, it is considered in the significance and potential section (6.2).

5.2.2 A small quantity of flint came from prehistoric features (Period 1); however, the bulk of the assemblage derives from Saxon or later features and deposits (Periods 3, 4 and 5). As such, the flints represent redeposited material, either incidentally incorporated into the fills of later features or displaced from their primary context (through colluvial movement for example). The most significant single artefact is a lower or middle Palaeolithic handaxe recovered from an undated pit in Area 1. The remaining material demonstrates that the area was widely used from the Neolithic to the Bronze Age period, more especially from the early Neolithic to the early Bronze Age, although chronologically diagnostic pieces are uncommon.

5.2.3 This report provides a basic characterisation of the flint assemblage with an assessment of its significance and potential for further analysis.

Flint type	HC Ct/Wgt	Sample Ct/Wgt	Total Ct/Wgt
Worked	650 / 8452g	69 / 541g	719 / 8993g
Unworked burnt	73 / 2108g	33034g	35142g

Table 1: Summary of the flintwork (HC = hand-collected)

5.2.4 The flint was recorded and reported following CIfA's *Toolkit for Specialist Reporting* (2020). The worked flints were quantified by count and weight. They were individually examined and classified using standard set of codes and morphological descriptions (Ballin 2021; Butler 2005; Inizan *et al* 1999). Important technological information was noted, the condition of the artefacts was recorded, and dating was attempted where possible. The fragments of

burnt unworked flint were scanned for worked pieces and quantified before being discarded (the fragments from the bulk soil samples were quantified only by weight). All data were recorded on Microsoft Excel spreadsheet. A breakdown of the composition of the assemblage by provisional period is presented in Table 2, and a full catalogue of the flint by context is provided in Appendix 5.

Category type	Period 1	Period 3	Period 4	Period 5	Period 0	Total	%
Flake	42	34	36	6	75	503	70.0%
Blade	3	17	3	1	19	43	6.0%
Bladelet	1	11	2	1	7	22	3.1%
Blade-like flake	4	16	3		14	37	5.1%
Core face/edge rejuvenation flake / blade		1			3	4	0.6%
Thinning flake		1				1	0.1%
Irregular waste	3	51	1	1	5	61	8.5%
Chip		2				2	0.3%
Single platform core	1	7			1	9	1.3%
Multiplatform core	2	6			5	13	1.8%
Unclassifiable/fragmentary core		6			4	10	1.4%
Side scraper					1	1	0.1%
End scraper		2	1			3	0.4%
Denticulated Scraper		1				1	0.1%
Awl		1				1	0.1%
Microdenticulate		1				1	0.1%
Truncated flake/blade		1				1	0.1%
Handaxe					1	1	0.1%
Other core tool		1				1	0.1%
Retouched flake		1				1	0.1%
Retouched blade-like flake	1					1	0.1%
Unclassifiable retouched piece/ Misc. retouched piece	1	1				2	0.3%
Total	*58*	*47*	*46*	*9*	*13*	*719*	*100.0*

Unworked burnt flint (weight in kg)	0.7	2.5	0.3	20.4	11	35.1

Table 2: Summary of the flint assemblage by provisional period

Raw material

5.2.5 The excavation produced a large quantity of natural unworked pieces that were mostly patinated to a white, light cream or milky blue colour. They consisted principally of weathered pebbles or cobbles that were thermally fractured. Several fragments of tabular flint of various thickness were also present, some of which consisted of thin (*c.*15mm) Bullhead Beds flint. All these natural pieces have been discarded, except for two large tabular flint fragments that may have been used as building materials: a fragment from

the primary fill [3147] of G22 SFB [3148], weighing 998g, and a larger fragment from the upper fill [3146] of the same SFB weighing 1,667g.

5.2.6 The internal colour of the pieces of worked flint was mostly mid to dark grey (to almost black). The flint was principally fine grained and flawless, with just a few pieces exhibiting some inclusions. Occasional pieces were made on thermal fragments. The outer surface was mostly stained, abraded and of variable thickness, measuring up to 3mm but principally very thin (<1mm). The bedrock geology consists of the Newhaven Chalk Formation with the superficial deposits consisting of the Lowestoft Formation, River Terrace deposits and Alluvium (BGS 2023). A geoarchaeological investigation undertaken during the evaluation also identified some colluvial deposits and small areas of soliflucted chalk (Stastney 2018). The main raw materials would have therefore been available locally from glacial outwash gravels or from river terrace deposits.

5.2.7 A total of 55 pieces were made on Bullhead Beds flint. They exhibited a dark olive-green cortex with an underlying orange band and a dark grey (almost black) interior. Additional non-cortical pieces are likely to be present in an assemblage. Although Bullhead Beds flint was present on site, in the form of tabular flint (see above), it is unlikely that these fragments were used for knapping because they were very thin (*c.*15mm). In fact, it seems that nodular flint was selected rather than tabular flint. Bullhead Beds flint occurs at the interface of the chalk and the overlying Thanet deposits; the raw material would have been available at *c.*1km to the south of the site, on the other side of the River Gipping (BGS 2023).

Condition

5.2.8 The condition of the flints varied. For the most part, the pieces exhibited minimal signs of weathering, with slight to moderate edge modification, and *c.*120 pieces were recorded as fresh. This implies that the material has undergone negligible post-depositional disturbance, or that it was not exposed for long periods prior to burial. Although nothing indicates significant redeposition, variable conditions were commonly recorded within the same contexts, which indicates minimum mixing. In total, 270 pieces were broken, five pieces were recorded as burnt, and 143 exhibited varying degrees of patination, ranging from incipient traces of light blue surface discolouration to entire creamy or milky blue surface patination.

The assemblage

5.2.9 The pieces of worked flint were spread over the three investigated areas; however, 73.7% of the total assemblage (n=530) came from Area 3 in the south of the site. Area 3, which is approximately half the size of Area 2, contains the possible Bronze Age ring-ditch G12. It should also be noted that the bulk of the worked flints recovered during the evaluation also came from Area 3, most particularly from Trench 57, with fill [57/008] of pit [57/007] producing 206 pieces (Headland Archaeology 2018, 21–2 and Ills. 35 and 36).

5.2.10 In total, 58 pieces – 8% of the total assemblage of worked flints – derive from prehistoric features and deposits (Period 1). In contrast, 73.1% of the assemblage (n=526) derives from Saxon or later features and deposits (Periods 3, 4 and 5). A further 135 pieces – 18.7% of the total assemblage – comes from features/deposits that are currently undated (Table 2).
Handaxe RF<52>, PF<52>

5.2.11 A Palaeolithic handaxe was recovered from single fill [1059] of prehistoric pit [1060] G6 in Area 1. The handaxe is complete except for the terminal end that is broken. The damage is not recent, because the scar is patinated; it is likely to be the result of thermal flows as thin cracks are visible on both surfaces. Although it is entirely patinated to a creamy and light blue colour, the creamy patination is more pronounced on one surface.This surface is also glossier that the other one. Inclusions are common, forming some thin pinkish lines and light honey patches. The handaxe is cordiform in plan and displays symmetrical edges. It is relatively small and may have substained further resharpening / reworking. It weighs 194g, measures 93.4+mm in length, 71.5mm in width and is 28mm thick. Overall, it is in a relatively good condition, with the ridges and edges displaying only minimum weathering consistent with slight post-depositional transportation. In section, the edges are relatively straight; however, the handaxe exhibits a plano-convex cross section. With no surviving cortex, it has been fully worked on both surfaces. To obtain a symmetrical profile, it would have been worked with a soft hammer finish. It displays a succession of successful invasive thinning flake scars, as well as a few flake scars indicating that some removals resulted with hinged fractures. The artefact could either be lower Palaeolithic or middle Palaeolithic in date. It was clearly redeposited in pit [1059]. Most of the deposits visible in the trenches during the geoarchaeological investigation carried out during the evaluation were of Pleistocene age, mostly outwash sands and gravels (Headland Archaeology 2018, cxi). Ridges of soliflucted chalk and River Terrace deposits/colluvium were also recorded. It is therefore plausible that the artefact has become incorporated into the open feature; it could alternatively represent a surface find collected and deliberately deposited into the pit.

Flint from Prehistoric features

5.2.12 A total of 58 pieces of worked flint were recovered from 10 features currently dated to Period 1 (Appendix 5). The features consist of two pits ([1058] G1 and [1034] G2) located in Area 1, and a series of pits ([3399], [3177], [3160], [3417], [3433] and [3156] G9) and ditch segments ([3442] G10 and [3211] G36) in Area 3. No diagnostic pieces were present, and most features contained small quantities of worked flint, often five pieces or less. As such, the flints could easily represent residual artefacts. For example, fill [3432] of pit [3433] contained a single artefact consisting of a Mesolithic well-maintained single platform core (66g) used to remove bladelets. Pit [3177] produced a larger assemblage (29 pieces). The pieces are chronologically mixed, with a few relating to Neolithic / early Bronze Age activity, but most are likely to be later in date.

5.2.13 The fill [1057] of pit [1058] and the fill [3398] of pit [3399] are associated with early Neolithic pottery. The flintwork from [1057] is coherent and is likely to

be contemporary with the pottery and the pit. The assemblage is small (8 pieces) and consists exclusively of debitage (2 blades, 2 blade-like flakes and 4 flakes). The flintwork from [3398] (5 pieces) could be later prehistoric. The fill [1033] of pit [1034] is associated with Middle Neolithic Peterborough ware. It produced only a single flake fragment.

The remaining assemblage

5.2.14 The bulk of the remaining flints represents redeposited material, either incidentally incorporated in the fills of later features or displaced from their primary context through slight colluvial movement, for example. In addition to the 526 pieces recovered from Saxon or later features and deposits, 135 pieces derive from contexts that are currently unphased. The material is considered together, below.

5.2.15 For the most part, the artefacts are in a fair condition, which indicates that the material has not been subject to significant redepositions. Nonetheless, despite the presence of large groups, the assemblage suffers from being chronologically mixed. It also suffers from containing only a very low quantity of chronologically distinctive pieces. In fact, the entire assemblage produced only 14 retouched pieces (Table 2). As such, it is difficult to closely date the flintwork.

5.2.16 Most of the assemblage consists of flake-orientated pieces reminiscent of middle Neolithic / early Bronze Age technology. However, it is mixed with earlier Mesolithic / early Neolithic blade-based material. In fact, although some of the blades might be Mesolithic in date, the majority of the blade-based material seems to be belong to the early Neolithic. A nice group was recovered from the fills [1055] / [1059] of G6 pit [1060] in Area 1, comprising 23 pieces of worked flint. The pit contained the handaxe (RF<52>); however, the remaining material is coherent and seems to be broadly contemporary with the early Neolithic flints recovered from the fill [1057] of pit [1058]. Pit [1060] contained a multiplatform core used to remove blades and thin flakes, 10 flakes, 3 blade-like flakes, 4 blades, a bladelets and 3 core face/edge rejuvenation pieces. Blade components and thin flakes were also well represented in Areas 2 and 3 (see Appendix 5). A microdenticulate recovered from the fill [2271] of Saxon pit [2272], an awl recovered from the fill [2055] of Saxon ditch [2054], and a core tool recovered from the fill [2052] of Saxon SFB [2053] are all likely to be early Neolithic although the core tool could be earlier.

5.2.17 Although blade components were well represented, the flintwork is more characteristic of middle Neolithic to early Bronze Age industries. A mixed hammer mode was noted, though it seems that the use of a hard hammer percussor was prefered. The presence of cores provides evidence for flint knapping; however, one of the characteristic of the assemblage is the low quantity and range of tools.

Burnt unworked flint

5.2.18 A large quantity of unworked burnt flint fragments was recovered (just over 35kg) from 47 numbered contexts. The fragments was distributed unequally

over the three areas (Area 1 = 4g; Area 2 = *c.*22kg and Area 3 = *c.*13kg). Only two features dated to Period 1 (pit [3156] and pit [3177] G9) produced some unworked burnt flint fragments (totalling just 740g). These were small, measuring only up to 35mm and calcined to a light to dark grey colour. The largest quantity was recovered from features dated to the Saxon and later periods (23.2 kg). The remaining fragments (11kg) came from features that are currently undated. Most features produced small quantities of burnt unworked flints (principally less than 500g); however, two pits yielded large assemblages: post-medieval/modern pit [2311] G96 produced just over 20kg and undated pit [3129] G34 produced 9kg. Despite being relatively large (up to 75mm), the fragments from pit [2311] were heavily calcined to a mid and dark grey colour with crazed surfaces. The fragments from pit [3129] were slightly less burnt.

5.3 **Prehistoric and Roman Pottery** by Anna Doherty

5.3.1 A very small assemblage of prehistoric and Roman pottery was hand-collected during the excavation, totalling 58 sherds, weighing 890g, with an additional five sherds, weighing 31g collected from the residue of a single bulk soil sample. No prehistoric pottery had been recovered during the prior evaluation (Headland Archaeology 2018). The prehistoric pottery is probably all of Neolithic date, with some diagnostic sherds of both Early Neolithic Plain Bowl and Middle Neolithic Peterborough Ware type. The Roman pottery appears to be largely residual in Early Medieval deposits.

5.3.2 The pottery was recorded and reported on following guidance in the *Standard for Pottery Studies in Archaeology* (PCRG et al 2016) and the CIfA (2020) *Toolkit for Specialist Reporting.* It was examined using a x 20 binocular microscope and quantified by sherd count, weight, estimated number of vessels (ENV) and, for the Roman assemblage, estimated vessel equivalent (EVE) on *pro forma* records and in an Excel spreadsheet. Prehistoric pottery was recorded according to a site-specific fabric type-series in accordance with the guidelines of the Prehistoric Ceramics Research Group (PCRG 2010; Table 3). Roman fabrics and forms were recorded using an unpublished type-series devised at the former Suffolk County Council Unit for the unpublished assemblage from Pakenham, which is widely used for assemblages from Suffolk.

Fabric	Description
FLIN1	Sparse/moderate ill-sorted flint of 1-4mm set in a low fired laminar matrix; rare/sparse fine quartz of 0.1-0.2mm may occur
FLQU1	Sparse/moderate ill-sorted flint of 1-5mm with moderate quartz of 0.1-0.5mm
FLQU2	Sparse/moderate ill-sorted flint of 1-3mm with moderate quartz of 0.1-0.5mm
QUAR1	Sparse/moderate ill-sorted angular milky quartz of 1-5mm set in a low fired laminar matrix; rare/sparse fine quartz of 0.1-0.2mm may occur

Table 3: Site-specific fabric descriptions for prehistoric pottery

Period 1: Prehistoric

5.3.3 A very small assemblage of prehistoric pottery (quantified in Table 4) includes a group of seven, undiagnostic body sherds of probable early Neolithic type,

weighing 61g, in fill [1057] of Period 1 pit [1058] (G1) and five sherds of a single vessel of similar date in fill [3398] of feature [3399] (G9). Two diagnostic sherds of middle Neolithic Peterborough ware were also found in fill [1033] of pit [1034] (G2). The fabric characteristics suggest that the whole assemblage is likely to date to the early or middle Neolithic although some fragments are featureless body sherds found as residual material in later deposits.

5.3.4 The assemblage is predominantly associated flint-tempered fabrics, featuring relatively sparse but ill-sorted inclusions, within dense laminar matrices (FLIN1) or with some coarse quartz sand (FLQU1, FLQU2). Two sherds in a low-fired purely quartz rich fabric were also identified (QUAR1). It should be noted that a handful of residual prehistoric sherds from post-Roman contexts were not directly identified by the current author, but have been included in the quantification under broad flint-tempered (FLIN), grog-with-flint (GRFL) and flint-with-quartz (FLQU) fabric categories based on descriptions by Sue Anderson.

Fabric	Sherds	Weight (g)	ENV
FLIN1	9	108	3
FLQU1	7	54	5
FLQU2	3	8	3
QUAR1	2	33	1
FLIN	3	19	1
GRFL	3	11	1
FLQU	1	15	1
Total	*28*	*248*	*15*

Table 4: Quantification of prehistoric pottery fabrics

5.3.5 Sherds from a single diagnostic early Neolithic Plain Bowl were recorded in fill [3398] of pit [3399] (G9). The form, with a diameter of *c*.220mm, has a gentle shoulder carination, hollow, slightly out-turning neck and beaded rim profile, associated with fabric FLIN1. Aside from the Peterborough Ware discussed below, the remainder of the assemblage is considered likely to be of Plain Bowl type but lacked any diagnostic features.

5.3.6 Two sherds of diagnostic Peterborough ware noted in fill [1033] of pit [1034] (G2). A small rim sherd with a heavy rim profile in fabric FLQU1, is probably of Mortlake style, with finger indents on the external surface below the rim and whipped cord decoration along the rim top and the upper internal surface. Another small non-fitting body sherd in a very similar fabric could be of the same vessel but features a row of fingernail impressions

Period 2: Roman

5.3.7 A very small assemblage of Roman pottery, quantified in Table 5, is considered to be entirely residual, predominantly having been found in early medieval features. The assemblage is mostly made up by unsourced coarse wares, including coarse grey (GX), red (RX) and buff (BUF) wares. A single sherd of Beatican amphora (AA) was recorded and another from a Colchester

mortarium (COLBM). Considering the tiny size of the assemblage, the number of samian ware sherds (SACG, SAEG) or late Roman fine red wares from Hadham (HAX) or Oxfordshire (OXRC) is quite high. These could potentially have been curated in use into the early medieval period.

Fabric	Description	Sherds	Weight (g)	ENV	EVE
AA	Amphora (Baetican)	1	106	1	
BUF	Unsourced buff fabrics	2	20	2	
COLBM	Colchester buff mortarium	1	72	1	0.1
GX	Unsourced coarse grey ware	15	283	15	0.15
HAX	Hadham red ware	3	43	3	
OXRC	Oxfordshire red ware	3	31	3	
RX	Unsourced coarse red ware	1	7	1	
SACG	Central Gaulish samian ware	3	33	3	0.11
SAEG	East Gaulish samian ware	1	47	1	
Total		*30*	*642*	*30*	*0.36*

Table 5: Quantification of Roman pottery

5.3.8 Diagnostic Roman sherds include a rim from a necked jar of uncertain date (4.5) and a partial rim from a wide-mouth jar/bowl (5) of likely later Roman type. An undated strainer base with multiple post-firing drilled holes, as well as a tiny fragment from a bead-and-flanged Colchester mortarium of uncertain specific form. A handle from a probable late Roman Hadham red ware flagon was recorded, as well as a Dragendorff 31 bowl in central Gaulish samian ware. The latter was produced between *c*. AD 150–230, although samian wares were frequently curated for long periods after the decline of Gaulish samian industries in the early 3rd century.

5.4 Post-Roman Pottery by Sue Anderson

5.4.1 Post-Roman pottery (1701 sherds / 25,189g) was collected from 181 contexts during the excavation. The post-Roman assemblage is dominated by early Anglo-Saxon material, although some sherds of earlier and later date were also collected. In addition, up to 48 sherds from the evaluation were probably early Anglo-Saxon (Headland Archaeology 2018, tab. 2), and there was a small quantity of pottery identified as late Saxon and later medieval.

5.4.2 Quantification was carried out using sherd count, weight and estimated vessel equivalent (eve). The minimum number of vessels (MNV) within each context was also recorded, but cross-fitting was not attempted unless particularly distinctive vessels were observed in more than one context. A full quantification by fabric, context and feature is available in archive. Early Saxon fabric groups have been characterised by major inclusions. Form terminology and dating for early Anglo-Saxon pottery follows Myres (1977) and Hamerow (1993). Recording uses a system of letters for fabric codes together with number codes for ease of sorting in database format, and the results were input directly onto an MS Access table, which forms the archive catalogue. A summary catalogue of the post-Roman pottery is provided in Appendix 6.

Early and Middle Anglo-Saxon Wares

Fabrics

5.4.3 Twenty-five generic fabric groups of handmade early Anglo-Saxon pottery were distinguished, as listed in Table 6. Fabrics are grouped by major inclusions (other than sand, except where sand is the only inclusion). However, it should be noted that, as with all handmade pottery, fabrics were extremely variable even within single vessels and categorisation was often difficult. Background scatters of calcareous material, unburnt flint, grog, white mica and other less common inclusions, such as feldspar and ferrous pieces, were present in many of the fabrics. All Saxon wares were handmade, and colours varied throughout from black through grey, buff and brown to red, often within single vessels.

5.4.4 Many sites in East Anglia and the Midlands have produced similar fabric groups, although they occur in different proportions. In general, quartz-tempered and granitic types tend to be the most common fabric groups at sites in East Anglia, although in the later early Saxon period these appear to have been replaced to some extent by grass-tempered pottery. Organic-tempering is thought to be a late early Saxon development in Essex (Hamerow 1993, 31) and Suffolk (K. Wade, pers. comm.), although in the Cambridgeshire fen edge it appears that granitic and other 'glacially derived' fabrics may have continued into the middle Saxon period (Spoerry 2016, 20). One small fragment (1g) of granite was included in the pottery assemblage, recovered from a Saxon pit fill (2348), perhaps suggesting that this material was collected for use in pottery manufacture.

5.4.5 At this site, calcareous-tempered fabrics were most frequent, based on MNV, with quartz-tempered and granitic fabrics being similarly common. Organic fabrics were also a significant component of the assemblage. All other fabric types were relatively infrequent, although the presence of four vessels containing bone is of interest as this type of tempering is rarely identified. Three sherds of middle Saxon Ipswich ware were present.

Description	**Fabric**	**No**	**Wt/g**	**eve**	**MNV**
Fine sandy, well-sorted	ESFS	318	5224	2.54	166
Fine sandy micaceous	ESSM	57	612	1.03	33
Abundant fine/medium 'sparkly' sand (greensand)	ESFQ	1	3		1
Medium sandy, well-sorted	ESMS	8	209		6
Moderate coarse sub-rounded quartz in a finer sandy matrix	ESCQ	15	248		7
Total sand/quartz tempered		*399*	*6296*	*3.57*	*213*
Granitic (feldspar and gold mica)	ESCF	284	4362	2.95	154
Granitic and calcareous	ESCM	42	765	0.33	33
Granitic and organic	ESOM	22	444	0.17	19
Total granitic tempered		*348*	*5571*	*3.45*	*206*
Fine/medium sandy with red grog	ESGS	6	17		2
Sand, red grog and granitic inclusions	ESGG	23	261		9

Description	Fabric	No	Wt/g	eve	MNV
Sand, grog and sparse calcareous inclusions	ESGC	6	88	0.16	3
Total grog tempered		*35*	*366*	*0.16*	*14*
Heavily grass tempered with few other inclusions	ESO1	78	1140	0.53	40
Grass tempered with greater proportion of sand	ESO2	69	956	0.23	42
Total organic tempered		*147*	*2096*	*0.76*	*82*
Sparse chalk/limestone and fine to medium sand	ESSC	25	235	0.25	14
Sparse shell, sparse organic, fine sandy	ESSO	18	230	0.17	10
Sparse limestone	ESSL	9	104		9
Oolitic limestone and fine/medium sand	ESOL	2	13		1
Sparse to moderate fine shell and sand	ESSS	595	8355	7.65	376
Coarse shell and coarse rounded quartz	ESCS	11	262	0.26	11
Calcareous and sandstone-tempered	ESCSA	7	79		1
Total calcareous tempered		*667*	*9278*	*8.33*	*422*
Quartz conglomerates in a fine or medium sandy matrix	ESQC	9	104	0.38	8
Sandstone and fine sand	ESSA	10	95		5
Fine unburnt flint and fine sand	ESFF	2	15		2
Fine sandy with ferrous inclusions	ESFE	6	112	0.09	6
Fine sandy with bone	ESBO	4	88	0.15	4
Total minor wares		*31*	*414*	*0.62*	*25*
Gritty Ipswich ware	GIPS	2	46	0.08	2
Sandy/smooth Ipswich ware	SIPS	1	4		1
Total Ipswich ware		*3*	*50*	*0.08*	*3*
Total early/middle Saxon		*1630*	*24071*	*16.97*	*965*

Table 6: Post-Roman pottery quantification

Vessel form, surface treatment and decoration

5.4.6 The estimated vessel equivalent of 16.97 is based on 169 measurable rims, but a further 22 rims were too small for measurement. Measurements of handmade vessels are always approximate unless a large proportion of the rim is present. For this reason, the minimum number of vessels (MNV), based on sherd families, was estimated for each context, producing a total MNV of 962 vessels.

5.4.7 Rim and base types were classified following Hamerow (1993, Fig. 26). This produced a total of 42 vessels with flaring rims, 111 vessels with vertical ('upright') rims, 18 with everted rims (including one with a tapered everted rim), nine with inturned rims, and six with beaded rims. Twenty vessels had flat-rounded bases, 20 had rounded or saggy bases, 16 had rounded bases with a clear angle, 30 were flat-angled, one had a 'footstand' (Myres' terminology), and nine could only be classified as 'flat' as the angle was lost.

5.4.8 No vessels were complete, but three full profiles were present, and it was sometimes possible to suggest the vessel type on the basis of rim or base form, where enough of the body was present (Table 7). Seventy-five vessels were identified as bowls, four as lamps/dishes/bowls, and 103 as jars.

Form detail	jar	jar?	bowl	bowl?	lamp/dish
biconical	2		1		
sub-biconical	3				
carinated			1		
globular	19		4	3	
globular, shouldered			1	1	
tall globular	1				
wide-mouthed globular	4				
baggy	2	1			
baggy, slight shoulder	1				
flaring-sided			1		1
straight-sided			23		
hemispherical			9		
inturned			3		
sloping neck	2				
concave neck	1				
shouldered	5		6	2	
unknown	48	15	10	10	3

Table 7: Identifiable forms/shapes of Saxon vessels (MNV)

5.4.9 Based on MNV, 33 vessels had rough surfaces which did not appear to have been smoothed or burnished, although in some cases this may have been due to use-wear or post-depositional abrasion. All others showed signs of burnishing, smoothing whilst wet, or grass-wiping, although the latter was rare. Three vessels appeared to have been covered externally with the type of coarse slip known as *Schlickung*, and in two cases this slip contained fragments of burnt bone. One other vessel may have had a deliberately roughened external surface.

5.4.10 Fifty-five vessels had some form of decoration, most frequently in the form of incised lines. Six vessels had vertical bosses, both slipped and hollow-backed types being represented. Ten vessels had finger-pinched or fingernail rustication. One vessel had a corrugated neck and another had vertical corrugations and circular stabs. Very few decorative schemes could be identified, but there were certainly some incised chevrons and one example of *stehende bogen* (standing arches). One boss had an incised herringbone pattern. At least ten vessels with stamps were present, including cross-in-circle, 'cartwheel', grid circles/ovals, segmented rings, C-shaped, and V-shaped types. Two vessels had plain circular stabs and one appeared to have stab marks made with a natural object.

5.4.11 Many pots showed signs of wear, sooting and/or burnt food residues, but there was no evidence to suggest that any of the vessels had been used for industrial processes.

5.4.12 This assemblage shows elements which suggest a long date range for occupation at the site. There are 5th-century vessels (carinated, bossed, incised, *Schlickung*-coated), and also some which suggest continuation into the 7th century (organic tempered wares, baggy vessels). Most of the evidence, however, fits largely within the 6th century, such as the predominance of globular forms and the high proportion of calcareous-tempered wares. Three sherds of Ipswich Ware, including a jar rim, may suggest continuation of activity into the later 7th or 8th century.

Other pottery

5.4.13 Table 8 shows the quantities of other pottery by fabric, in approximate date order.

Description	Fabric	Date range	No	Wt/g	eve	MNV
Unidentified handmade	UNHM	prehistoric?	1	9		1
Thetford-type ware	THET	L.9th-11th c.	1	5		1
Early medieval ware	EMW	11th-12th c.	1	2		1
Yarmouth-type ware	YAR	11th-12th c.	1	6		1
Early medieval ware East Suffolk type	EMWES	11th-M.13th c.	1	7		1
Early medieval ware Essex type	EMWE	11th-M.13th c.	3	16		3
Early medieval ware sparse shell and grit	EMWSG	11th-M.13th c.	1	9		1
Early medieval ware sparse shelly	EMWSS	11th-M.13th c.	10	102	0.20	7
Medieval East Suffolk coarsewares	MESCW	12th-14th c.	2	14	0.06	2
Medieval South Suffolk coarsewares	MSSCW	12th-14th c.	4	100	0.16	4
Stowmarket-type medieval coarseware	SKTMCW	12th-14th c.	5	51		5
SW Suffolk sandy micaceous ware	SWSSM	12th-14th c.	2	22		2
Colchester-type ware	COLC	13th-15th c.	1	8		1
Hollesley-type ware	HOLL	L.13th-14th c.	2	17		2
Ipswich glazed ware	IPSG	L.13th-14th c.	1	4		1
Late medieval and transitional wares	LMT	M.14th-M.16th c.	3	31		1
Speckle-glazed ware	SPEC	17th-18th c.	1	8		1
Pearlware	PEW	L.18th-19th c.	5	36	0.09	3
Yellow ware	YELW	L.18th-20th c.	1	1		1
Refined factory-made whiteware	REFW	19th-20th c.	5	252		3
Late post-medieval unglazed earthenwares	LPME	M.19th-20th c.	8	200	0.56	3
Unidentified	UNID		2	127		2
Total			*61*	*1027*	*1.17*	*50*

Table 8: Late Saxon and later pottery quantifications, by fabric

5.4.14 A fragment in a hard silty micaceous fabric from pit fill [1035] was recorded as UNHM, and may be prehistoric or possibly early Anglo-Saxon. One small fragment of late Saxon Thetford-type ware was recovered from pit fill [2277], adding to the small quantity recovered during the evaluation. If these sherds are genuinely of late Saxon date (and not misidentified Roman greywares), then they are likely to relate to the slightly larger early medieval group which would have been broadly contemporary with them in the 11th century. This group was dominated by sparse shelly wares which are typical of this part of Suffolk, with small quantities of Norfolk (YAR, EMW) and Essex (EMWE) types. The early medieval wares included three jar rims of more developed forms, suggesting continuation into the 12th to 13th centuries and contemporaneity with the high medieval group.

5.4.15 High medieval coarsewares in this assemblage were a mixture of east and south Suffolk fabric types, the largest group being the east Suffolk 'Stowmarket' type. Three jar rims were present, a south Suffolk type (Essex form H2), an east Suffolk example with a collared rim, and a south Suffolk type with a typical everted square-beaded form. These sherds span the 13th to 14th centuries. One fragment of medieval Ipswich ware was the only glazed sherd in the group.

5.4.16 Three fragments of late medieval and transitional ware of local origin were found in ditch 3029, and were all from a single green-glazed vessel. One sherd of post-medieval speckle-glazed redware came from pit fill [2249].

5.4.17 Modern wares were dominated by factory-made whitewares, including pearlware. These included rim sherds two dishes and a body fragment of a preserve jar. Two vessels were decorated with transfer printed designs. There was also a small piece of yellow ware, and several pieces of plant pots (LPME).

5.4.18 Two sherds were unidentified. One, from SFB fill [2052], was a burnt fragment which could be either an early Anglo-Saxon sherd with fingertip impressed decoration, or part of a medieval coarseware thumbed base – given the context the former seems more likely. The other, from midden deposit [2152], was a finely burnished wheel-made pedestal base which appeared too thick to be Roman and could be an early/middle Saxon import.

Pottery by context type

5.4.19 Table 9 shows the distribution of pottery by preliminary site phase, context type and pot period.

Period	Context type	EAS	MSax	LSax	EMed	Med	LMed	PMed	Mod	Un
3.1	SFB	287				1				1
	ring-ditch	73			1					
	foundation	2								
	pit	709			1	1		1		
	quarry pit	65								

	post-hole	3								
	ditch	47	2		1	3	3			
	hollow deposit	180			1	4				1
	colluvium?	11								
4	pit	3			2					
	deposit								1	
5	ditch	3							1	
	pit								1	
	posthole	4								
Undated	pit	68		1	4	3				
	quarry pit	108	1		1				2	
	ditch	46			6	4				
	hollow deposit	3								
	deposit	1								
	colluvium?	1								
	subsoil	4				1				
	u/s finds	9								

Table 9: Distribution of post-Roman pottery by phase, context and period

5.4.20 The majority of pottery came from features assigned to the early Anglo-Saxon Period 3. In this phase group, the largest quantities were recovered from pits, SFBs and midden-related deposits. A few later sherds were intrusive in some of these features, and earlier sherds were also present, possibly as 'found objects' in the case of the Roman sherds. A high proportion of early Anglo-Saxon pottery was deposited in features which are currently undated, and also occurs as residual finds in Periods 4 (medieval) and 5 (post-medieval).

5.4.21 Further analysis of the distribution of the Saxon pottery will be required for the final report, in particular with regard to any layering within the SFBs, and pits and other features associated with Saxon structures. A brief assessment of the pottery within each of the SFB pits suggests that there were several sherd links within the fills of the largest assemblage (G75), and some possible links were also identified within and between other features – these relationships will be examined in more detail during analysis. The vessel types and fabric proportions in each structure may provide a sequence for their backfilling.

5.5 **Ceramic Building Material** by Rae Regensberg

5.5.1 A large assemblage of ceramic building material consisting of 859 fragments, weighing 69,597g was recovered from 105 contexts. The assemblage was predominantly composed of Roman material. However, the material was very fragmented, mostly having been found in Saxon contexts, and there were other indications of reuse. The post-Roman material was post-medieval in date, with no distinctly medieval CBM recorded. There were some broadly dated flat roof tile pieces that could be medieval or post-medieval. A breakdown of the assemblage by form is provided in Table 10.

CBM form	Quant	%	Weight (g)	%
Roman				
Tegula	34	3.96%	6282	9.03%
Tessera	105	12.22%	1674	2.41%
Flue tile	25	2.91%	3777	5.43%
Imbrex	18	2.10%	1895	2.72%
Roman brick	156	18.16%	27938	40.14%
Roman tile	301	35.04%	5176	7.44%
Roman tile - tegula	155	18.04%	16410	23.58%
?Flue tile	2	0.23%	179	0.26%
?Imbrex	1	0.12%	299	0.43%
?Roman tile	2	0.23%	59	0.08%
Sub total	*799*	*93.02%*	*63689*	*91.51%*
Post-Roman				
Flat roof tile	38	4.42%	1605	2.31%
Pantile	2	0.23%	88	0.13%
Brick	13	1.51%	3717	5.34%
Floor tile	1	0.12%	327	0.47%
?Tile	2	0.23%	89	0.13%
?Brick	4	0.47%	82	0.12%
Sub total	*60*	*6.98%*	*5908*	*8.49%*
Total	*859*	*100.00%*	*69597*	*100.00%*

Table 10: Ceramic building material by form

5.5.2 All the material was recorded by form, weight, complete dimensions (when present) and fabric and entered into an Excel spreadsheet. Fabrics were identified with the aid of a x20 binocular microscope, and site specific fabric codes have been applied using the following conventions: frequency of inclusions (sparse, moderate, common, abundant); the size of inclusions, fine (up to 0.25mm), medium (0.25-0.5mm), coarse (0.5-1.0mm) and very coarse (larger than 1.0mm). Fabric descriptions are provided in Table 11. Form and fabric samples, as well as items of interest, have been retained. The remainder of the assemblage has been discarded.

Fabric	Description
Roman	
R1	Fine orange fabric with moderate to common very fine to fine quartz, mica and very sparse medium to coarse calcareous material. Some with areas with sparse medium, black oxidised material.
R1A	Sparse quartz. Very occasional medium or coarse quartz.
R1B	Includes cream streaking.
R2	Orange, micaceous fabric, quite coarse, with sparse medium, mostly rounded quartz, sparse to moderate fine to coarse orange to red iron rich material.
R3	Micaceous, orange to tan fabric with common very fine black speckling/grains and sparse fine to medium quartz.
R3A	Abundant very fine quartz, maybe a poorly fired version of R3.

Fabric	Description
R3B	Includes very coarse, grey to tan silty pellets.
R4	Orange fabric with moderate medium quartz, mostly rounded and includes rose quartz, and occasional to sparse calcareous material.
R4A	Abundant medium quartz.
R5	Orange, very micaceous, gritty fabric with sparse to moderate fine to medium quartz.
R6	Red to orange fabric with abundant medium quartz and common medium burnt out calcareous lined voids and calcareous material.
R7	Orangey red fabric with abundant fine quartz and common medium quartz.
R8	Tan to orange with sparse fine quartz and sparse to moderate medium to coarse dark ?oxidised material, and sparse fine to medium calcareous material.
Post-Roman	
T1	Orange fabric with common fine quartz and moderate to common very fine black grains.
T2	Orangey red fabric with moderate quartz, mica and sparse medium dark red to black oxidised material.
T3	Orange fabric with common very fine quartz and sparse fine to coarse red oxidised material.
T4	Orange fabric with moderate fine quartz, mica, some darker orange/iron rich streaks and darker orange medium and coarse pellets.
T5	Orange fabric with gritty, very quartz rich matrix and cream streaks.
T6	Orange fabric with abundant very fine quartz.
T7	Fine orange fabric with sparse to moderate fine to medium quartz.
B1	Red, powdery fabric with gritty/abundant very fine quartz, varying quantities of very fine black grains, sparse to moderate medium and coarse red oxidised material, occasional to sparse medium and coarse calcareous material, and mica.
B2	Orange fabric with common to abundant very fine and fine quartz and moderate to common coarse and very coarse dark orange, iron rich material.
B3	Red fabric with moderate medium, coarse and very coarse black oxidised material, and moderate to common medium to coarse quartz, and fine calcareous speckling in some areas.
FT1	Cream to white fabric with sparse fine to coarse dark orange oxidised material.

Table 11: CBM fabric descriptions

Roman CBM

5.5.3 There was a large range of Roman fabrics identified, although the assemblage was dominated by the fine, orange, relatively quartz free R1A and more quartz rich R1 fabrics. These are fairly common fabric types for Roman CBM, analogous with MoLA fabrics 2452 and 3004 (MoLA 2014). Both have a mid-1st to mid-2nd century date (MoLA 2017). The micaceous, gritty R5 fabric was also reasonably common at the site. It is possible, however, that the R5 fabric is a low-fired version of the R1A fabric; there were a number of pieces that appeared to be somewhat in between each category. The only other fabrics present in any notable quantity were the R3A fabric, distinguished primarily by black grains and large quantities of quartz, and the

R2 fabric which was notable primarily due to its distinctly rounded quartz. The R3A fabric is similar to the MoLA 3023 fabric, which has a mid-1st to 3rd century date. The remaining fabrics were represented by fewer than 40 individual fragments, and many (R1B, R3B, R6 and R8) had five or fewer fragments recovered.

5.5.4 The forms present included Roman brick, tegula, imbrex, tessera and flue tile. There were also a large quantity of spalled fragments and pieces of undiagnostic form that have been recorded as Roman tile. A separate category was also used for flat pieces with thicknesses suggesting that they were tegula body fragments (Roman tile – tegula).

5.5.5 Altogether, 156 pieces of Roman brick was collected during the excavations. The brick was identified based on a thickness greater than 35mm, although several thinner corner fragments (33mm to 34mm) were clearly brick as no flange or cutaway was present. No complete or near complete bricks were found, the only dimension was thickness, which was between 33mm and 45mm. The majority of the fragments had reduced cores, most were well fired and knife trim was present on the base and/or side of a large proportion of the Roman brick assemblage. Several pieces had part of finger-swiped signatures present. One fragment had two incised lines on the upper surface, but the piece was too small to see if these were intentional or accidental. A large proportion of the brick fragments had reduction on their upper surfaces, many also had indications of heat exposure on broken edges. This is strongly indicative of either reuse as hearth bricks, or use in an oven/corn dryer or similar. This was common after the Roman period when CBM was no longer produced. This would also explain the preponderance of brick over roofing material despite brick normally being less common than roof tile. Tegula usually outweighs the Roman brick assemblage significantly; however, here, it is roughly proportionate, indicating selective recycling of useful and easily available Roman CBM. Although this was practiced in the later Roman period, it is far more common afterwards.

5.5.6 Only 34 fragments of tegula were recovered, although 155 flat pieces with thicknesses between 20mm and 30mm were also recorded; these dimensions are consistent with average tegula body thicknesses. The tegula were between 18mm and 25mm thick; no other dimensions were measurable due to the fragmented state of the assemblage. The flange profiles were predominantly rectangular to sub-rectangular with dimensions ranging from W: 19mm x H: 41mm to W: 32mm x H: 50mm (height was taken from the base of the tegula). One trapezoidal flange was also recorded. The flanges were accompanied by a finger swiped 'channel' along the flange edge (one had four 'channels' present), except for three where a tool had been used instead of a finger. Only one complete cutaway was noted, this was a type C according to Warry's (2006, 251) typology. Warry suggests that the type C lower cutaway has a manufacture date of AD 160 to AD 260. Knife-trimmed sections were common on the sides and bases of the tegula and body fragments (Roman tile – tegula). Several of the tegula and flat body fragments had sections of finger swiped arcs present, these signatures have been interpreted as a type of tally mark (Brodribb 1987, 99–101), and a cat paw print was recorded on one tile. A significant quantity of the pieces had both reduced cores and general reduction, or reduction on the upper surface; two

pieces also had soot present. The general and surface reduction suggests heat exposure post-firing and, like the Roman brick, this might be an indicator of reuse as hearth or oven tiles of some sort.

5.5.7 There were 18 small fragments of imbrex in the assemblage. These were primarily identified by their curvature. They were between 11mm and 18mm thick, no other dimensions were available due to the fragmented state of the imbrices. It is probable that many of the small fragments recorded as Roman tile that had similar thicknesses were imbrex fragments. One larger piece had finger swiped lines running across the tile. A moderately large collection of 105 tesserae were recovered. A random sample were measured and had dimensions ranging from 25 x 22 x 16mm to 36 x 20 x 22mm. They were in eight different fabrics but most commonly R1A and R4. Most were reasonably neat cuboids in form; however, a number were quite irregular but clearly tessera based on the mortar present on the base and sides.

5.5.8 Flue tile was represented by 25 pieces, most of which were identified by the presence of comb keying. Two fragments had deeply scored lines crossing diagonally in both directions; one was so deeply scored that it had snapped along one of the lines. These were found together, and are most likely from the same flue tile. The flue tiles were between 17mm and 27mm thick, no complete widths or heights were present. Lime mortar and reduction was noted on many of the fragments.

5.5.9 The undiagnostic Roman tile was primarily spalls, but a large quantity of the spalled fragments were chunky enough to be either Roman brick or tegula. Most of the larger pieces had reduced cores and/or general reduction present.

5.5.10 The Roman CBM was spread over 93 contexts; however, there were several notable concentrations. The largest quantity of Roman material was recovered from early Saxon G65 hollow fill/layer [2057]; this included all but one of the tesserae recovered. Although the quantity was notable, a large amount of this was spalled material and, while it made up 25.5% of the assemblage by count, it only comprised 5.5% by weight. Nevertheless, the concentration of tesserae is interesting. It is important to note that there are no Roman features on site and that Roman CBM was mostly recovered from archaeological features dating to the early Saxon period. Examples of reused Roman mosaic, such as at St Albans Abbey, includes tesserae made from tegulae (Nancarrow 2013, 77). Although this is a later example, reuse of Roman CBM was common in the Saxon period (Wilson 2006, 231). The fill of early Saxon hollow G68 ([2280]) contained 108 pieces of Roman tile and brick, including pieces with reduced surfaces indicating reuse, and was accompanied by 6th century Saxon pottery. The majority of Roman CBM was recovered from early Saxon dated archaeological features, with no evidence of Roman landuse on site. This strongly supports that we are looking at material that has been brought in for reuse. There were fourteen contexts with Roman CBM that were not associated with any other artefacts; however, except for structure G59 ([2091]), these contained negligible quantities by both count and weight. Possible hearth/dryer structure G59 produced substantial pieces of Roman brick and flat pieces of tegula body, as well as flue tile and imbrices. Despite the lack of Saxon material in this feature, the

preponderance of reused material and low levels of Roman pottery at the site may indicate that these were also reused. Other than several pieces of tile in the R3 fabric, all of the CBM in G59 ([2091]) was in the R1 fabric group, which may indicate that the material was retrieved from one source rather than a haphazard collection from multiple sources over time, although this may be extrapolating too far with a collection of only 76 individual pieces. None of the pieces had post-firing heat exposure, which precludes their use in a hearth or similar feature.

Post-Roman CBM

5.5.11 The post-Roman material was predominantly composed of roof tile, with a small component of brick and one piece of floor tile. There were 38 pieces of flat roof tile in six different fabrics thinly distributed over 19 contexts. No context had more than five individual fragments present. The most common was the T1 fabric, which is very similar to the Roman R3A fabrics, possibly indicating a local raw material source that has been repeatedly exploited since the Roman period. The remaining fabrics were sparsely represented. Approximately half of the flat roof tile was only broadly dated as medieval to post-medieval due to a lack of diagnostic features. The remaining fragments were very neat with a very fine, neatly applied mould sand, and were well-fired. These fragments are more likely to be post-medieval in date, although this is difficult to confirm due to the consistency in form of flat roof tile throughout the medieval and post-medieval periods. Thickness was the only dimension measurable for all fabrics, and these ranged widely in all fabric categories (10mm to 16mm), although the post-medieval tile tended to be slightly thicker in general. One 16mm thick fragment in the T5 fabric had a black glaze, this is possibly a floor tile. The pantile recovered was in two different fabrics, T6 and T7. These were 17mm and 13mm in thickness and collected from the subsoil [1002] in Area 2 and the basal fill [2305] of early Saxon possible SFB G73, respectively. Pantile was imported from the 17th century but became more common from the late 17th to 18th century. The T6 fragment from SFB fill [2305], however, was particularly neat and well-fired, which suggests a later post-medieval date.

5.5.12 One floor tile piece was recovered from post-medieval/modern G41 ditch fill [2082], in Area 2. It was smooth on both base and upper surfaces, had mould sand and minor creasing on sides. It tapered in thickness, from 20mm to 29mm, no other dimensions were possible.

5.5.13 Except for one piece, the post-Roman brick assemblage was all in the B1 fabric. The larger pieces of the B1 bricks were between 51mm and 66mm in thickness, none of the fragments were complete enough for breadth or length dimensions. The thinner fragment was comparatively irregular, and at 51mm, is likely to be older than the thicker pieces (58mm to 66mm). The thicker fragments were also neater with sharp arrises and were well fired. One of these also had a neat frog present. These have a later post-medieval date and were collected from post-medieval/modern fills in G41 ditch segs [2043] and [2083]. The one piece of B2 brick was 55mm thick and was slightly irregular in form. This fragment is post-medieval in date, and was also found in G41ditch seg [2043].

5.6 **Fired Clay** by Stephen Patton

5.6.1 A relatively large assemblage of fired clay was recovered from 60 separate contexts during the evaluation and subsequent excavation. Weighing a total of just under 7kg, the assemblage consists of amorphous fragments with no diagnostic features (3.2kg), fragments of daub (1kg), pieces with flat surfaces that are also most likely fragments of daub (1kg), and the remains of ten ceramic objects. All of the objects have been given a Registered Find number (RF<>) and, other than one possible ceramic wedge RF<776>, they are all the fragmentary remains of loomweights. These loomweights mostly appear stylistically middle Saxon (*c.*7th–9th century). However, they were typically found with early Saxon pottery (spanning the 5th–7th centuries) and all are very fragmentary and incomplete, sometimes only represented by a single fragment. It is possible that they overlap with the later end of activity suggested by the pottery or, alternatively, that they represent early Saxon forms that were too fragmentary to characterise typologically. Table 12 shows the quantification of the assemblage by form.

Form	Count	Weight (g)
Amorphous	1123	3226
Daub	51	997
Daub?	250	1019
Loomweight RF<777>	3	172
Loomweight RF<778>	1	63
Loomweight RF<779>	2	92
Loomweight RF<20>	30	841
Loomweight RF<23>	1	105
Loomweight RF<24>	1	74
Loomweight RF<25>	1	39
Loomweight RF<537>	1	115
Loomweight RF<717>	1	68
Wedge? RF<776>	1	64
Total	*1466*	*6875*

Table 12: Quantification of fired clay by form

5.6.2 The fragments were examined with the naked eye for diagnostic characteristics indicating form and/or function and recorded by count and weight in an Excel spreadsheet. Fabrics were identified and described using a x20 magnification binocular microscope. See Table 13 for the site-specific clay fabric descriptions allocated.

5.6.3 The fired clay fragments that have wattle impressions have been recorded as daub, those fragments with flat surfaces and no other diagnostic features have been recorded as probable daub, and those with no diagnostic features as amorphous. However, it should be noted that the amorphous material also most likely originated from daub.

5.6.4 In order to estimate the diameters of the loomweights and their central holes, a circumference rings board was used. However, due to the hand-made

nature of these objects, and their forms being often sub-circular and uneven, these estimates are to be considered very approximate and as a guide to their original sizes rather than as exact measurements.

Fabric	Description
F1	Fine silty micaceous clay with rare fine quartz, ferrous inclusions, rare chalk 0.5-2mm and very rare stone 3mm
F2	F1 with common fine to medium quartz and very rare chalk up to 10mm
F3	F1 with moderately frequent to common chalk 0.5-20mm
F4	Fine silty micaceous clay with moderately frequent fine quartz
F5	Fine silty clay with organic striations and voids
F6	Fine silty clay with moderately frequent quartz, rare coarse and very rare very coarse sand 4-5mm
F7	Fine silty micaceous clay with chalk 1-3mm
F8	Fine silty clay with sparse fine quartz and organic voids
F9	Fine silty clay with clay pellets or possibly grog

Table 13: Site-specific fired clay fabrics

Distribution

5.6.5 The largest amount of material was recovered from Area 2 (5.5kg), with only very small amounts being present in Area 1 (0.1kg) and Area 3 (0.7kg). In terms of the dating of activity on site, almost 6kg is from Period 3 features and deposits. In total, 5kg of the Area 2 material relates to this Period 3 activity, with just under 1.4kg being the remains of loomweights. The majority of fired clay was collected from features and deposits of Period 3 date. Table 14 shows the quantification of material by group, context and form.

5.6.6 The largest single context assemblage is the 2.6kg of amorphous fragments from refuse pit [2347] (G93). All of these fragments are very heavily abraded and friable, appearing to have been potentially baked in the sun rather than exposed intentionally to fire. Whilst these fragments do not have any diagnostic features, it is most likely they originate from the remains of a daubed structure.

5.6.7 Three of the sunken-featured buildings, G73, G76 and G77, and another possible SFB, G85, produced loomweights RF<23>, RF<778>, RF<24> and RF <25> respectively. All of the other loomweights and possible wedge RF<776> are from various features across Area 2 and were not concentrated in any one specific location.

5.6.8 In general, the fragments of daub and probable daub are spread over the site in very small quantities, indicating that wattle and daub structures were present, but the spatial distribution does not indicate where these may have been located. However, the presence of over 500g of material found in SFB/structure G15 and structure G59 might suggest that these included daubed elements to their construction.

Period	Area	Group	Parent	Context	Form	Count	Weight (g)
1	1	G1	Pit [1058]	[1057]	Amorphous	3	36
		G6	Pit [1060]	[1059]	Amorphous	1	2
3	1	G3	SFB [1051]	[1050]	Amorphous	1	2
			SFB [1054]	[1052]	Daub?	1	45
		G4	Pit [1038]	[1037]	Daub?	3	8
		G5	Pit [1042]	[1041]	Daub?	1	11
	2	G59	Foundation [2096]	[2096]	Amorphous	119	202
			Foundation [2097]	[2097]	Daub?	164	372
		G60	Hollow [2005]	[2003]	Wedge? RF<776>	1	64
			Hollow [2114]	[2114]	Amorphous	2	19
		G64	Hollow [2116]	[2115]	Amorphous	5	27
					Loomweight RF<537>	1	115
			Hollow [2280]	[2279]	Loomweight RF<717>	1	68
		G68	Hollow [2104]	[2041]	Amorphous	3	4
			Deposit [2355]	[2355]	Amorphous	4	4
		G73	SFB [2305]	[2303]	Amorphous	13	105
					Daub?	2	38
					Loomweight RF<23>	1	105
		G74	SFB [2157]	[2156]	Amorphous	1	29
		G75	SFB [2053]	[2052]	Amorphous	7	26
		G76	SFB [2227]	[2228]	Loomweight RF<778>	1	63
		G77	SFB [2345]	[2342]	Loomweight RF<24>	1	74
		G78	SFB [2244]	[2243]	Daub?	3	10
		G81	Pit [2131]	[2130]	Amorphous	6	6
		G92	Ditch [2054]	[2055]	Amorphous	1	7
		G93	Refuse pit [2347]	[2348]	Amorphous	82	115
				[2351]	Amorphous	808	1681
				[2352]	Amorphous	34	830
		G94	Pit [2016]	[2015]	Daub	5	64
			Pit [2254]	[2253]	Amorphous	2	1
		G100	Pit [2170]	[2169]	Amorphous	1	2
		G103	Pit [2288]	[2287]	Loomweight RF<779>	2	92
					Loomweight RF<20>	30	841
		G71	SFB [4019]	[4018]	Daub?	1	20
		G72	SFB [4027]	[4026]	Amorphous	3	43
		G73	SFB [4017]	[4016]	Daub?	1	7
		G85	SFB [4025]	[4023]	Daub	5	126
				[4024]	Loomweight RF<25>	1	39
	3	G12	Ring-ditch [3045]	[3042]	Amorphous	4	11

Period	Area	Group	Parent	Context	Form	Count	Weight (g)
			Ring-ditch [3317]	[3319]	Amorphous	1	5
			Ring-ditch [3408]	[3414]	Amorphous	1	5
		G15	SFB [3053]	[3052]	Daub	29	302
			SFB [3055]	[3054]	Daub?	26	145
			SFB [3162]	[3161]	Daub?	20	158
			SFB [3164]	[3163]	Daub?	2	10
		G16	Pit [3453]	[3452]	Amorphous	2	5
		G17	Pit [3021]	[3019]	Daub?	1	21
4	2	G48	Ditch [2314]	[2315]	Amorphous	2	25
			Ditch [2421]	[2420]	Amorphous	1	5
Undated	2	G61	Hollow [2008]	[2006]	Daub?	1	51
	2	G62	Hollow [2012]	[2009]	Loomweight RF<777>	3	172
			Hollow [2012]	[2010]	Daub?	2	24
			Hollow [2068]	[2067]	Amorphous	1	1
		G97	Pit/posthole [2300]	[2299]	Amorphous	3	11
		G98	Pit [2381]	[2380]	Daub?	6	52
		G99	Pit [2199]	[2167]	Amorphous	1	1
		G13	Hollow [3135]	[3134]	Amorphous	5	10
	3 -	G34	Pit [3051]	[3050]	Amorphous	2	2
		G34 G37	Posthole [3266]	[3265]	Amorphous	1	2
			Pit [3305]	[3304]	Daub?	16	47
			Ditch terminus [3332]	[3386]	Amorphous	1	1
			Deposit [3440]	[3440]	Amorphous	2	1
		U/S	U/S	U/S	Daub	12	505
						1466	*6875*
Total							

Table 14: Quantification of fired clay by group, context and form

Fabric

5.6.9 Of the nine clay fabrics identified within the assemblage, fabrics F3 and F7 are the most prevalent by weight. These two fabrics are predominantly present within the daub, probable daub and amorphous material, suggesting that a local outcrop of clay relating to the Newhaven Chalk Formation bedrock was exploited for daubing structures. Clay fabric F6 was used for five out of the nine loomweights, with fabrics F8 and F9 being used for three of the others. Only 'unfired' loomweight RF<20> was made from a chalky fabric, suggesting that it may have been made somewhat *ad hoc* from the clay used for daub. See Table 15 for the quantification of clay fabrics.

Fabric	Count	Weight (g)
F1	10	75
F2	11	79
F3	174	2294
F4	30	251
F5	1	64
F6	10	554
F7	1226	3341
F8	2	73
F9	2	144
Total	*1466*	*6875*

Table 15: Quantification of fired clay fabrics

Form and decoration

5.6.10 The Period 1 prehistoric fragments of fired clay (36g) were recovered from early Neolithic pit [1058]. They are all amorphous, though there are possibly external flat surface areas on two. It is not clear what form, if any, they originally had.

5.6.11 The wattle impressions in the Period 3 material that could be positively identified as daub range in size from *c*.5mm in diameter to 20mm. One impression is too large to measure as the complete imprint is not present, but the shape indicates a rounded wooden post rather than worked timber with corners.

5.6.12 The only somewhat informative part of the assemblage that has been recorded as possible daub is the 52g from undated pit [2381] in Area 2. These six fragments are very hard suggesting that they were exposed to heat sufficiently to become fully ceramic. Whilst they may simply be the slight remains of a structure that burnt down, they could potentially be from an oven superstructure. However, pit [2381] shows no signs of *in situ* burning and the small quantity of fragments suggests whatever the origin of the clay was, it was situated not too far away and that the fragments were rolled prior to deposition. Potentially they could even have originated from nearby possible sunken featured building G80.

Registered Finds: Ceramic Objects

5.6.13 RF<776> is a sub-rounded ball of clay that has been fired. The slight angle on one side suggests it may have been a wedge or prop of some type, but it is not diagnostic enough to identify with any certainty. This possible wedge weighs 64g and was recovered from pit [2005], fill [2003]. It measures approximately 50mm x 40mm in size and is 28mm in height at the top. The colouring is an oxidised mid-orange brown, and it is made from clay fabric F5.

5.6.14 RF<777> consists of three conjoining fragments of an intermediate form early medieval loomweight (i.e. quoit-shaped, with thickness of the ring larger than or equal to the diameter of the hole). It weighs 172g and was recovered from quarry pit [2012], fill [2009]. It is sub-rounded in shape, with a diameter estimated to have been *c*.90mm. The central hole is estimated to have been

approximately 30mm in diameter. One side slightly flattened from when it was formed and fired, and it is made from fabric F6.

5.6.15 RF<778> is a single fragment of intermediate form early medieval loomweight. It weighs 63g and was recovered from sunken-featured building G76, seg [2227], fill [2228]. It is made from fabric F6, its estimated diameter is 140mm, and the estimated diameter of the internal central hole is 50mm.

5.6.16 RF<779> consists of two non-conjoining parts of a most likely intermediate form early medieval loomweight recovered from G103 pit [2288], fill [2287]. The fragments weigh 92g in total, and are made from fabric F6. The remains of the object are too fragmentary to estimate the original size.

5.6.17 RF<20> is the very fragmentary remains of an 'unfired' loomweight. The 30 fragments are all made from fabric F3 and weigh a total of 841g. It was recovered from pit G103 [2288], fill [2287], along with RF<779>. The fragments are mostly too indistinct and friable to ascertain the original shape, and it cannot be ruled out that there are not two objects present, but there are enough central hole parts to positively identify it as a loomweight. The clay appears to have been baked dry rather than fired, which is similar to other examples (see below) that have been described as ‘unfired’.

5.6.18 RF<23> is a single fragment constituting just under half of an intermediate form early medieval loomweight. It weighs 105g and was recovered from G73 SFB seg [2305], fill [2303]. It is made from fabric F9, has an estimated diameter of 120-140mm, and a central hole estimated to be 20–30mm in diameter.

5.6.19 RF<24> is a single part of an intermediate form early medieval loomweight that weighs 74g. Its estimated diameter is 120mm and the estimated central hole diameter is 40mm. The weight is made from fabric F6 and it was found in SFB G77, seg [2345], fill [2342].

5.6.20 RF<25> is a single slightly friable fragment of a most likely intermediate form early medieval loomweight. It is made from fabric F9, weighs 39g and was found in fill [4024] of seg [4025] of possible SFB G85. Only the internal central hole surface and inner part of the object survive, with the central hole diameter estimated to be 35mm.

5.6.21 RF<537> is a single fragment of an early medieval loomweight of intermediate form. It was recovered from G64 hollow [2116], fill [2115] and weighs 115g. The estimated diameter is 115mm, and the central hole is estimated to have been 40mm in diameter. It is made from fabric F6 and is sub-circular in shape.

5.6.22 RF <717> is also a single fragment of intermediate form early medieval loomweight. Weighing 68g, it was recovered from pit [2280], fill [2279] and is made from fabric F8. The fragment is quite thin walled, but the estimated diameters suggest intermediate rather than annular form. The estimated diameter is 180mm, and the estimated central hole diameter is 60mm.

Discussion

Daub

5.6.23 The use of wattle and daub structures was very common during the early medieval period in England (Hughes 2004), so such a small amount being recovered from this Bramford site is notable. This is especially the case when it is taken into consideration the number of sunken featured buildings and other structures identified during the excavation. Even if it is assumed that all the amorphous clay originated from daub then the entire assemblage only amounts to just over 5kg.

5.6.24 However, building daub is usually not intentionally heated by fire, and instead bakes hard in sunlight. This means that it remains somewhat friable and once the building goes out of use and collapses the daub will most likely dissipate into the ground over time as it gets wet and reverts back to being soft clay particles. This type of daub may be what was preserved in refuse pit [2347].

5.6.25 It could be that the only daub that has survived is rarer fragments that have been exposed to fire to some degree, either due to the accidental burning of buildings or due to the daub being from ovens and other clay structures that utilise fire.

5.6.26 Notable assemblages of daub have been recovered from sites in *Lundenwic*, the middle Saxon part of London. This daub is often ceramic, most likely due to fires breaking out and daub buildings being destroyed. Hughes (2004) quotes the Roman architect Vitruvius who stated that “As for ‘Wattle and Daub’ I could wish it had never been invented. The more it saves in time and gains in space, the greater and the more general is the disaster that it may cause; for it is made to catch fire, like torches.” This appears to be true in the case of *Lundenwic* where excavations have recovered substantial quantities of daub that has been turned ceramic. The largest quantities so far are 89kg recovered by Archaeology South-East (Clifford and Patton forthcoming), and over 48.5kg recovered by Museum of London Archaeology (Smith 2012, 216, Table 36).

5.6.27 It seems most likely then that the structures at Bramford did indeed have wattle and daub elements to them, but their spatial distance from one another meant that even if one were to catch fire the others would not. Kruger (2015) examined the sintering and distribution of the fragmentary daub deposited after the conflagration of a wattle and daub house in Mexico. He noted that not all of the daub was sintered, and the most ceramic parts of the daub were those near to the wattle as that produced the fuel for the fire. Additionally, he observed that most of the fragments are quite small due to breaking when hitting the ground, and that most did not have diagnostic wattle impressions. Kruger estimated that in total less than 2% of all the daub would be sintered enough to remain in the archaeological record.

5.6.28 Therefore, whilst the fragmentary daub and amorphous fired clay assemblage from the site is relatively small, its presence at all when combined with the evidence for structures indicates a strong case for daubed buildings.

Loomweights

5.6.29 Loomweights are a relatively common find on early medieval sites, with the forms of these objects generally correlating to specific phases throughout the Saxon period. Hurst (1959, 23–24 and Fig. 6.24) expanded on the earlier binary division of loomweights and characterised them as annular, intermediate and bun-shaped.

5.6.30 Annular-shaped weights are defined as being where the weight's central hole diameter is larger than the radius of the weight itself (Keily and Blackmore 2012), and this form is typical of the early Saxon period (*c.*5th to 7th century AD). The intermediate form is broadly characterised as the diameter of the central hole is smaller than with annular examples, but still relatively large, and this form is characteristic of the middle Saxon period (*c.*7th to 9th century AD). Lastly, bun-shaped loom weights, also referred to as being biconical in form, have a small central hole (Keily and Blackmore 2012) and are typical of the late Saxon period (*c.*9th to 11th century AD).

5.6.31 This assemblage appears to entirely consist of intermediate forms, which are more typical of the 7th century AD onwards. However, all of the dimensions have been estimated as the weights are quite crudely formed, and it cannot be ruled out that some were originally closer to earlier annular forms. Alternatively, closer dating of the site via subsequent pottery analysis and phasing adjustments may indicate that the loomweights are from contexts from the 6th to 7th century AD. This would then potentially provide evidence that these objects are some of the earliest intermediate form loomweights in the region.

5.6.32 Unfired loomweights are relatively common in early medieval loomweight assemblages, with examples from the East of England being found at Mucking, Essex (Hamerow 1993) and Pakenham, Suffolk (Plunkett 1999). It is still uncertain whether they were used after being drying or even being baked in the sun, or whether they were intended to be fired but never were.

5.6.33 The number of weights provides evidence of textile making being undertaken to some degree at the site during Period 3. This is supported by the presence of other objects related to textile manufacture being recovered, such as bone spindle whorl RF<704> and thread pickers RF<715>, RF<718> and RF<719>.

5.7 Clay Tobacco Pipe by Elke Raemen

5.7.1 A single clay tobacco pipe (CTP) stem fragment weighing 3g was recovered from pit [2157], fill [2156]. The piece is unmarked and undecorated, and dates to the 19th century. It was found as an intrusive find in SFB G74.

5.8 Glass by Elke Raemen

5.8.1 A small assemblage comprising 16 fragments of glass with a combined weight of 1,564g was recovered from eight individually numbered contexts. Both hand-collected pieces and those recovered from bulk soil samples are included.

5.8.2 The earliest comprises a possible shoulder fragment from a green bottle, dating between *c.*1650 and 1800. The piece was recovered from Period 3 G61 hollow [2008], fill [2006], but is clearly intrusive here.

5.8.3 The remainder of the assemblage dates to the 19th century or later. This includes more wine bottle fragments, including a 19th-century example (Period 5 G41 ditch seg [2083], fill [2082]) and a more broadly post-medieval to modern dated tiny fragment found in the residue from bulk soil sample <49> (basal fill [2343] of early Saxon SFB G77). Three beer bottles of late 19th- to mid-20th-century date, representing just one green bottle, were found in Period 5 G41 ditch seg [2043], fill [2042]. The same context also contained an olive green globular bottle with embossed dotted zigzag pattern and dating to the 19th century, and an aqua cylindrical bottle dating to the late 19th- to mid-20th century. The latter is likely to represent a mineral water bottle. Jars include a cylindrical and a rectangular panelled example, both from ditch G41 seg [2083], fill [2082]. Both date between the mid-19th and mid-20th century. Finally, modern pit [2129], fill [2128] (G67) contained a clear rectangular bottle embossed "ESS CAMP COFFEE & CHICORY GLASGOW" and dated to the late 19th to early 20th century.

5.8.4 Window glass includes two clear fragments of post-medieval or modern date, recovered from bulk soil samples <33> and <47> (fill [2067] of G62 hollow [2068] and fill [2310] of post-medieval to modern pit [2311], G96). They comprise tiny fragments (<1g) and can only be dated broadly to the post-medieval or modern period.

5.9 Geological Material by Luke Barber

5.9.1 The excavations recovered 456 pieces of stone, weighing 50,554g, from 63 individually numbered contexts. Most of this material was recovered by hand, with only 10 pieces (1,365g) being recovered from three bulk soil samples. The material has been fully listed on geological record sheets by provisional stone type for the archive, with the resultant information being used to create an Excel spreadsheet as part of the current assessment. Some of the main stone types have variations (such as colour or coarseness) that have been distinguished between. Although these variations may simply represent different beds within the same exposure, they have been kept separate to facilitate any detailed sourcing studies that may be undertaken in the future.Any pieces of significance will be accorded Registered Finds numbers during the analysis phase of work. The assemblage is characterised in Table 16, by provisional type and period.

Phase/Type	***Period 3 Early Saxon***	***Period 4 Medieval***	***Period 5 Post-med***	***Undated***
No. of contexts	*41*	*5*	*3*	*14*
1a Midlands-type sast	63/6935g	-	1/64g	6/310g
1b Bunter-type sast	14/1143g	-	-	2/261g

Phase/Type	*Period 3 Early Saxon*	*Period 4 Medieval*	*Period 5 Post-med*	*Undated*
2a German lava	196/11,285g	12/445g	-	30/450g
3a Quartzite	23/3151g	-	3/284g	3/401g
3b Coarse quartzite/ quartzose sast	19/3684g	-	4/562g	2/447g
4a Fine grey calcareous sast	2/52g	-	-	1/59g
5a Basalt	4/640g	-	-	1/299g
6a Coarse Tertiary sast	-	-	-	11/7187g
7a Coal	2/30g	-	4/42g	-
8a Tertiary flint	21/1402g	-	1/358g	-
8b Fire-cracked flint	1/692g	-	-	-
8c Iron pyrites	-	-	-	1/96g
9a Septaria	13/954g	-	-	-
10a Hertfordshire puddingstone	3/203g	-	-	-
11a Lower Greensand	1/25g	-	-	-
12a Coarse flecked hard sast	1/202g	-	-	-
13a Oolitic limestone	1/38g	-	-	-
13b Shelly oolitic limestone	-	-	-	1/64g
14a Granite	5/8552g	-	-	-
15a Shelly limestone	1/78g	-	-	-
16a Ferruginous sast	1/66g	-	-	-
17a Millstone Grit		-	-	1/59g
18a Micaceous fine brown sast	1/34g	-	-	-
Total	*372/39,166g*	*12/445g*	*13/1310g*	*59/9633g*

Table 16: Characterisation of the geological material by period

The assemblage

5.9.2 Although there is a moderate variety of different stone types present in the assemblage, the vast majority of these are of types that one may expect to occur naturally in the area after natural transportation from their geological source. The material would appear to derive from a number of original sources, including the Thames estuary (e.g. the 9a Septaria) and sources to the north of the county (e.g. the 1a and 1b sandstones from the Midlands and the 13a and 13b limestones from Lincolnshire). This would be in keeping with the material being heavily derived from glacial till and fluvial/coastal deposits. The vast majority of these pieces are well worn and there are many cobble fragments among them – all of the Midlands-type sandstone consists of cobble fragments. Beyond unintentional burning, none of this material has been modified.

Period 3: Early Saxon

5.9.3 This Early Saxon period produced by far the largest assemblage from the site (Table 16). As noted above, the vast majority of this consists of stone types

that can be considered as potentially naturally occurring on the site. Most of these are unworked though many have been burnt, possibly as a result of them being utilised as hearth surrounds. A quantity of the recovered stone fragments have, however, been worked and comprise quernstones and a whetstone.

5.9.4 199 pieces (19,717g) comprised quern fragments, though these are represented by just two stone types. All but three of these are imported German lava (196/11,285g) and, typically for the type, the vast majority consist of worn amorphous pieces with no surviving morphological detail. By far the best example was recovered from structure G59, which produced 46 pieces (10,022g) probably deriving from a single *c.*400mm diameter rotary quern with a thickness of about 45mm. Although very fragmented, the pieces are quite fresh and display the remains of the *c.*80mm diameter central perforation. The only other German lava quern fragments with measurable dimensions were recovered from deposit [2056] (G65) and SFB [3373] (G22) where full thicknesses measuring 20mm and 29mm respectively were recorded. Although 16 pieces (250g) were from Area 3, the remainder were all recovered from Area 2. This is an area where most of the residual Roman finds were made and, although lava querns were used in the Saxon period, the possibility of residual and/or re-used Roman stones needs to be considered. The only other stone type used for querns consists of granite.. Deposit [2290] (G68) produced three pieces (8432g) from a water-worn granite boulder measuring 65-70mm thick, one of which has part of a grinding face surviving, suggesting they were used as a saddle quern. The use of locally available glacial boulders for querns is well known in East Anglia, though it is usually noted for the prehistoric period. Whether this example is a residual piece or represents a similar opportunistic utilisation of locally available resources in the Saxon period is uncertain.

5.9.5 The only other deliberately worked stone from deposits of this period consists of a 34g fragment from a whetstone in a slightly micaceous fine grey-brown sandstone (G103 pit [2288], Area 2). The stone is 55mm long by 7mm thick, with a width tapering from 36mm to 32mm wide. Non-local whetstones are common in the area during the Saxon period and its presence here is not unexpected.

Period 4: Medieval

5.9.6 Contexts of this period produced very little stone and, surprisingly, the assemblage consists solely of German lava quern fragments. All of this material was recovered from Area 2 and it is quite possible that the material represents residual Roman and/or Saxon material, even though the stone type was imported for querns in the medieval period itself. The majority of pieces consist of the usual amorphous lumps, but stone thicknesses of 27mm and 20mm were recorded from pit [2174] (G102) and ditch [2405] (G46).

Period 5: Post-medieval

5.9.7 This period produced roughly the same stone quantities as Period 4 (Table 16), though the types are a bit more varied. The majority can be considered natural to the site and the presence of burnt quartzite cobble fragments

suggests most of the material is residual from earlier periods. The only clearly contemporary stone type is coa,l with four pieces (42g) being recovered from deposit [2046]. It is certain that the two pieces of coal recovered from Period 3 pit [2038] are intrusive post-medieval pieces.

Undated/unphased

5.9.8 Features that are currently unphased produced a larger group of stone (Table 16). The majority of this material again consists of unworked pieces that can be considered natural to the site. Many are burnt and are similar types to those noted for Period 3, which may suggest they relate to the Saxon activity. The 30 pieces of German lava quern that this assemblage includes are all amorphous lumps with no morphological detail. A single whetstone fragment was recovered from G61 hollow fill/layer [2008]. This is in a fine calcareous sandstone and measures *c.*60mm long with a section measuring 25x17mm, but it is not intrinsically datable. The other stone of interest is part of a grindstone in coarse Tertiary sandstone (with embedded flint and chalk). The stone measures *c.*230mm in diameter by 118mm thick and, although much of the original face has been lost, the exterior edge is clearly smoothed/worn from use. Again, this piece is not intrinsically datable. The only other stone of note is a piece of Millstone Grit that, although irregular and burnt, could be part of a Roman quern (fill [4016] of SFB G73).

5.10 Metallurgical Remains by Luke Barber

5.10.1 The excavations recovered just 1,730g of material initially identified as slag, from 58 individually numbered contexts. This comprises six pieces of slag collected by hand in the field (176g), with the remainder being recovered from 53 bulk soil sample residues (mainly from the magnetic fractions). The assemblage has been fully listed on metallurgical record sheets for the archive, with the resultant information being used to create an excel database as part of the current assessment. Due to the tiny size of the particles from the environmental residues these were quantified by weight only. The assemblage is summarised in Table 17.

Type/Phase	Period 1 Prehistoric	Period 3 Early Saxon	Period 4 Medieval	Period 5 Post-med	Undated
Number of contexts	*2*	*31*	*4*	*1*	*19*
Magnetic Fines	28g	152g	20g	13g	323g
Hearth lining	-	2/100g	-	-	-
Fuel ash slag	-	19g	2g	-	107g
Clinker	-	1g	-	-	-
Undiagnostic iron	-	1/24g	-	-	3/92g
Forge bottom	-	-	-	-	146g
Hammerscale	-	1g	1g	-	701g
Total	*28g*	*3/297g*	*23g*	*13g*	*3/1369g*

Table 17: Summary of slag assemblage by period (NB. Only hand collected slag quantified by count and weight)

The assemblage

5.10.2 A significant proportion of the assemblage consists of 'magnetic fines', which are present in deposits of all periods. These are composed of granules of ferruginous stone and burnt clay whose magnetic properties have been enhanced through heating. This can occur through any high temperature event, including domestic hearths and bonfires, and is not an indication of any industrial activity. True slag first appears in early Saxon contexts.

Period 3 Early Saxon

5.10.3 This period produced 19g of fuel ash slag, a type that can be generated in any high temperature process, including domestic hearths (pit [2131], G81). In addition, there is a tiny scrap of clinker in G65 hollow deposit [2056]. This waste from burning coal is certainly an intrusive post-medieval piece in this deposit. The two pieces of hearth lining (SFB [3175] G15 and pit [3541] G30) consist of pieces of orange-red sandy clay with vitrified surfaces (rather than slagged faces) that could easily derive from a domestic hearth/oven rather than an industrial one. The only definite metalworking waste from this period consists of 24g of undiagnostic iron slag (pit [2347] G93 and pit [3053] G15) and <1g of hammerscale flakes (5-10 flakes, also from pit [3053]). These suggest iron smithing; however, the quantities are very low.

Period 4 Medieval

5.10.4 The only slag from deposits of this period consist of a tiny amount of fuel ash slag and hammerscale (just 5-10 flakes from ditch [2066], G56). Although the latter hints at iron smithing again, as with Period 3, the quantities are so low that it is likely the material is residual.

Period 5 Post-medieval

5.10.5 No slag was recovered for this period – just magnetic fines.

Undated/unphased

5.10.6 Undated/unphased deposits produced the largest quantity of slag from the site (Table 17). This includes 92g of undiagnostic iron slag (pits [2073] G97 and [3051] G34), a piece of plano-convex forge bottom (hollow [3135], G13) and a significant quantity of hammerscale (virtually all from pit [3051], G34). This material certainly suggests iron smithing was occurring on/close to the site, at least on a domestic level, but the period in which this was occurring is currently uncertain.

5.11 Bulk Metalwork by Alex Budau and Iris Rosas de Oliveira

5.11.1 A fairly large assemblage of bulk metalwork, weighing a total of 3,065.14g and comprising 395 fragments, was recovered during the excavations, from 69 separate contexts, the vast majority the result of metal detecting. The assemblage includes primarily iron nails, undiagnostic fragments, and lead waste. The material was recorded on pro forma sheets and digitally on Excel

spreadsheets for the site archive. X-radiography was carried out on all metals apart from lead.

5.11.2 The nail and bulk metalwork assemblages have been measured and weighed using digital scale and calliper. Goodall's (2011) typology was used as the basis of the site nail typology for both structural and horseshoe nails. The bulk metalwork assemblage referenced Tyrrell (2015) and Major (2015) reports for the lead fragments identification and Goodall (2011) typology for the iron and copper characterisation. Preliminary site phasing was used to categorise the assemblage.

Nails by Alex Budau

5.11.3 The nail assemblage comprises 304 nail fragments recovered from 65 different contexts, weighting in total 1,668g. All the nails are made of iron, with generally poor preservation. Most of the nails belong to phased contexts, from Periods 3.1, 4 and 5, with 54 nails recovered from undated contexts or layers.

Characterisation by period

Period 3: Saxon (5th to 7th Centuries)

5.11.4 Features and deposits dated to this period produced 200 nails, of which 14 were incomplete and therefore could not be categorized. The rest of the nails are divided across all 12 categories of general purpose and heavy-duty nails and the four horseshoe nail types. The general purpose nails account for 120 of the total, with Type 1 nails being most common in this category (n=52). Types 2, 4 and 8 are also well represented. Of the 32 horseshoe nails, Types B, C and D are more numerous than the earlier Type A. The presence of so many horseshoe nails of medieval and post-medieval date within features phased to Period 3 suggests a high degree of intrusive material.

5.11.5 With regard to distribution, the majority of nails (n=186) were recovered from Area 2 (Groups 60, 64, 65, 68, 70, 75, 76, 78, 80 and 87) and only 14 nails came from Area 3 (Group 11, 12, 15, 16, 22 and 29). No nails were recovered from Saxon contexts in Area 1.

Period 4: Medieval

5.11.6 Thirty nails were excavated from medieval-phased features: 12 general purpose, two heavy duty nails, 13 horseshoe nails, and three indeterminate fragments. Three of the nails were excavated from Area 3 and 27 from Area 2. All horseshoe nail types were present; however, only Types 1, 2 4, 7, 10 and 11 structural nails are represented, all in small numbers.

Period 5: Post-medieval/Modern

5.11.7 Only 20 nails were recorded in post-medieval and modern contexts; three horseshoe nails of Type B, six heavy duty nails, and 11 general purpose nails. All the nails were recovered from Area 2.

Undated

5.11.8 A further 54 nails were recovered from undated contexts, mainly from the subsoil. Of these, 32 nails are general purpose, 11 are heavy duty, nine horseshoe nails, and two indeterminate fragments. The undated contexts from Area 3 produced 25 nails and the other 29 are from the undated contexts from Area 2.

Bulk metalwork by Iris Rosas de Oliveira

5.11.9 The bulk metalwork assemblage comprises lead, iron and copper. Undiagnostic strip, sheet and rod fragments were recovered, weighing a total of 1,397.14g and comprising 91 fragments, from 27 separate contexts. Fragments were recovered from Period 3, 4 and 5 contexts; however, nearly half the total of fragments were retrieved from undated contexts.

Characterisation by period

Period 3: Saxon (5th to 7th centuries)

5.11.10 The lead fragments recovered from Period 3 features amounted to 13 fragments, most of which were sheet scraps from Area 2. Two fragments were excavated from Area 3.

5.11.11 All of the iron metalwork attributed to Period 3 were collected in Area 2, mainly from midden-derived deposits found in hollows. Although strip fragments compose most of the assemblage, one modern pair of tweezers and a hook fragment were present, clearly intrusive.

5.11.12 Two copper fragments were excavated from the same Period 3 deposit [2013] in hollow G70, in Area 2. One was a simple rectangular strip, the other did not retain enough well-preserved characteristics to be identified.

Period 4: Medieval

5.11.13 G40 ditch fill [2078] yielded a single fragment of iron barbed wire. Although the ditch is phased to Period 4, the wire is of modern date and is likely intrusive. No lead or copper metalwork was recovered from features of this period.

Period 5: Post-medieval/Modern

5.11.14 Two features in Area 2, phased to Period 5, produced six metalwork fragments, which comprised an iron rod and a lead scrap from deposit [2046], and three iron fragments, including a piece of barbed wire, from ditch fill [2148]. There is no copper metalwork attributed to this period.

Undated

5.11.15 A total of 40 lead fragments and eight iron fragments were excavated from undated contexts. The majority of these pieces come from the topsoil and subsoil in all three areas. Most of the lead metalwork was identified as puddles, dribbles or undiagnostic; however, a musket or pistol ball and four

window came pieces were recovered. The iron fragments were mainly unidentifiable, except for one strip, one scrap, and a tapering bar. A single copper fragment collected in Area 3 is undated and is characterised as possible melting residue.

5.12 Human Bone by Lucy Sibun

5.12.1 Human bone was recovered from three contexts, all phased to the early Saxon period (5th to 7th centuries): hollow deposit [2101] (G60) in Area 2; and in Area 3, two fills, [3052] and [3054], associated with possible SFB G15. The bone from [3054] was recovered from bulk soil sample <10>, the remaining fragments were hand collected.

5.12.2 An inventory has been produced for each context. The analysis of the human skeletal remains comprised sex and age estimation. All fragments were examined for pathologies but none were observed.

5.12.3 Age-at-death estimations were made using the standard osteological techniques available, which included fragment size, dental development and long bone diaphyseal length (Buikstra and Ubelaker 1994; Scheuer and Black 2000). An assessment of the biological sex of the adult remains was made using dimorphic traits of the skull following (Scheuer and Black 2000). The infant skeleton was not assigned to any sex category.

Results

5.12.4 G60 hollow fill/layer [2101] contained the incomplete remains of an infant skeleton. Identified elements included fragments of the cranium, long bones, spine and ribs. A right humerus and left femur were complete, enabling measurements of diaphyseal length to be taken, both of which are consistent with a new-born infant (Scheuer and Black 2000).

5.12.5 The single fragment recovered from possible SFB G15 fill [3052] came from bulk soil sample <10> and was identified as an adult-sized maxillary incisor. It was very worn with only the base of the crown remaining. Fill [3054] of the same feature produced a single fragment of human bone, a piece of anterior mandible from an adult individual. The morphology of the bone suggests that this could be from a male individual, but sex cannot be accurately assessed from a single characteristic. There were no teeth present in the mandible, which has surface weathering and cracking.

5.13 Animal Bone by Emily Johnson and Gwendoline Maurer

5.13.1 A large animal bone assemblage was recovered from the excavation. Hand-collected specimens made up the vast majority of the assemblage, totalling 18,271 fragments and weighing 283,326g.

5.13.2 The vast majority of specimens derived from early Saxon contexts dating to the 5th to 7th centuries (Period 3, n=15,540). They were particularly abundant in the fills of SFBs and their associated contexts in Area 2. The assemblage presented moderate to good preservation (Tables 18 and 19).

Period		Total	Preservation %		
			Poor	*Moderate*	*Good*
3	Saxon 5th - 7th centuries	14697	17.9	55.4	26.7
4	Medieval 11th - 13th centuries	411	4.4	28.0	67.6
5	Post-medieval/Modern	91	1.1	46.2	52.7
0	Undated	2030	43.1	47.7	9.2
Total		*17229*	*20.4*	*53.8*	*25.8*

Table 18: Fully recorded zooarchaeological specimens (Method 1) and preservation percentages per period

Period		Total	Preservation %			
			Poor-Good	*Poor*	*Moderate*	*Good*
3	Saxon 5th-7th Centuries	843	10.3	2.3	39.3	48.2
4	Medieval 11th - 13th Centuries	105	0	1.9	49.5	48.6
5	Post-medieval/Modern	7	0	0	0	100
0	Undated	87	0	3.4	92.0	4.6
Total		*1042*	*8.3*	*2.3*	*44.4*	*44.9*

Table 19: Assessed zooarchaeological specimens (Method 2) and preservation percentages per period

Methodology

5.13.3 Three different methodological approaches were used for the assessment of this assemblage. Contexts preliminarily dated as Saxon or medieval were recorded in full (Method 1; Appendix 7). Undated contexts or those dated to later periods were assessed and a comment made on their potential for full recording (Method 2). Similarly, the material from bulk soil samples was briefly assessed and its potential for further analysis indicated (Method 3; Appendix 8). Data for all three methodologies were recorded onto an Excel spreadsheet.

Method 1: full recording

5.13.4 Fully recorded contexts were recorded by specimen. Where possible, bones were identified to species and element using the ASE faunal reference collection and identification manuals (Hillson 1992; Schmid 1972; Cohen and Serjeantson 1998) and the bone zones present noted (Serjeantson 1996). Determination of caprine (sheep and goat) specimens used criteria outlined in Halstead et al. (2002), Zeder and Lapham (2010) and Boessneck (1969), where possible. Elements that could not be confidently identified to species, such as long bone, rib, cranial and vertebral fragments, have been categorised by taxa size (large/ medium/ small) and type (mammal/ bird/ fish). Refitting fragmented specimens were counted as one.

5.13.5 Mammalian age-at-death data was collected where possible. The state of epiphyseal bone was recorded as fused, unfused and fusing. Dental eruption and attrition was recorded on teeth within mandibles and maxilla using Grant's (1982) wear codes on cattle, ovicaprid and pig teeth. Whole long bones of domestic mammals were measured using standards set out in von den Driesch (1976). Specimens have been studied for signs of non-metric traits and pathology.

5.13.6 Modifications to bone surfaces were recorded where observed. Evidence of butchery and burning was recorded by type and bone zone. Fracture freshness analysis was undertaken on broken long bones through recording the type(s) of fracture (fresh, dry, mineralised and new) observed on each specimen and the Fracture Freshness Index (Outram 2001). Evidence of taphonomic agents such as gnawing, weathering, erosion, abrasion and metal staining were also noted. Preservation was qualitatively assessed considering the state of the cortical surfaces and the non-archaeological fragmentation of the assemblage as poor, moderate or good.

Method 2: assessed hand-collected

5.13.7 The rest of the hand-collected assemblage has been recorded by context following Historic England guidelines (Baker and Worley 2019). Specimens were counted per identifiable taxa per context. Bird and fish specimens that were either indeterminate or not identifiable at this stage have been counted. Determination of alike species including caprines, equids, large deer and leporids was not rigorously attempted. The number of partially identifiable mammal specimens, comprising cranial, vertebral, rib and diaphyseal fragments, and the number of indeterminate specimens, was quantified.

5.13.8 Ageable and measurable bones were counted per taxa, per context. Ageable dentitia (mandibles and maxillae) include those where the last tooth in the tooth row was present, or those containing erupting or unworn teeth. Fusion epiphyses from the postcranial appendicular skeleton were those counted as ageable bones. Measurable specimens were defined as whole long bones.

5.13.9 The presence of butchery, burning and taphonomic agents was noted, where observed, per context. Each context was assessed for suitability for fracture freshness analysis, defined as when 10 or more specimens carried fracture data. A qualitative assessment of potential was undertaken with reference to identifiable and ageable specimens, or if notable specimens or patterns were present.

Method 3: assessed bulk sampled

5.13.10 The animal bone deriving from environmental samples was assessed (Appendix 8). The quantity of bone in different fractions was estimated, any identifiable specimens were noted, and the preservation and potential was recorded. For burnt bone, the quantity of different burning types indicated was also recorded. A qualitative indicator of potential was given based on these criteria, with high potential samples being well-preserved, containing identifiable and ageable specimens, or having potential for taphonomic analysis through fragmentation.

Quantification

5.13.11 A total of 5,098 specimens were identifiable to species, possible species or family. Mammals dominate the assemblage, with domestic cattle (n=2382) and pigs (n=1669) being the most frequently recovered species. In comparison, caprine species were underrepresented, as were equids, dogs and cats (Table 20).

5.13.12 Of the wild mammals, species of deer were the best represented, largely from the presence of their antlers although post-cranial material was also recovered. Bird bones were also occasionally recovered, predominately identified as domestic fowl, goose and duck. Further identification is needed on some likely wild bird specimens. The assessment of the bulk soil sample material occasionally identified the presence of fish specimens, which also need further identification.

5.13.13 A further 5,324 fragments were identifiable to species type, representing cranial, rib, vertebral and diaphyseal fragments, and 7,847 bones were indeterminate.

Taxa	**NISP**	**Period**			
		3	***4***	***5***	***0***
Cattle	2382	1969	90	17	306
Sheep	53	49	1	1	2
Goat	6	6			
c.f. Goat	1	1			
Caprine	337	305	7	6	19
Pig	1669	1469	49	18	133
Pig/ wild boar	5	4			1
Horse	70	52	9	4	5
Equid	161	121	17	1	22
Dog	32	18	13	1	
Dog/ fox	4	4			
Cat	2	2			
Red deer	79	77	1		1
Fallow deer	1	1			
Roe deer	18	14	1		3
Roe deer/ caprine	2	2			
Large deer	224	218	4		2
Small deer	2	2			
Deer	11	8			3
c.f. Deer	1	1			
c.f. Badger	1				1
Rabbit	1			1	
Large mammal	3472	2957	117	26	372
Medium mammal	1421	1292	62	7	60
Small mammal	13	13			
Mammal	388	298	39	3	48
Microfauna	1	1			
Domestic fowl	20	17			3
c.f. Domestic fowl	2	2			
Galliform	5	5			
Goose sp.	8	7	1		
Duck sp.	1	1			
Large bird	3	3			
Medium bird	11	10	1		
Bird	15	13			2
Indeterminate	7847	6596	104	13	1134
Total	*18269*	*15538*	*516*	*98*	*2117*

Table 20: Taxa abundance by the Number of Identifiable Specimens (NISP) per period. Full itemisation of taxa per context can be found in Appendix 7. Identifiable specimens present in bulk samples are noted in Appendix 8.

Characterisation, contextualisation and interpretation

5.13.14 The overall trends of the assemblage are below described by period, identifying some of the best represented context groups.

Period 3: Saxon (5th-7th centuries)

5.13.15 The assemblage from Period 3 features and deposits was the largest period assemblage by a large margin (n=15,538). It primarily derived from the Saxon settlement in the north of site, with the majority of bones recovered from Area 2 (n=10,620). Several contexts and context groups yielded large assemblages suitable for intra-site comparison in future analysis, particularly SFBs G73 (n=3589) and G75 (n=2281), nearby refuse pit G87 (n=1084), and large shallow feature G15 (n=1207).

5.13.16 Taxa representation reflects the overall assemblage, with cattle dominating followed by pigs (Table 20; Table 21). Caprines were largely identified as sheep where possible but also included goat; equids were all likely horse. Equid specimens showed evidence of butchery, suggesting at least that their carcasses were processed post mortem, and likely that they were sometimes consumed. Deer species reflect exploitation of wild resources and include red, roe and fallow. Bird bones represented domestic fowl, and species of duck and goose, which could represent wild or domestic species at this stage of investigation.

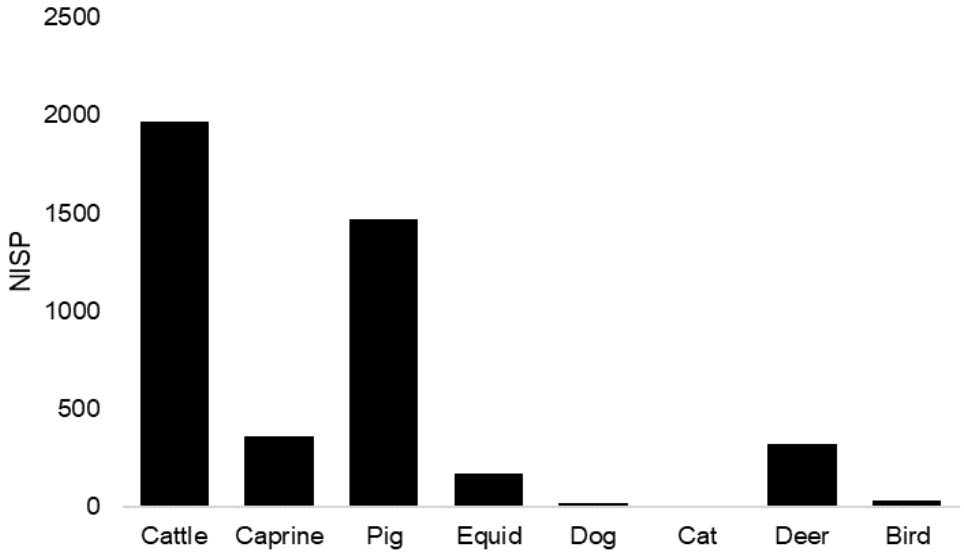

Table 21: Taxa representation in Period 3 by NISP

5.13.17 This period returned a relatively large dataset of ageable specimens for cattle and pigs (Table 22). Initial analysis of fully recorded specimens suggests some young slaughter or death of cattle before six months, but high survival beyond four years. For pigs, some first-year slaughter was also suggested and slaughter between one and two years. A relatively high proportion of pigs survived to fusion maturity given the lack of secondary product utility of pigs (44.0%, n=132). Interesting trends in the equid ageable bone suggests some

animals younger than one year at death were present, which may suggest horse breeding on site. Sex was determinable on 78 specimens, the vast majority of which were pig dentitia. Specimens with evidence of pathology totalled 29 and require further analysis to interpret.

Taxa	Fusion epiphyses	Ageable mandibles	Measurable
Cattle	655	59	16
Pigs	614	82	4
Caprines	115	25	6
Equids	75	1?	2

Table 22: Number of fusion epiphyses, ageable mandibles and measurable whole long bones in the Period 3 assemblage

5.13.18 Initial assessment of skeletal part abundance of fully recorded pig and cattle specimens suggests all parts of the skeleton were present, indicating that the animals were likely slaughtered and consumed nearby rather than being brought to the settlement as cuts of meat. There were some differences between cattle and pigs in skeletal part abundance, particularly in the recovery of metapodia and phalanges, which were overrepresented in cattle. Although preservation and collection bias against smaller pig extremities may be a factor, cattle metapodia and phalanges were also overrepresented compared to the rest of the cattle skeleton. These discrepancies may be evidence for specific carcass processing choices related to cooking or consumption practices or later intended use of primary products.

5.13.19 A further species group with a notable overrepresentation of one part of the skeleton was deer. Antler fragments comprised 80.4% of the overall deer NISP (n=321). Of the seven fragments with the pedicle intact, five were shed, all of which were red or large deer, and two were unshed, identified as fallow and roe. Antler fragments commonly exhibited saw marks (n=20), which were only found on antler and occasional bones of the skull of cattle and horse. Limb elements totalled 16.8% of the total deer NISP, indicating that while some shed antler was undoubtedly collected, some deer were hunted and likely brought to site as whole animals.

5.13.20 Surface modification data was collected for the 14,697 fully recorded specimens in this period, whereas its presence per context was noted for those assessed. Of the fully recorded specimens, surface modifications were relatively rare. Butchery marks were identified on 392 specimens, burning evidence was identified on 187, which was largely low temperature roasting or scorching, gnawing was observed on 416 specimens, mostly canid, and other taphonomic modifications such as weathering, erosion and abrasion were recorded on a further 164. A total of 1,369 specimens carried fracture information, which may have implications for carcass processing and site formation with full analysis.

Period 4: Medieval (11th-13th centuries)

5.13.21 A relatively small assemblage of 516 bone fragments was recovered from high medieval contexts. Like previous phases, most specimens derived from Area 2 (n=284) and Area 3 (n=143). Almost all contexts yielding animal bone were ditches. None had the same abundance of animal bone as in Period 3.

5.13.22 Taxa representation shows an increase in cattle compared to pig and caprines in this period, although sample sizes are low (Table 23). Deer specimens also reduced in proportion, and no antler fragments were recovered for this period. Equid specimens increased in abundance, partially due to the presence of an articulated horse spine in [3321], the fill of boundary ditch [3320] (G19). Dog specimens were also comparatively more common than in the earlier Saxon period, and also included an Associated Bone Group (ABG; Morris 2008) comprising the head and cervical vertebrae in the upper fill [3237] of boundary ditch [3242] (G20).

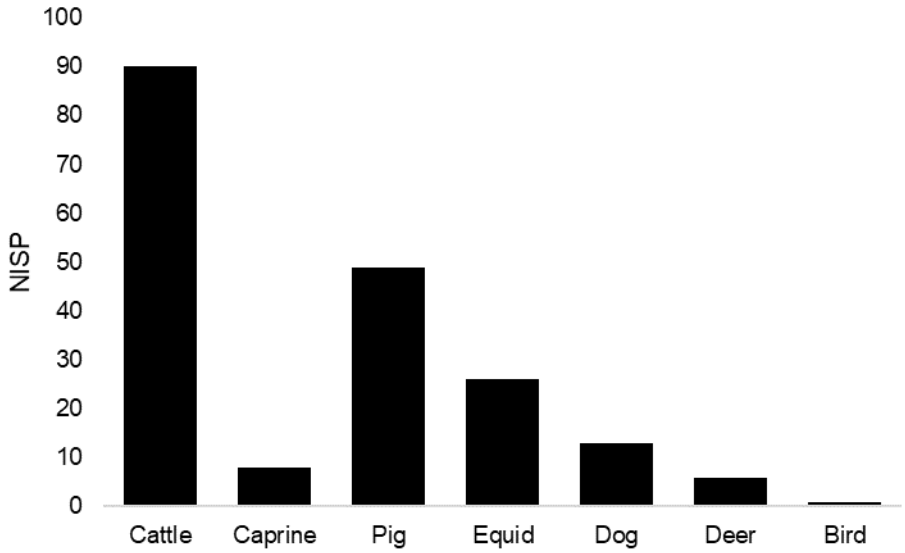

Table 23: Taxa representation in Period 4 by NISP

5.13.23 The analysis of other assemblage attributes suffered from the small sample size. All parts of the carcass were present, at least for cattle, which may indicate these animals were still being slaughtered nearby. Age-at-death datasets were negligible for all species, although these may yield some information about husbandry practices with further investigation. Some measurement data was collected, which may allow for comparison of cattle sizes between the early Saxon and high medieval period. Occasional evidence of pathology should be further investigated. Surface modification evidence relating to carcass processing and taphonomy was also minimal.

Period 5: Post-medieval/modern

5.13.24 The latest phase of activity on site yielded a total of 98 fragments of bone from Areas 2 and 3, deriving from ditches G41 and 28, pits G96 and layer G67. Taxa represented included cattle, caprines, pigs, equids, dogs and rabbit.

5.14 **Shell** by Stephen Patton

5.14.1 A very small assemblage of seven oyster (*Ostrea edulis*) shell fragments (53g) was recovered from five separate contexts (Table 24). Almost all of the shell pieces are too fragmentary to ascertain detailed information, and they are too small in quantity to indicate any evidence for consumption practices. All of the shell from phased features is of Period 4 date. It is evident that

shellfish was not part of the diet during the main phase of occupation activity in Period 3.

5.14.2 The unstratified shell is a single abraded, but complete left valve. It measures 55mm from dorsal to ventral margin and 54mm from anterior to posterior margin. The abrasion makes identifying parasitic damage not possible with certainty, but there are potentially some linear bore holes along the surface.

5.14.3 The fragment from undated G50 ditch fill [2320] is a very abraded and friable right valve fragment that is too incomplete to estimate the animal's size. It is also too abraded to identify any parasitic evidence.

5.14.4 The only shell retrieved from stratified contexts all came from medieval G19 ditch in Area 3.
The single fragment from fill [3073] is an abraded right valve that does not have any signs of parasitic damage. It measures 47mm from dorsal to ventral margin and 44mm from anterior to posterior margin. However, the edges are quite damaged suggesting the shell was originally slightly larger.
The two fragments from G19 medieval ditch fill [3029] are both parts of left valves, but they do not conjoin indicating that they represent separate animals. Both are too incomplete to estimate the original sizes and neither shows any signs of parasitic damage. The two shell pieces from G19 fill [3469] are an almost complete right valve and a small fragment of left valve. The ventral and posterior margins of the right valve are damaged, but it measures a minimum of 62mm by 55mm. There is no evidence of parasitic damage on the right valve, but the left valve is a dorsal margin fragment with indications of limited worm infestation, most likely by *Polydora ciliate* worms.

Period	Context	Parent	Count	Weight (g)
N/A	U/S	U/S	1	19
Undated	[2320]	Ditch terminus [2319], G50	1	4
4	[3029]	Ditch [3030],G19	2	8
4	[3073]	Ditch [3074], G19	1	6
4	[3469]	Ditch [3470], G19	2	16
Total			*7*	*53*

Table 24: Quantification of shell fragments

5.15 Registered Finds by Dr Tim van Tongeren with Trista Clifford

5.15.1 A total of 502 artefacts were assigned a unique Registered Finds number (RF<0>). All items were air dried or washed and dried as appropriate and packed following CIfA guidelines. All metal objects were X-radiographed prior to assessment in order to enhance identification. Each individual item was recorded on a *pro forma* sheet for the purpose of archiving before being packaged separately. Worked flint and fired clay RFs are discussed in Sections 5.2 and 5.6, respectively, and not considered further here.

5.15.2 Many of the phased contexts produced a relatively high number of objects that do not belong to the assigned period. Most are evidently residual in later (particularly Period 3) contexts, while some are seemingly intrusive. Given the scale of the phenomenon, and pending further refinement of site phasing

in analysis, no attempt has been made to consider the assemblage by site period.

5.15.3 In order to avoid confusion, this report is structured by main finds category (e.g. dress accessories) followed by a subdivision into individual object types (e.g. brooches, pins). Under each object type, the items are discussed in chronological order and grouped by find location.

Dress accessories and items of personal care

Beads

5.15.4 With a total of four specimens, beads are a rarity amongst the assemblage from this excavation. An elongated biconical bead (RF<350>) made of copper-alloy was discovered in Period 4 ditch G40, fill [2039]. Whilst this type has few known parallels, it is closely related to bead NMS-C66C08, listed on the Portable Antiquities Scheme (PAS) database. This bead was found in Norfolk and shows a similar linear incised decoration around the carination. Similar beads are dated between AD 43 and 410, suggesting that this bead is residual in its high medieval context. Bead (RF<754>) was discovered in pit fill [2015] (G94) and can be classified as a 'Constricted Bead' (Brugmann 2004, Fig. 84.2). This type dates between AD 300 and 450.

5.15.5 Area 3 subsoil [3002] (G105) contained two beads of which the first is globular and made of translucent red glass (RF<70>). The bead is decorated with slightly raised opaque white dots. The perforation is lined with a tube of similar opaque white glass. The second bead is thick discoid and made of opaque black glass (RF<69>). The perforation is unusually placed, through the narrow side of the bead. Each flat side is decorated with a spiral created from opaque white glass. Both beads are relatively recent and can be assigned a date of post- AD 1540.

Bracelets

5.15.6 A total of four bracelets were recovered from the site. Hollow deposit G60, which is phased as early medieval, produced a residual copper-alloy bracelet (RF<307>) which can be dated between AD 43 and 410 (Bishop 1996, 50). A copper-alloy bracelet (RF<117>) was found in fill [2255] of early medieval hollow G61 and has a close parallel in Roman Aldeburgh, which dates it to between AD 43 and 410 (Bishop 1996, 50 (item 293).

5.15.7 A copper-alloy twisted wire bracelet (RF<419>) was retrieved from medieval ditch G20, fill [3264]. Bracelets of this type occur during the transition period between Roman and Anglo-Saxon influence in Suffolk (AD 300–500) and the item is therefore residual in the ditch (Crummy 1983, 38-9; MacGregor and Bolick 1993, 168). A fourth copper-alloy bracelet (RF<107>), from hollow deposit G70, is decorated and has a hook and eye closure. It can be dated to between AD 410 and 700 (Macgregor and Bolick 1993, 167).

Brooches

5.15.8 Amongst the assemblage are 14 brooches or parts thereof. A complete hinged Colchester derivative brooch (RF<110>) from hollow deposit G70 can be assigned to the mid-1st to 2nd century AD and is therefore residual in the feature, which is phased as early medieval (Mackreth 2011, Pl54 no.2470). A second, undiagnostic brooch fragment (RF<113>) was collected from the same deposit, potentially part of a bow or the transition between the bow and either the head- or foot plate. The item probably belongs to the Roman or early Saxon period.

5.15.9 Brooch (RF<142>), represented by a fragment of the transition between the bow and arms, can be identified as a Colchester two-piece (Harlow) fragment. The brooch was found in hollow G61 and dates to the first century AD. Hollow deposit G60, phased as early medieval, contained a fragment from a trumpet headed brooch (RF<523>), a 1st- to 3rd-century type with a largely eastern distribution (Mackreth 2011, Pl86), as well as the head and part of the bow of a probable proto crossbow brooch (RF<527>), which is a similarly late type confined to the 2nd to 3rd century AD, and an undiagnostic brooch pin.

5.15.10 A large decorated penannular brooch (RF<42>) was found, with parts of its broken-off pin present, in SFB G21. The brooch belongs to Booth's type F and is typically associated with transitional late Roman/early Saxon sites, and have been recovered from Anglo-Saxon graves in Sussex and Kent, and from the early medieval settlement at Mucking (Booth 2015, 182-3).

5.15.11 Dump layer G67, phased as modern, produced a residual supporting arm brooch (RF<233>). The style of this specimen is unusual; a similar brooch was found in Essex and is listed in the PAS database (ESS-999D76). Brooches of this type can be dated between AD 420 and 480. A second brooch, found in the deposit, is a copper-alloy annular brooch (RF<232>). The style of this brooch is categorised by Hines as type BR3-d, with a start date of AD 555 (Hines and Bayliss 2013, 223). Similar annular brooches continue to occur up to AD 1540; thus both items are therefore residual.

5.15.12 Fill [2039] of G40 ditch seg [2040], produced the headplate and bow of a cruciform brooch (RF<176>). The specimen is most closely related to a brooch in the collection of the Ashmolean Museum (MacGregor and Bolick 1993, 104; item 12.24). Brooches of this type can be dated between 5th to 6th century and the specimen is therefore residual in this high medieval feature. A loose brooch spring (RF<185>) was also found in the ditch, which probably belongs to a bow brooch dating to between AD 43 and 1066, making it also residual.

5.15.13 Also found in subsoil [3002] (G105), in Area 3, is the foot plate fragment of a Merovingian 'Radiate Headed Brooch', which is a continental import (RF<31>). Similar items are known from the German Rhineland, the Low Countries, and northern France and date between the mid-5th and 6th centuries; several have been found in graves at Buckland, Dover and Mill Hill (Brugmann 2012; 1997). Another fragment recovered from this subsoil appears to comprise part of a bow brooch (RF<37>), broadly dating from AD 43 to AD 1066.

5.15.14 Early Saxon hollow deposit G65 contained a fragment of an annular brooch, consisting of a flat and narrow frame with irregular decoration (RF<435>). This item dates between AD 510 and 650 (Hines Bayliss 2013, 223).

Buckles

5.15.15 The site yielded a total of 25 buckles or parts thereof. Most buckles are simple types made of iron or copper-alloy. One specimen (RF<461>) is made of silver and was treated as Treasure in accordance with the Treasure Act (1996; 2003). The silver item is a small, D-shaped buckle frame of Marzinzik type group I.9 (2003, 29). The loop is trapezoidal in section. The strap bar has a sub-rectangular section and is slightly recessed from the surface and the inner outline. The upper surface of the frame appears to have no organised decorative motif; however, the strap bar exhibits a series of three shallow horizontal indentations along the length. File marks are visible on the reverse of the buckle. The pin is missing. The item, dating between AD 400 and 600, was retrieved from hollow deposit G65.

5.15.16 D-shaped buckle frame (RF<314>), found in hollow deposit G60, has a somewhat thickened bar. It belongs to Marzinzik's type I-10a-I and is dated between AD 400 and 700 (2003, 349). Hollow G64 produced an oval buckle frame (RF<511>) belonging to Marzinzik's type I-11b. This type can be dated between AD 450 and 700 (2003, 383). Buckle RF<376> was found in post-medieval ditch G44, fill [2327], and comprises a very small D-shaped frame which can be assigned to Marzinzik's group I-10a-ii and dates to AD 450-700 (2003, 353).

5.15.17 Buckle plate (RF<633>) was found in hollow deposit G65 and has a semi-circular terminal with one rivet. This item can be attributed to Marzinzik's type II.22a and dates to AD 500-700 (2003, 216 and plate 124).

5.15.18 Undated ditch G51, fill [2338] produced a decorated buckle plate belonging to Marzinzik's type II-24a (RF<600>). A parallel is known from grave 103s of the Polhill cemetery (2003, 458). The item can be dated between AD 575 and 800.

5.15.19 Loose buckle pin (RF<297>) found in hollow deposit G60, has a rectangular section which flattens towards the tip. This specific shape can be attributed to the period between *c*. AD 1066 and 1450, or potentially somewhat later (Egan and Pritchard 2002, 95). This pin is therefore intrusive in this early medieval phased context.

5.15.20 Seven buckles and ten plates of various dates were collected from the subsoil in excavation Area 2. Buckle (RF<766>) is similar to those listed by Egan and Pritchard (items 434 and 435) and dates between AD 1066 and 1540 (2002, 96). A second buckle with a double rectangular frame dates between AD 1350 and 1400 and is therefore residual (*ibid*, 88). RF<265> dates between AD 1350 and 1450 (*ibid*, 83). Slightly later, RF<266> dates to AD 1400-1700 (*ibid*, 88 and Egan 2005, 35). A double-framed buckle with a date of post- AD 1900, alongside two other buckles with broad post-medieval dates were

recovered. Buckle plates (RF<335>, <486> and <557>) are undiagnostic and date between AD 450 and 1450.

5.15.21 A buckle found in hollow G13, fill [3361] is represented by the central bar of a double iron frame and dates between AD 1066 and *c*.1700.

5.15.22 The back plate of a buckle (RF<624>) was found in ditch G41, fill [2148]. The plate can be assigned a medieval date between AD 1250 and 1450 and is therefore residual in this post-medieval/modern ditch.

5.15.23 The buckle in hollow G68 fill [2080] is very small and has a circular frame and a simple straight pin (RF<162>). X-ray imaging revealed a possible coating of white metal on the frame. Shape-wise, parallels can be found dating to the period AD 450–725/50 (Marzinzik 2003, 390 (type I-12a-i). Similarly shaped buckles, often with a tin coating, are more common, during the period *c*.AD 1250-1400 (Egan and Pritchard 2002, 59-60). It is therefore possible that this buckle is intrusive in the early medieval phased pit.

5.15.24 A shoe buckle with the inscription S COOK (RF<6>) was retrieved from the topsoil [1001], and dates between AD 1690 and 1720 (Whitehead 1996, 96).

5.15.25 Buckle RF<275> is represented by a small fragment of a facetted frame, retrieved from subsoil [2002] in Area 2. Whilst no type can be assigned, a date between AD 43 and 1540 can be suggested.

5.15.26 RF<139> is a buckle frame-like object, but with two rivets on the thickened bar which prevent the placement of a pin. The item, found in G31 pit/posthole [2008], is likely a medieval or post-medieval belt or strap fitting, although its exact use is currently unclear.

5.15.27 Two loose buckle pins (RF<360> [2047] and <519> [2134]) are undiagnostic and their occurrence spans at least the early medieval and high medieval periods. Hollow deposit G64 contained an undiagnostic D-shaped buckle frame.

Strap fittings

5.15.28 This sub-category contains seven strap fittings other than buckles. SFB G75 fill [2059] produced a strap end fragment with dot-in-circle decoration (RF<505>) which likely dates between AD 400 and 600. A late Roman date, however, is not unreasonable.

5.15.29 One sheet of a two-sheet strap end (RF<130>) was found in hollow G61 fill [2006]. The item is very similar to an example found at Little Eriswell cemetery (grave 28) and can be dated between AD 525 and 675 (Marzinzik 2003, 481).

5.15.30 Area 3 subsoil [3002] produced a decorative strap slide (RF<62>) which is parallel to a specimen registered on PAS (YORYM-214DC1). The item likely dates between AD 1066 and 1540.

5.15.31 Strap end (RF<436>), from hollow G65 fill [2056], has a very rectangular shape, which indicates a medieval date (*c*. AD 1250-1450) (Egan *et al*. 2002,

131). Strap guide (RF<370>) was also collected from G65; it is very simple and of post-medieval date. Both items are therefore likely intrusive in this early medieval phased feature.

5.15.32 Strap ends RF<239> [2112] and <468> [2058] are simple and undiagnostic. They date to the early medieval or medieval periods.

Wrist clasps

5.15.33 The excavations produced a total of five wrist clasps, all of which can be dated between AD 450 and 570 (RF<243>, <380>, <403>, <752> and <769>). Two from hollow G64 and SFB G74 have close parallels in Suffolk (West 1998, 164, item 17 and 8 resp.). The examples from SFB G22 and possible SFB G85 are represented in the collection of the Ashmolean Museum (Macgregor and Bolick 1993, 176-77). The fifth clasp (RF<769>), identified by its hooked part, was retrieved from Area 3 subsoil [3002]. The item can be identified as Hines's type B7.

Earrings

5.15.34 RF<716>, retrieved from SFB G73 fill [2303], has the classic shape of a penannular earring with one pointy and one blunt terminal. The item, however, is made of iron, which seems an unusual choice for this type of jewellery. Earrings of a similar shape are part of the British Museum collection and are listed in PAS (e.g. DENO-783C78 [copper-alloy] or BM-80EE16 [silver]). These known items are usually somewhat smaller than RF<716> and relatively common throughout the Roman period in Britain.

Finger rings

5.15.35 Three finger rings were recovered during the excavations. The first specimen (RF<634>), found in Period 3 hollow G65 fill [2057], can be dated between AD 100 and 410 and is likely residual here. The ring, with a distinct bezel and shoulder pellets belongs to Guiraud's type 4 (1989, 188). Unphased pit/posthole fill [2307] (G97) produced a twisted wire finger ring (RF<80.3>) which belongs to Hines's type WR1-c (2013, 216). The item can be dated between AD 580 and 685. The third finger ring (RF<481>), represented by the bezel, was also retrieved from the G65 deposit [2057], but is of more recent date and likely intrusive to the deposit. The bezel features a circular setting for an (imitation) gemstone and can be dated between AD 1150 and 1550 (Egan 2005, 53, items 232/233).

Pendants

5.15.36 An object with a yet unknown purpose (RF<545>) was retrieved from Period 4 ditch G40. The object is small and consists of a 'stem' with a curved terminus and a lanceolate 'blade'. The curved terminus of the tapering stem may represent a broken suspension loop and suggests use as a pendant. It is possible to identify the item as a miniature votive spear. Similar items are listed in the PAS database (e.g. DOR-71D7AA and BM-999956) and in a recent study on material from Gloucestershire (Kiernan 2009, 100-105). Miniature votive spears are rare and generally date between 400 BC and AD

100. However, alternative interpretations are also possible, such as a skewer, small awl, tool bit, or stem/grip fragment of a pin. None of these alternatives have proven to be convincing to date.

5.15.37 Possible SFB G85 fill [4024] produced a pendant made of the maxillary tusk of pig or wild boar (RF<755>), that can be assigned a general early medieval date (AD 410-1066). Iron wire ring RF<112>, in G70 hollow fill [2013]), has a spiral bezel and wrapped shoulders. Its diameter, however, suggests it is too large to be a finger ring. This type of ring is likely related to necklaces instead and can be dated between AD 450 and 700 (Hines and Bayliss 2013, 217).

Pins

5.15.38 A diverse assemblage of 32 pins were collected, of which five are made of animal bone or antler, two of copper-alloy, and 25 of iron. Four pins RF<713>, <714>, <751> and <758> were recovered from SFBs G76, G78 and G71, and midden deposit G70, respectively. The bone used to make the former three items is likely a pig's fibula. The latter pin is fragmented and possibly made of either an equid metapodia or of antler. Alternatively, this may be the stem of a needle rather than a pin. Pins of this type are common between AD 410 and 1066 (Malcolm *et al*. 2003, 309).

5.15.39 G60 hollow deposit [2111] contained a 'Cast Spatulate Expanded Headed Pin' of Ross's type XV.ii (RF<259>) (1992, 197). This type, which looks similar to the pins made of animal bone, dates between AD 450 and 550. A similar 'Expanded Headed Pin' (RF<194>), but made of folded sheet metal, was retrieved from medieval ditch G41. Whilst a similar date for both pins is likely, it is suggested that the latter may be later, from around AD 480.

5.15.40 A further pin made of animal bone, RF<757>, was recovered from fill [2052] of SFB G75. This object appears unfinished or featuring a broken top edge with a stepped transition from head to stem, which is uncommon. Parallels of this style have previously been found in West Stow and are dated to the 6th century (West 1985b, Fig. 61.8/9).

5.15.41 Deposits G64 and G65 both produced a 'Hook Headed Pin' of Ross's type XVII (1992, 199). These pins (RF<221> and <707>) date between AD 475 and 560. Very similar to Hook Headed Pins, albeit somewhat more elegant, are 'Loop Headed Pins' of Ross's type XVIII (1992, 199). This type was recovered from SFB G75 and hollow deposit G60 and can be dated between AD 500 and 575 (RF<306> and <452>). Of similar date are three 'Curled Headed Pins (RF<146>, <150> and <706>) which were found in hollow G68, ditch G56, and the upper fill of pit G87, respectively. These pins belong to Ross's group XII.ii.a (1992, 180). Pin (RF<150>) is likely residual in the Period 4 ditch.

5.15.42 'Crook Headed Pins' are another member of the same typological family. One such pin (RF<602>) was discovered in SFB G15 fill [3054]. This item belongs to Ross's type XIX and dates to between AD 500 and 575 (1992, 202).

5.15.43 Examples of the relatively small 'Kingston Disc Headed Pin' (RF<73> and <303>) were discovered in two features, pit G13 and hollow deposit G60,

respectively. These pins, with decorated stems, belong to Ross's type L and date between AD 575 and 630 (1992, 226).

5.15.44 A pin from hollow deposit G64 has a collar and a head consisting of an integrally cast loop (RF<680>). The stem is partially decorated with a spiralling line of silver wire. The combination of iron and silver and/or brass in various artefacts is relatively common on the Continent during the period spanning *c*. AD 580-650, but much less so in Anglo-Saxon England. Shape-wise, the pin is closely related to Ross's type VIII.iii.a (AD 475-560) (1992, 170). Alternatively, there may be a link with the usually more luxurious 'Linked Pin Sets' of Ross's type LXIV.ii (AD 640–725/50) (1992, 260). Whilst a date between 475 and 750 is possible, a 7th century date is most likely.

5.15.45 The 'Spiral Headed Pin' (RF<702>) from hollow deposit G60 can be firmly dated to the 7th or 8th centuries (AD 650-760) and might therefore be intrusive to the early medieval phased feature. The item belongs to Ross's type LXVI.i.a (1992, 271).

5.15.46 An uncommon object is the 'Glass Headed Pin' (RF<488>) from Period 3 hollow deposit G65. The specimen has a spherical head of green glass and is closely paralleled by a pin from the Dover Buckland Anglo-Saxon cemetery (grave 157) which dates between AD 650 and 700 (Evison 1987, 332). Specimens with a copper-alloy stem have a long lifespan stretching across the Roman and medieval periods. Iron examples, however, start around AD 650 and continue up to *c*.900, as evidenced by finds from Flixborough (Evans and Loveluck 2009, 77). It is possible that this item may be intrusive in the feature.

5.15.47 The last complete iron pin in the assemblage has a polyhedral head and a stem with ring and barrel moulding (RF<145>), collected from Period 3 hollow G68. The pin is closely linked to Ross's type IV, but not made of copper alloy as the type-description prescribes (1992, 157). A fellow iron specimen is known from Ipswich and dates to the 7th or 8th centuries (Ross 1992, 153-55). West Stow produced another example, which is unfortunately unstratified (West 1985a, 123). Flixborough yielded 17 iron specimens of which five are dated between AD 675 and 875, seven to between AD 850 and 1025, and four to between AD 1100 and 1400 (Evans and Loveluck 2009, 38-9). The pin can therefore be assigned a date between AD 600 and 1400 and is potentially intrusive here.

5.15.48 Pin (RF<687>) is very small and equipped with a likely domed or half-domed head. This specimen is probably a more modern steel (sewing) pin rather than a dress pin and is therefore intrusive to the early medieval G60 hollow deposit. Further hollow G14 revealed a pin fragment consisting of the stem only, which is decorated with ring and barrel moulding. Given its length, it is more likely that the head was lost, rather than it belonging to Ross's 'Headless' or 'Organic Headed' type. Pins with ring and barrel moulding occur during the Roman and early medieval periods.

5.15.49 Nine iron pins are represented by undecorated stem fragments only and are undiagnostic. They can be assigned a general date between AD 43 and 1540,

which suggests that the specimens from Period 4 ditch G40 are potentially residual.

Hooked tags

5.15.50 Early Saxon hollow G64 produced a fragment of a possible hooked tag (RF<501>). The item can be dated to between AD 410 and 1066.

Combs

5.15.51 The excavations produced a total of five bone combs. The first specimen (RF<756>) is represented by three fragments of a decorated triangular comb plate and was recovered from SFB G75 fill [2052]. This comb can be assigned to Ashby's type 1a (2010, 3) and is a very late Roman or early Anglo-Saxon specimen (AD 375-600). Given this date range, there is a slight possibility that the comb is residual in the early medieval context.

5.15.52 The second item was retrieved from G87 pit [2147] and is a connecting plate terminal fragment of a double-sided comb (RF<770>). Decoration on the fragment suggests one side with fine and one side with coarse teeth. This division, together with the narrow and convex shape of the plate, allows for a likely identification as Ashby's type 10, which was in use during the 4th and 5th centuries. A similar fragment is found in West Stow's SFB 9, which dates to the early 5th century (West 1985b, Fig. 52.3).

5.15.53 Hollow deposit G65 contained a fragment of a relatively long single-sided composite comb (RF<470>). No end plates remain, complicating classification. The shape and decoration of the central section is very similar to that of the comb found in West Stow AFB 22, dated to the 5th century and, to a somewhat lesser extent, one from SFB 15, dated to AD 575-700 (West 1985b, Figs. 94 and 73). Both feature a relatively elaborate decoration as well as flared and/or profiled side plates. This would place the comb in Ashby's type 2, closely related to types 2a and 2b, and give it a date between AD 400 and 800. Alternatively, the shape of the comb is closely related to Ashby's type 5, which does not have elaborate end plates. This type dates between AD 800 and 950 and would instead mean that the comb is intrusive in this early Saxon phased feature.

5.15.54 SFB G15 fill [3052] produced a well-preserved, single-sided composite comb (RF<66>) that is shorter than the previously discussed object. The type is closely related to Ashby's type 2, but not an exact match. The comb is more rounded and more elaborately decorated than type 2a but is less ornamental than type 2b. It could probably be considered a transitional type. Both types 2a and 2b date between AD 400 and 800 (Ashby 2010, 3-4). Shape-wise, a close parallel was found in West Stow which was dated between AD 500 and 600 (West 1985b, Fig. 61.4).

5.15.55 Period 3 G99 pit [2199] contained a bone comb with an elongated triangular profile (RF<709>). No exact parallel is identified by Ashby (2010), but it is likely a variant of type 2 which is dated between AD 400 and 900. West Stow produced four combs which can be considered parallels, of which the closest dates between AD 500 and 700. A parallel with a somewhat more rounded

back dates between AD 500 and 600 and two items (one with somewhat more protruding tooth plates and one with more elaborate decoration and a steeper apex) can be assigned a date between AD 400 and 700 (West 1985b, Figs. 251, 61, 147, 197 resp.). Based on this information, it is possible to suggest a date for RF<709> of between *c*. AD 500 and 700.

Girdle hangers

5.15.56 Sunken featured-building G22 fill [3146] produced part of the only girdle hanger found on this site (RF<36>). Similar examples are part of the collection of the Ashmolean Museum and date between AD 450 and 570 (MacGregor and Bolick 1993, 167).

Tweezers

5.15.57 Hollow G14 fill [3124] featured a pair of copper-alloy tweezers with incised and stamped decoration (RF<21>). Parallels are known from Ingham (West 1998, Fig. 57.2) and the collection of the Ashmolean Museum (MacGregor and Bolick 1993, 224 [e.g. types 38.9 and 38.19]). The tweezers can be dated to between AD 410 and 1066.

Post-medieval dress accessories

5.15.58 Dress accessories of diagnostic post-medieval and later date include 19 buttons and one dress fastener. The oldest button in the assemblage is RF<105>, which has a concave plate and dates between AD 1066 and 1540 (Read 2010, 29 – type 95). This specimen was retrieved from Area 2 subsoil [2002].

5.15.59 Originating from ditch G41, button RF<99> is dated AD 1500-1700 (Read 2010, 55). Closely contemporary, button RF<393> was collected from medieval pit fill [2317] (G102) and likely dates to the early post-medieval period, probably between AD 1540 and 1700. Close parallels are listed by Read, but no exactly similar item it could be found (Read 2010, 108-10). A second button RF<358> from ditch G41 is heavily corroded, which prevents classification. The shape and character of the loop, however, suggest a post-medieval or modern date.

5.15.60 Hollow deposits G60 and G65 contain a button front and a button respectively. Both items are intrusive to these early medieval contexts and can be dated to post-AD 1700.

5.15.61 Dress fastener RF<71>, found in Area 3 subsoil [3002], is trefoil-shaped and dates to between AD 1540 and 1900 (Egan 2005, 51). Area 2 and 3 subsoils also produced multiple buttons, including six which can be dated between AD 1700 and 1900. Button (RF<57>) is decorated and features a demi lion facing left. An inscription which is partially obscured reads ‘Firmin.....London’. The full inscription is likely 'Firmin & Sons London' and provides the item with a date between AD 1850 and 1900. A comparable specimen, but gilded, is listed in the PAS database (DOR-1B34FB). Five other buttons are from the later post-medieval period, dating broadly from AD 1700 to 2020. A final button, RF<34>, is made of white metal and was produced post- AD 1900.

5.15.62 A total of five shoe irons were recovered from the site. All these objects can be dated between AD 1775 and 1900. Three of the five shoe irons were found in Period 3 pit G87, deposit G68 and deposit G64. Given the feature dating, these three items are intrusive. The remaining two shoe irons were recovered from post-medieval/modern ditch G41.

5.15.63 Ditch G41 and hollow deposit G67 each produced a shoe patten. These shoe protectors date between AD 1650 and 1800 (Goubitz 2011, 262).

5.15.64 Cuff link RF<536>, found intrusively in Period 3 G87 pit 2216], features a facetted mock sapphire (blue glass) set in a copper-alloy or lead/tin alloy setting. The cuff link can be dated between AD 1650 and 1725 (Read 2010, 127).

5.15.65 Hollow deposit G67 produced a potentially decorated dress stud (RF<219>). The stud is post-medieval, likely Victorian, in date.

5.15.66 Area 2 subsoil [2002] produced an item made of sheet copper-alloy, which is likely a seal fob pendant of Georgian or later date.

Weaponry

Arrowheads

5.15.67 Two metal arrowheads were recovered. The first, from ditch G41, has a barbed tip (RF<103>). The dimensions of the item are around the arbitrary divide between an arrowhead and a spearhead. The shape, however, definitively identifies it as an arrowhead. Artefacts of this type are rare in comparison to other arrowheads in England, as well as on the Continent. The type can be dated between AD 500 and 650 and is therefore residual within the post–medieval/modern phased feature (Legoux and Vallet 2010, 32).

5.15.68 The second specimen originates from ditch G40 and has a lanceolate blade (RF<619>). Whilst arrowheads of this type occur in both the early medieval and medieval periods, the split socket suggests an early medieval date, between AD 410 and 800, which could suggest this item is residual in the Period 4 ditch. The shape of the blade is related to Swanton's spearhead group C1 (1973, 47 [item D]). A parallel, but with a blade with a lozenge-shaped section, was found in grave 302 of the Buckland cemetery in Dover (Parfitt and Anderson 2012, 484).

Axes

5.15.69 Hollow G60 deposit [2112] yielded a head of a francisca, or throwing axe (RF<87>). Axes, especially franciscas, are a rare weapon find in early medieval England. Contemporary specimens are substantially more common on the Continent, albeit not as common as other weaponry such as spearheads. Use of axes as early medieval weaponry is usually restricted to the 5th and 6th centuries, with some types appearing up to AD 650. For the francisca, a latest date of AD 600 can be suggested. Parallels to RF<87>

were found in grave 90 of the Alfriston cemetery, Selmeston and Lewes (Welch 1983, Figs. 39, 53 and 68 resp.).

Ferrules

5.15.70 A ferrule was recovered from each of ditch G41 and midden deposit G60 (RF<190> and <695> respectively). Ferrules can be classified as potential weapons. They are sometimes interpreted as a form of arrowhead (Bishop and Coulston 2006, 77; Swanton 1973, 202), whilst others suggest they sat on the back of a wooden spear shaft (e.g. Parfitt and Brugmann 1997, 84). Another alternative interpretation postulates use as a pointy end on other objects such as walking sticks. For this reason, it is unclear whether to interpret the ferrules as part of the Bramford weapon assemblage. Ferrules are long lived, occurring between AD 43 and 1540. However, RF<190> is residual in its post-medieval/modern phased feature.

Seaxes

5.15.71 A short narrow seax was also collected from Period 5 ditch G41. The seax is a common form of weaponry which becomes popular during the 6th century and continues to occur into the 7th century. This item can be assigned to the smallest category, Hines's type SX1-a (2013, 194), and dates between AD 525 and 570. The seax is therefore residual in the ditch.

Spearheads

5.15.72 A spearhead fragment consisting of a socket and shank (RF<35.1>) was recovered from Period 3 pit fill [1041] (G5). The spearhead has a split socket, which suggests a date in the earlier part of the early medieval period. As the blade is missing, it is not possible to provide an exact classification. The shape of the fragment, however, suggests that it is a spearhead with a relatively short blade and a long shank. This would place the spearhead in Hines's group SP4 and date it to between AD 525 and 650 (2013, 180).

Ammunition

5.15.73 A lead shot was recovered from subsoil [2002], while modern deposit G67 contained the remains of two modern shotgun cartridges.

<u>Tools, craft and industry</u>

Woodworking

Axes

5.15.74 An axe (RF<35.2>), represented by a fragment of the head, was found residually in Period 3 G5 pit [1042]. The item is identified as a socketed axe and dates to the later part of the Middle Bronze Age or the Late Bronze Age (O'Connor 1980, 58-61). It is noteworthy that the axe was found in combination with the early Saxon spearhead RF<35.1>.

Auger bits

5.15.75 The auger bits (RF<666> and <668>), both retrieved from hollow deposit G64, are undiagnostic. It is likely that fragment RF<666> represents a gouge bit whilst fragment RF<668> is from a smaller spoon bit. The basic shape of these bits has not changed significantly between the Roman and the modern periods. They may well be contemporary with the Period 3 hollow deposit.

Chisels

5.15.76 Two chisels (RF<315> and <489>), associated with metal working, were found in Period 3 G60 hollow fill [2114] and G64 hollow fill [2115]. These are undiagnostic as their shape does not change significantly throughout history. Matching examples are listed by Goodall (2011), but this does not definitively date them to the medieval period.

Drawknives

5.15.77 Hollow deposit G64 and SFB G75 each produced a drawknife (RF<78> and <672>), which is a tool associated with woodworking. The absence of a tang on either side of the blade in both cases suggests an early medieval rather than a high medieval date (Evans and Loveluck 2009, 254-55).

Hammers

5.15.78 Hammer head RF<88>, from Period 3 hollow deposit G60, can be identified as a double-faced sledgehammer (Goodall 2011, 8-9). This type of hammer was used in metal working, but could also be associated with stone working. The hammer is likely to date broadly from AD 1066 to 1900 and therefore probably intrusive here.

Rasps

5.15.79 A rasp (RF<529>) was found in hollow G60 deposit [2114] and is a rare item. A 13th-century parallel is known from medieval York and a 12th/13th-century example was previously found in Fyfield Down, Wiltshire. It is likely that the rasp is intrusive in this deposit and has a later medieval date (Ottaway and Rogers 2002, 2728).

Saws

5.15.80 Suspected saw RF<662>, from Period 3 deposit G64, has a broad, flat tang. No direct parallels could be found. It is potentially a saw blade which had a handle on one or both sides. Alternatively, it may be a form of rasp or file, similar to RF<529>. A third possibility is that the item represents a fragment of a weaving comb. However, the teeth seem somewhat coarse and far apart for it to be either a rasp or weaving comb. Archaeological evidence for the use of saws in Britain is uncommon before the late medieval period. A date after AD 1300 is therefore likely and suggests the item is residual here.

Wedges

5.15.81 RF<294> is probably a wedge rather than a chisel due to the absence of burring. Shape-wise, however, the item could be either. It was collected from G60 hollow deposit [2112]. A further wedge, related to woodwork or metalwork, was found in hollow G61. Wedges do not change significantly over time and are therefore undiagnostic of date.

Leather working

Awls

5.15.82 Five awls (RF<116> [2013], <183> [2039], <367> [2057], <611> [2076] and <710> [2167]), associated with leather working, were recovered from the site. The awls are non-diagnostic, as their shape changes little between the Roman and medieval period; however, most derive from Period 3 contexts and it is likely that they are of early Saxon date.

Stilettos

5.15.83 Stilettos are an uncommon find and are associated with leatherworking. Specifically, they were likely used to create eyelet holes for the threading of rope (Goodall 2011, 69, 76). Similar items are not known from prior to the medieval period. It is likely that both stilettos can be dated to post-AD 1250. One was retrieved from the upper fill of SFB G22 (RF<43>), while the other was unstratified (RF<388>).

Textile production

Heckle teeth

5.15.84 A single heckle tooth (RF<647>) was retrieved from Period 3 hollow deposit G64. Heckles, used as combs for wool or flax, exist in the early medieval as well as the high medieval period.

Needle cases

5.15.85 Intermediate fill [2144] of Period 3 G87 pit [2147] contained a probable needle case made of a long bone from a medium-sized mammal (RF<763>). The item can be dated between AD 410 and 1066. A similar needle case is known from the Spong Hill Anglo-Saxon cemetery in Norfolk (Hills and Lucy 2013, 105; Fig. 2.37).

Thread pickers

5.15.86 Three bone thread pickers (aka pin beaters), RF<715>, RF<718> and RF<719> were retrieved from Period 3 SFBs G73 and SFB G15, and Period 4 ditch fill [2285] (G40). Thread pickers, associated with textile working, occur between AD 43 and 800. Being found in SFBs, objects RF<715> and RF<719> likely date AD 400-800, whereas RF<718> is probably residual in its high medieval context.

Shearboard hooks

5.15.87 A shearboard hook (RF<618>) was discovered in Period 4 G40 ditch seg [2286]. Shearboard hooks are used in the process of fabric/cloth preparation and help to stretch fabric onto a board before shearing the fibres to an equal and neat length. The item is made of iron, has a straight, non-twisted stem and is of the shorter type (Goodall 2011, 65, D73). The centre of the stem is decorated with a zone of either incised lines or spiralling metal wire. Due to corrosion, the exact nature of the decoration can no longer be seen. Walton Rogers states that shearboard hooks rarely occur prior to AD 1100. She suggests that iron specimens are generally earlier than copper-alloy equivalents and that a twisted stem is an earlier feature than a line- or wire-decorated stem. She furthermore indicates that older specimens are generally longer. Subsequently, she goes on to contradict herself and notes that a 10th-century iron specimen with a line- or wire-decorated stem is known from England and a copper-alloy specimen with a line- or wire-decorated stem from the Netherlands. The latter dates between AD 750 and 900 (Walton-Rogers 1997, 1774). Given that the Bramford find is a short iron example without a twisted stem, it is likely to date to post-AD 1100; this would fit with the assigned feature phase. A start date around AD 900 or somewhat earlier, however, cannot be ruled out.

Spindle whorls

5.15.88 A decorated bone whorl (RF<704>) was retrieved from basal fill [2348] of Period 3 pit G93. According to research by Malcolm, it can be suggested that the small diameter of the whorl is indicative for it to be a gaming piece rather than a spindle whorl (Malcolm *et al*. 2003, 100 and 305). However, at Spong Hill, items very similar to RF<704> are classified as spindle whorls whilst the many gaming pieces found are all substantially smaller (Hills and Lucy. 2013, 146-49). Given the shape of the item, classification as a spindle whorl seems probable, with a date from AD 410 to 800.

Thimbles

5.15.89 Five thimbles were found, of which four are machine-made. Thimble RF<768>, retrieved from subsoil [2002], is a handmade example and dates between AD 1066 and 1540. The four machine-made thimbles date post- AD 1750, which is in agreement with the contexts they were found in, namely subsoils G105; [2002] and [3002],and G41 ditch fill [2148].

<u>Metalworking</u>

Ingots

5.15.90 Copper-alloy ingot (RF<153>) was retrieved from Period 4 ditch G56 and is potentially related to metal-working or tool-making. The item is undiagnostic for the purpose of dating and could be earlier than the ditch.

Punches

5.15.91 Three punches were found that are associated with metal-working (RF<172> [2112], <246> and <250> both [2057]). The punches are undiagnostic as their shape does not change significantly throughout history. Matching specimens are listed by Goodall (2011), but this does not definitively date them to the medieval period. All were collected from Period 3 hollow deposits.

Knives

5.15.92 Amongst the registered finds are 38 knives or fragments thereof. Knives are of limited use for the purpose of dating, as most basic shapes have a long lifespan. Especially for a site like Bramford, where the majority of artefactual evidence dates to the early medieval or medieval period, this problem becomes evident. Thirty-two examples were retrieved from contexts which are phased as early medieval (AD 400 – 700) and only one knife was found in a context phased to the high medieval period.

5.15.93 The remaining five knives in the assemblage were discovered in contexts which have not been phased as yet. Based on their shape, many of the knives span both the early medieval and high medieval periods. As in other finds categories, the phasing of contexts does not in all instances correspond with the dating of items found in them. This suggests that it is often unsafe to assume that a knife found in an early medieval context automatically belongs to the early medieval period. The same applies to the knife from a high medieval context. Instead, where relevant, an early medieval and a medieval date are provided for each knife. Only occasionally, a more specific date could be assigned. This more precise date is predominantly based on the context of the find rather than on the shape (e.g. a knife from a sunken featured building is likely early medieval rather than medieval).

5.15.94 Blakelock's knife typology is used for both early medieval and medieval knives. It provides a simple division into four categories (A-D) based on the shape of the back (Blakelock 2012, 81). Additionally, the scheme allows subdivision on the basis of the positioning of the tang (1-4). Table 25 categorises the Bramford knives according to the Blakelock typology.

RF NO.	BACK SHAPE	TANG POSITION	DESCRIPTION
7	A	3	Angled back, low tang
55.2	-	-	n/a, post-AD 1540
61	B	?	Curved back, tang unknown
73.2	B	1	Curved back, central tang
77	B	1	Curved back, central tang
79.2	D	4	Straight back, tapering tang
80.2	A	?	Angled back, tang unknown
89	?	?	Unknown
108	B	3	Curved back, low tang
122	B	1	Curved back, central tang
124.1	A	?	Angled back, tang unknown
144	D	1	Straight back, central tang
163.1	B	?	Curved back, tang unknown
163.2	B	?	Curved back, tang unknown

RF NO.	BACK SHAPE	TANG POSITION	DESCRIPTION
165	A	?	Angled back, tang unknown
258	A	?	Angled back, tang unknown
327	B	1	Curved back, central tang
415	B	?	Curved back, tang unknown
417	B	1	Curved back, central tang
429	?	?	Unknown
454	B	?	Curved back, tang unknown
483	B	1	Curved back, central tang
491	B	1	Curved back, central tang
492	B	4	Curved back, tapering tang
495	B	1	Curved back, central tang
500	A	?	Angled back, tang unknown
502	B	3	Curved back, low tang
535	B	3	Curved back, low tang
539	?	?	Unknown
555	B	1	Curved back, central tang
562	A	1	Angled back, central tang
564	B	1	Curved back, central tang
625	?	2	Unknown back, high tang
635	B	3	Curved back, low tang
637	B	?	Curved back, tang unknown
676	?	1	Unknown back, central tang
711	B	4	Curved back, tapering tang
774	B	3	Curved back, low tang

Table 25: Knife classification, according to the Blakelock (2012) typology

5.15.95 Out of the total 38 knives, 36 are whittle tang knives and two are scale tang knives. The knife from Period 4 G20 ditch terminus (RF<55.2>) is equipped with a shoulder plate and has a sharply-stepped cutting edge near the shoulder. The combination of these features starts to occur around AD 1600/50 and continues to be applied up to *c.*1950 (Brown 2001, e.g. 87, 113, 131, 153), thus making this knife intrusive.

5.15.96 Knife RF<61>, which was found in Area 3 subsoil, is the second scale tang knife and belongs to Goodall's type Q. Goodall dates this type between AD 1200 and 1540/1600 (Goodall 2011, 108). Alternatively, Brown suggests a continuation of the type up to approximately AD 1700 (2001, e.g. 77 or 90).

5.15.97 Twenty-eight of the recovered knives could be classified according to the early medieval knife typology by Vera Evison (Table 26). Out of the remaining 10 knives, one may belong to either type 3 or 5 and one to either to type 1 or 4. Three further knives are pre- or post- early medieval in date and therefore do not feature in Evison's typology. Five knives are represented by fragments which do not allow for classification using Evison.

TYPE	NO. OF KNIVES	TYPE DATING	DESCRIPTION
1	19	475 – at least 750	Curved back, curved cutting edge
2	1	475 - 700	Straight back, curved cutting edge
3	4	525 – at least 750	Angled back, curved cutting edge
4	2	625 – at least 750	Curved back, straight cutting edge
5	2	575 – at least 750	Angled back, straight cutting edge

6	0	475 - 700	Straight back, incurved near tip

Table 26: Classification of the knives from Period 3, after Evison 1987

5.15.98 Twenty-six of the total 38 knives can be classified using Goodall's typology for medieval ironwork (Table 27). Of the remaining 12 knives, three may belong to either type B or D and three knives may belong to either type D or E. In one case, a knife can be classified as post-medieval and does therefore not feature in Goodall's typology. Five knives are represented by fragments which do not allow for classification using Goodall.

TYPE	KNIVES	TYPE DATING	DESCRIPTION
A	0	1066 - 1300	Rising, then angling down back, straight or curved cutting edge
B	5	1066 – 1540 Predom. 1066 - 1300	Flat, straight back before angling down, straight or curved cutting edge
C	1	1066 - 1540	Flat straight back, parallel cutting edge, then rising to meet back
D	12	1066 – 1540 Predom. 1100 - 1300	Back and cutting edge parallel before both tapering to tip
E	5	1066 – 1540 Predom. 1200 - 1400	Back and cutting edge taper more or less equally towards tip
F	1	1100 - 1500	Back tapers from shoulder down to meet straight cutting edge
G	0	c. 1300 – 1540	Cutting edge rises from shoulder to meet straight back
H	0	1200 - 1400	Stepped back, any cutting edge
I	1	1066 - 1400	Convex back.any cutting edge
J	0	Not dated	Concave back, any cutting edge
Q	1	1200 - 1600	Straight back and scale tang in line, cutting edge rises to meet back

Table 27: Classification of the knives from Period 3, after Goodall 2011

5.15.99 In Table 28, a date is suggested for all 38 knives from Bramford. The knife found in hollow deposit G70 can be classified as Goodall's type I and has a concave back. This characteristic is specifically linked to high medieval rather than early medieval knives. For this reason, it is likely that RF <108> can be dated between AD 1066 and 1400 and is intrusive in its Period 3 context.

5.15.100 Knife RF<89>, found in hollow deposit G60, is represented by a fragment which is not diagnostic. The same applies to RF<429> [2056], <539> [2105], <625> [2084] and <676> [2105]. Theoretically, all five knives could date between AD 43 and 1900. In all likeliness, however, they can be placed roughly between AD 475 and 1540.

RF NO.	GROUP	CONTEXT	EARLY MED TYPE	MED TYPE	DATE
7	3	1047	5	B	575-750
55.2	29	3382	-	-	1600-1950
61	105	3002	-	Q	1200-1700
73.2	13	3361	1	D or E	475-1540
77	75	2052	1	E	475-750

RF NO.	GROUP	CONTEXT	EARLY MED TYPE	MED TYPE	DATE
79.2	75	2059	2	C	475-700
80.2	97	2307	3	B	525-1540
89	60	2112	UKN	UKN	475-1540 (?)
108	70	2013	-	I	1000-1400
122	61	2006	1	D	475-1540
124.1	61	2006	5	B	575-1540
144	68	2076	1	E	475-1540
163.1	68	2080	1	D or E	475-1540
163.2	68	2080	1	D	475-1540
165	40	2078	3	B or D	525-1540
258	60	2112	3	B	525-1540
327	64	2115	1	E	475-1540
415	64	2115	1 or 4	B or D	475-1540
417	64	2115	1	E	475-1540
429	65	2056	UKN	UKN	475-1540 (?)
454	65	2056	4	F	625-1500
483	65	2057	1	D	475-1540
491	65	2058	1	D	475-1540
492	68	2088	4	B	625-1540
495	65	2058	1	D	475-1540
500	64	2115	3	D	525-1540
502	64	2115	1	D	475-1540
535	87	2143	1	D	475-1540
539	64	2105	UKN	UKN	475-1540 (?)
555	64	2105	1	D	475-1540
562	16	3486	3 or 5	B or D	525-1540
564	64	2105	1	E	475-1540
625	68	2084	UKN	UKN	475-1540 (?)
635	65	2057	1	D	475-1540
637	65	2058	1	D or E	475-1540
676	64	2105	UKN	UKN	475-1540 (?)
711	76	2228	1	D	475-750
774	4	1037	1	D	475-750

Table 28: Classification and dating of the knives from Period 3

Unidentified tools

5.15.101 Hollow G62 produced an unidentified iron tool which is likely related to either woodwork or metalwork. Two finished bone tools (RF<760> and <765>) with an unknown purpose were found in Period 3 pit [3541] (G30) and SFB G15. The tools are made of a likely sheep/goat metapodia or tibia and a modified fish dentary bone.

Waste material and raw material

5.15.102 The discovery of waste- and raw materials is indicative for craft processes taking place on site. At the site, items in this category are limited to animal bone and antler working and were all found in Area 3. SFB G15 fill [3161] produced a waste product of animal bone working (RF<761>), consisting of a bovine scapula with deep knife marks. Given its context, the waste can likely be dated to the early medieval period.

5.15.103 Hollow G62 deposit [2012] contained a second waste fragment from animal bone craft. The fragment consists of a long bone from a medium-sized mammal and shows oblique file marks on the outer surface. A date cannot be ascertained. Evidence for antler working includes one item of craft waste (RF<762>), comprising a beam or crown fragment with semi-circular removal, found in an upper fill of ring-ditch G12. A potentially worked antler tine (RF<614>) was recovered from SFB G15 fill [3414]. The item consists of a naturally curved and tapering fragment with potential traces of working around the tip. Both items suggesting antler working are derive from early medieval occupation contexts.

Containers and vessels

Boxes

5.15.104 Hollow deposit G65 produced a very small box catch (RF<480>) of which a parallel has previously been found in Coddenham, Suffolk. The catch is evidence for the presence of wooden containers on site which have not been preserved. The catch dates between AD 410 and 1066 (West 1998, 137 – item 21.18).

Buckets

5.15.105 Three bucket fittings were recovered, all made of copper-alloy. The first is a decorated bucket binding (RF<705>) from Period 3 G87 pit [2147]. Parallels with a similar decoration on the centre of the band are listed by Cook (2004, 112 – types C and B). The item dates between AD 450 and 570. SFB G22 produced a bucket fitting (RF<72>) that can be assigned a general early medieval date. A likely bucket clip (RF<559>) was found in hollow deposit G64. Whilst it likely dates to the early medieval period, it cannot be ruled out as an intrusive high medieval item.

Copper-alloy vessels

5.15.106 Two copper-alloy vessel fragments were collected from hollow deposit G65 (RFs<391> and <599>) and further single fragments from each of hollows G67 (RF<326>) and G68 (RF<577>). The first two fragments are both from a rim, but do not belong to the same vessel. The third fragment, also from a rim, is relatively heavy, suggesting that the alloy has a lead content. The fourth object is in a poor condition and may show signs of heat exposure. Due to the nature of the fragments, they are undiagnostic and can be placed roughly between AD 410 and 1900. However, all derive from deposits phased as Period 3.

Iron vessels

5.15.107 An iron lid of an unknown vessel (RF<418>) was found in Period 5 ditch G41. A circular shape is pressed into the centre of the item. The object has a modern date.

Security equipment

Keys

5.15.108 The excavations produced four keys or fragments thereof. Fragment RF<644> was discovered in deposit G15, associated with an early Saxon building. This type of key dates roughly between AD 1275 and 1400 and is therefore intrusive (Goodall 2011, 289 – item I499). The same applies to the key (RF<451>) from hollow deposit G65, which can be dated to approximately AD 1250 and 1425 (Goodall 2011, 295 – items I579 and I581).

5.15.109 Ditch G41 is the only post–medieval/modern feature which contained a key (RF<96>. The item is a large and heavy key of Goodall's type G2. This is a common type with a lifespan between AD 1066 and 1900, which could mean that the key is potentially residual in the context (Goodall 2011, 240 – item I541; Egan 2005, 74 – related to item 319).

5.15.110 A small copper-alloy key (RF<11>) was retrieved from Area 3 subsoil [3002], which can be identified as a casket key and dates between AD 1150 and 1400 (Egan 2010, 112 - e.g. items 298 and 305).

Latch lifters

5.15.111 Hollows G64 and G65 both contained a latch lifter made of iron (RFs<334 and 473>). This is an early form of key which is associated with the early medieval period (Malim and Hines 1998, 125; Wagner and Ypey 275-76).

Locks

5.15.112 A lock bolt from subsoil [2002] belongs to a Goodall type 2 lock and dates between AD 1066 and 1540 (Goodall 2011, 260 – items I154 and I156). A plate, found in hollow deposit G70, is part of a modern lock. The item dates between AD 1900 and 2020 and is therefore intrusive in the early medieval feature.

Padlocks

5.15.113 Hollow deposit G65 produced a padlock bolt (RF<449>). The bolt likely belongs to Goodall's type E and has a long lifespan between AD 1066 and 1900.

Household equipment

Flesh hooks

5.15.114 The assemblage includes three flesh hooks which were retrieved from hollows G60 and G68, and from ditch fill [2148] (G41). Those from the hollows (RF<178> and <292>) can be identified as Goodall's type one, which was in use between *c.*AD 700 and 1300 (Goodall 2011, 298-99), which perhaps means they are intrusive. The latter flesh hook (RF<102>) is fragmentary and of a type cannot be assigned. As such, the item is undiagnostic and has a broad date range of *c*. AD 700 and 1900.

Lanterns

5.15.115 A fragmentary objecct found in hollow G68 likely represents the base of a candlestick or part of a lantern (RF<609>). The fragment is decorated with ridges and made of a light weight, grey-coloured copper-alloy. The folded-over top edge might make identification as a lantern more likely. Based on this preliminary identification, the item can be dated roughly between AD 1400 and 1700 (Egan 1998, 138-39 - item 376; Egan 2005, 128 - item 210).

Nutcrackers

5.15.116 The Area 2 subsoil produced an item which can be identified as one handle of a pair of nutcrackers. Comparable items are listed on the PAS database (e.g. NLM-A394A7). The item dates between AD 1600 and 1800.

Cutlery

5.15.117 An item retrieved from Area 3 subsoil is the copper-alloy top edge of a cutlery handle (RF<38>). Given its simple sub-circular terminal, the item can be considered relatively modern (*c.*AD 1750-1950).

Transport, agriculture and subsistence provision

Bells

5.15.118 Three bells, represented by their clappers (RF<366>, <462> and <604>), were recovered from SFB G15 and hollow deposit G65. The clappers have a broadly medieval date.

Fishhooks

5.15.119 G29 Posthole fill [3063] contained a fishhook (RF<643.2>) which is undiagnostic. The item can be dated between AD 410 and 1900. The posthole is phased as Period 3.

Harness fittings

5.15.120 An S-shaped hooked strip made of iron (RF<615>), from G103 pit [2288], cannot be identified with certainty, but is likely related to a horse harness. Whilst an exact date is unknown, the item is likely Roman or early medieval. Hollow deposit G65 contained a strap hook (RF<434>), which can be related to a horse harness (Clark 1995, 60 - item 52). The item is dated between AD 1066 and 1540 and therefore intrusive in the early medieval phased feature.

Harness mounts

5.15.121 Copper alloy harness mount (RF<14>) is one of the most interesting pieces found on site and originates from SFB G15 fill [3054]. It is decorated with garnet inlay and dates between AD 500 and 600. Pluskowski describes similar mounts, but an exact parallel has not be found to date (2005, 59 – item 1). More research into this object is required.

5.15.122 A second harness mount (RF<16>) that dates between AD 500 and 600, was retrieved from Period 5 ditch G18 and thus is residual. It requires further research to find an exact parallel. Similar harness mounts, however, are listed on the PAS database (e.g. GLO-2E6C4F, NMS-339941 and DOR-1C5D40).

Harness pendants

5.15.123 Medieval pit [2174] (G102) produced a copper-alloy harness pendant (RF<426>), which can be dated between AD 1066 and 1540 (Clark 1995, 64 – item 57).

Horseshoes

5.15.124 A fragment of an early horseshoe (RF<128>) was retrieved from hollow deposit G61. The shape of the nail holes suggests that the item belongs to Clark's types 1 or 2a. The latter has an undulating edge which is not visible in the fragment. However, the edge may have worn due to intensive use. The item can be dated between AD 900 and 1350.

5.15.125 Hollow deposit G64 produced an early horseshoe nail (RF<679>) of the Fiddle-key type (Goodall 2011, 364 - type A). The nail dates between AD 1000 and 1200. An intrusive medieval horseshoe (RF<224>) was retrieved from Period 3 hollow deposit G65. The item is relatively small and belongs to Clark's type 3 or 4, dating between AD 1200 and 1650. The poor condition prevents more-precise classification.

Ox shoes

5.15.126 An ox shoe was recovered from each of Period 4 ditches G40 (RF<175>) and G19 (RF<772>). Both ox shoes have a broad medieval to post-medieval date.

Fixtures and fittings
Angle ties

5.15.127 Two angle ties were recovered, from hollow deposit G60 and ditch G57. Angle ties are undiagnostic and can date from AD 1066 to 1900, which means they are both likely intrusive within the Period 3 and 4 features.

Appliqués

5.15.128 A likely item of decorative appliqué (RF<76.2>) was found in SFB G75. Whilst the purpose of the object remains unknown, and no direct parallel could be found, the metal and its condition suggest a date in between AD 43 and 1066. This suggests that the item is potentially residual in the early medieval feature. Post-medieval/modern ditch G75 produced a small fragment of openwork decorative applique made of a low-quality copper-alloy (RF<398>). The item can be dated to post-AD 1900.

Bindings

5.15.129 Bindings (RF<533>, <675> and <681>) were found in Period 3 G87 pit [2216], hollow deposit G64, and SFB G22 respectively. Bindings are generally undiagnostic, but sometimes show particular features which can provide them with an approximate phasing. Both RF<675> and <681> are comparable to items listed by Goodall and can be dated between AD 1066 and 1900 (2011, 209 or 215; 215, item H553). Binding RF<533> is likely modern (*c*.AD 1700 – 2000) and therefore intrusive.

Brackets

5.15.130 An iron bracket (RF<583>) was found in Period 3 hollow G68. The item is undiagnostic.

Chains

5.15.131 Hollow deposit G65 contained heavily corroded, S-shaped chain link RF<456> (Goodall 2011, 333; J240). A chain consisting of nine interlocking links (RF<653>) and a likely fragment of a curb chain link were retrieved from hollow G64 (RF<336>). Chains are used from the Roman period onwards and change little in their appearance. They are therefore undiagnostic. The good condition of the latter find, however, suggests a post-medieval date. The latter type occurs during the medieval and post-medieval periods (Goodall 2011, 377 – item L79).

Clench bolts

5.15.132 Hollow G70 deposit [2013] produced a clench bolt (RF<116.2>), which is undiagnostic. It can be dated between AD 1066 and 2000 and is therefore likely intrusive to the early medieval context (Goodall 2011, 189).

Furniture fittings (miscellaneous)

5.15.133 A likely base of a drop handle from an item of furniture (RF<3>) was discovered in topsoil [1001], in Area 1. The item can be dated between AD 1540 and 1900. In Area 2, post-medieval ditch G41 contained a castor wheel made of a grey-coloured copper-alloy, which broadly dates between AD 1750 and 1950.

Handles

5.15.134 Three handles were retrieved from Period 5 ditch G41. The first (RF<357>) is made of iron and has potentially a decorative edge, but is undiagnostic. The second handle (RF<642>) is made of animal bone and belongs to an unknown implement. The item can be dated between AD 410 and 1066 and is therefore residual. Lastly, an iron handle that broadly from the medieval to post-medieval period was collected (RF<3203>).

5.15.135 An item which is likely a drop handle was found in hollow G60 deposit [2114]; alternatively, it could be a pot hanger (RF<301>). The item is undiagnostic and dates between AD 43 and 1900.

5.15.136 G102 pit [2316] produced an undiagnostic handle (RF<392>) which can be dated to the medieval or post-medieval period. Given the fact that the context is phased as high medieval, the item may be intrusive (Goodall 2011, 325).

Hinges

5.15.137 A hinge pivot (RF<231>) from the later slump fill of ring-ditch G12 can be dated from the early medieval to later medieval periods and is likely intrusive. A modern hinge (RF<354>) was retrieved from Period 5 ditch G41.

Hooks

5.15.138 A large, handled hook (RF<65>), likely used for bags or bailing, was retrieved from Area 3 subsoil. The hook can be dated between AD 1066 and 1540 (Goodall 2011, 327 - item J168). An S-shaped, undiagnostic hook with unequal 'arms' (RF<402>) was retrieved from Period 4 ditch G40. Hollow G68 produced a copper-alloy hook with a slight lip at the terminal (RF<580>). The hook is undiagnostic and broadly dates between AD 410 and 1950. For this reason, it may be intrusive to the early medieval phased feature.

Loops

5.15.139 The excavation produced two loops which could not be assigned to a particular use. The first loop is balloon-shaped (RF<214>) and was found in Period 5 layer G67. The loop dates to the post-medieval/modern period. The second is D-shaped (RF<524>) and was retrieved from Period 3 hollow G60deposit [2114]. It is formed from an iron bar with tapering ends which are intertwined. The loop is undiagnostic.

Mounts

5.15.140 Six mounts, some of which can be considered decorative, were collected from the excavations. Possible SFB G81 fill [2130] contained a copper-alloy specimen with a white metal coating (RF<636>). This item can be dated between AD 410 and 1066.

5.15.141 A mount with a flat circular head (RF<432>), potentially part of a medieval hinge was retrieved from Period 3 G65 hollow deposit [2056]. The item dates between AD 1066 and 1540 and is thus intrusive (Goodall 2011, 203).

5.15.142 The subsoil produced two mounts; one with decoration (<RF54>), which can be broadly dated between AD 410 and 1900 and the second dating from AD 1540 to 1900 (RF<270>).

5.15.143 A post-medieval mount (RF<521>), retrieved from hollow G61, is paralleled by an item on the PAS database (SWYOR-FCECDA) and dates between AD 1540 and 1700. A heavy cast copper-alloy specimen (RF<374>) was found in a possible early Saxon SFB G80, which likely has a post-medieval date, between AD 1540 and 1900. The purpose of the mount is unknown.

Rings

5.15.144 Three rings were found at Bramford which cannot be identified as dress accessories or as related to items from any other find category in this report. Rings are usually undiagnostic and can only be assigned rough date ranges. The item found in hollow G64 is similar to item J281 listed by Goodall (2011, 336-37). The ring from ditch G41 is comparable to Goodall's item J283 (2011, 337). And the third ring, from deposit G65, is most like Goodall's item J194 (2011, 331). A wide date range of early medieval to post-medieval can be assigned.

Sockets

5.15.145 Unphased ditch G52 produced a socket made of antler (RF<708>). The shape of the item suggests a possible hammer head, but no traces of use as such could be found.

Springs

5.15.146 A spring was found which could not be related to an item such as a brooch (RF <569>). This item was retrieved from hollow G68 and is undiagnostic.

Staples

5.15.147 The excavation produced three staples, all retrieved from early medieval features. RF<93>, made of copper-alloy, was retrieved from hollow deposit G60 and is relatively small. Whilst a date cannot be assigned with certainty, the item is likely early to high medieval in date. The second staple (RF<320>), also from hollow G60, is likely intrusive to and dates between AD 1540 and 1900. The third staple (RF<658>) is heavy and can be considered a structural fitting which dates to the medieval period or thereafter. The item is intrusive to deposit G64 (Goodall 2011, 172-73).

Studs and tacks

5.15.148 The excavation produced eight items which can be identified as a tack or stud. One of these, (RF<271>) was recovered from hollow G70 deposit [2013] and is noteworthy due to its large size. The item is likely a fixture related to an early medieval lyre and is comparable with an example from Bergh Apton, Norfolk (Green and Rogerson 1978, 63 and 90-91).

Unidentified fixtures and fittings

5.15.149 Hollow G60 deposit [2114] produced a potential structural fitting (RF<318>) which dates between AD 43 and 1066. SFB G22 returned an unidentified fixture consisting of a shaped iron strip with a nail through it. No date could be provided but given its context, it is likely early medieval. Hollow deposit G64 yielded an unidentified fixture (RF<592>); it is possible that the item represents an electrical fitting. This would suggest a post-AD 1900 date which makes it intrusive in its early medieval context. A second item from the same context is an unknown structural fitting which dates between AD 1066 and 1900 (Goodall 2011, e.g. 187 or 193).

5.15.150 Another unidentified fitting was retrieved from Period 4 ditch G40. The item likely dates to the post-medieval period and probably intrusive. Iron fixture (RF<254>) has an unknown purpose and was retrieved from Area 2 subsoil. The object can be dated to post-AD 1900. The same subsoil produced a structural fitting, potentially a holdfast. The item dates between AD 1066 and 1950 (Goodall 2011, 189 - item H236).

5.15.151 The unknown object recovered from hollow deposit G60 is made of copper-alloy and resembles a casket mount or handle attachment. A high medieval or early medieval date can be suggested. The unidentified structural fitting retrieved from hollow deposit G70 is undiagnostic. Hollow deposit G64 produced a fixture which includes a nut and bolt. This relatively modern item is intrusive in the early medieval context.

Wall hooks

5.15.152 Two wall hooks were recovered from Period 3 contexts. The first specimen (RF<697>), from hollow deposit G60, can be dated between AD 1066 and 1540 and is intrusive here (Goodall 2011, 185 - item H193). The second wall hook (RF<345>) was retrieved from hollow deposit G64 and is undiagnostic.

Washers

5.15.153 Four washers made of copper-alloy were collected, of which two (RFs <413> and <513>) can be dated between AD 43 and 1540. Both these items were retrieved from hollow G64. The remaining washers were recovered from post-medieval/modern deposit G67 (RF<196> and early medieval hollow G68 (RF<208>). Both can be assigned a modern date of post AD 1900.

Wire

5.15.154 Two pieces of undiagnostic iron wire were retrieved from Period 5 ditch G41.

Coins by Trista Clifford

5.15.155 The excavations produced a total of 65 coins from a range of 33 separate contexts of Period 3, 4, 5 and unphased date. The oldest is a copper alloy ancient Greek coin minted during the 3rd century BC; the most recent a contemporary copy of a George V penny. Excluding topsoil and subsoil deposits, G64 hollow deposit [2105] contained the largest number of coins (7); this includes the Greek coin and a 12th- to 14th-century penny fragment.

5.15.156 The majority of the coins are copper alloy, just two are silver. Preservation of the coins is variable; they are largely in poor, worn to extremely worn condition; however, there are a number of Roman coins for which the condition is unusually good and the patina of these coins leads one to suspect that they have been either ‘cleaned’ post-excavation by persons unknown or that they derive from a private collection and thus represent more recent losses.

Pre-Roman

5.15.157 Period 3 hollow G64 deposit [2105] produced an ancient Greek coin, RF<656>, minted between 228 and 280 BC. Why/how this coin has found its way to Suffolk is a mystery; it may have been a more recent loss from an antiquarian collection. In addition, a late Iron Age bronze unit, RF<750>, came from SFB G71. The coin bears a bust obverse, with an indistinct creature on the other. It can tentatively be identified as an issue of Cunobelinus of the Catevellauni and Trinovantes North Thames region, minted in the first half of the 1st century AD (ABC 2957; VA2089; BMC1968-71). Both are residual within their contexts based on date of production; however, the Greek coin is an unusual find in Britain and may be a more recent loss.

Roman

5.15.158 Roman coins form the majority of the assemblage, with 50 coins attributed to this period. The earliest is RF<308> from G60 hollow deposit [2114], an *As* of Nerva minted between 96-98AD; however, there are a number of unidentified copper alloy issues which may predate this. Of the fourteen 1st - 2nd century coins recovered, just three could be identified to ruler.

5.15.159 Third-century issues are also poorly represented by identifiable coins, although of the eleven coins of this period, nine could be attributed to Reece Period and five to ruler.

5.15.160 Fourth-century issues are the most numerous, with 19 examples. Issues of the House of Constantine dominate, and there are no recorded examples of Reece Period 19 or later. Thirteen examples can be attributed to Reece Periods, and of the remaining coins four are probable late 4th-century minims.

Saxon

5.15.161 An 8th-century debased silver sceatta of Abramson type series R type 150 or 160 was recovered from G64 hollow deposit [2105] (RF<667>).

Other coins

5.15.162 A silver coin, RF<588>, also from G64 hollow deposit [2105] is a penny with the legend entirely clipped, leaving just the central bust. The style of the bust suggests a Plantagenet ruler of the 12th-14th century. The coin is extremely worn. This coin appears to be intrusive within its Period 3 context.

5.15.163 Three 16th-century jettons were recovered from the subsoil (RF<75>, <41>, <60>), as was a 17th-century farthing token, RF<9>. A William III sixpence formed into a 'love token' (RF<56>) came from unpahased ditch G23. Other post-medieval issues include a contemporary copy penny of George V RF<361> from G68 hollow.

Trade and commerce

Bag seals

5.15.164 One undiagnostic bag seal made of lead was discovered in layer G67 (RF<201>), which is phased to the post-medieval/modern period. Modern bag seals are usually related to agricultural practice whilst those from earlier periods can also be related to general trade of goods.

Weights

5.15.165 Lead weights are found in four contexts. The weights are undiagnostic and were retrieved from hollow deposits G62, G64, G65, and the subsoil.

5.16 Environmental Remains by Mariangela Vitolo

5.16.1 Fifty bulk soil samples were taken during archaeological excavations at the site, for the recovery of environmental remains such as plant macrofossils, wood charcoal, fauna and Mollusca as well as to assist finds retrieval. Sampled features included pits, postholes, ring-ditches, layers and SFBs, and ranged in date from the prehistoric to the post-medieval period. The following report describes the contents of the environmental samples and discusses the information they provide on agrarian economy, the local environment and fuel selection and use.

5.16.2 Samples ranged from 10L to 80L in volume and were processed in their entirety by flotation using a 250µm mesh for retention of the flots and a 500µm mesh for the heavy residues, before being air dried. The heavy residues were passed through graded sieves of 8, 4 and 2mm and each fraction sorted for environmental and artefactual remains (Appendix 9a). Finds and ecofacts from the residues have been incorporated within the relevant reports where they provide further information to the hand-collected assemblage.

5.16.3 The flots were scanned under a stereozoom microscope at 7-45x magnifications and their contents recorded (Appendix 9b). Nomenclature for the cereals follows the traditional classification (Zohary and Hopf 1994) and Stace (2010) for the wild plants. Charred botanicals extracted from the residues have been included the flot quantification (Appendix 9b).

5.16.4 When available, one hundred charcoal fragments per context underwent identification; however, in some deposits, fewer fragments were suitable for identification. Each fragment was fractured by hand along three planes (transverse, radial and tangential) according to standardised procedures (Gale and Cutler 2000; Hather 2000; Leney and Casteel 1975). Charcoal specimens were viewed under a stereozoom microscope for initial grouping, and an incident light microscope at magnifications up to 400x. Taxonomic identifications were assigned by comparing suites of anatomical characteristics visible with those documented in reference atlases (Hather 2000; Schoch *et al.* 2004; Schweingruber 1990). Taxonomic identifications of charcoal are recorded in Appendix 9c, and nomenclature used follows Stace (2010).

Results

Period 1 – Prehistoric: Samples <12> [3155] and <16> [3176]

5.16.5 Prehistoric pits G9 produced no charred remains of crops and a single hazel (*Corylus avellana*) nutshell fragment. The latter could have originated from wild resources collected either for food or for fuel. Charcoal fragments were scarce, warranting no identification work. Finds from the residues included pottery, flint, fire-cracked flint and magnetic material, which could be natural in origin.

Period 3 – Early Saxon: Samples <2> [1037], <3> [1053], <6> [3052], <10> [3054], <11> [3106], <13> [3161], <14> [3143], <19> [2015], <21> [3199], <26> [2052], <27> [2056], <28> [2057], <29> [2058], <34> [3462], <35> [3476], <37> [3146], <38> [2124], <39> [2130], <42> [2096], <43> [2097], <44> [2245], <46> [2289], <48> [2342], <49> [2343], <50> [2344], <51> [2351], <52> [2348] and <53> [2382]

5.16.6 The majority of sampled Saxon contexts were associated with various certain and probable SFBs, but they also included pits, ditches and a possible corn-dryer. In general, charred plant remains were absent or scarce (<10) in most Period 3 deposits. Moderate amounts of crop remains (10-50) were recovered from SFB G75, SFB G78, and Saxon pit G94. Similar species of plant macrofossils occurred in all Saxon deposits. These included hulled barley (*Hordeum vulgare*), wheat (*Triticum* sp.), possibly of the free-threshing type, rye (*Secale cereale*) and other indeterminate cereals and pulses. Oat (*Avena* sp.) grains were occasionally present but the absence of diagnostic floret bases hindered their identification as a wild or a cultivated species. A few wild seeds, probably originating from crop weeds, were recovered and included mostly large grass caryopses. Grass stem fragments and hazelnut shells were also present in various Saxon features.

5.16.7 Possible dryer / hearth G59 produced scarce charred remains of crops, including Celtic bean (*Vicia faba*), vetch/bean (*Vicia* sp.), wheat/barley (*Triticum/Hordeum* sp.) as well as large grass (Poaceae) caryopses and wild vetch/tare (*Vicia/Lathyrus* sp.). These remains were few and do not clarify the precise use of this feature.

5.16.8 Charcoal generally preserved in a fragmentary state on site, but it preserved well in the Saxon contexts. Tyloses were noted commonly on the oak fragments. These are growths that occur within the vessels and are due to old age or disease. Radial cracks were also noted on occasion; these could be due to the burning of green as opposed to seasoned wood.

5.16.9 The Saxon charred wood assemblages were dominated by a mixture of hazel (*Corylus avellana*), oak (*Quercus* sp.) ash (*Fraxinus excelsior*) and Maloideae. The latter is a sub-family that includes taxa that are not distinguishable on grounds of wood anatomy, including apple, pear and hawthorn among others. Other taxa occurred less often and were likely to represent minor components of the fuel, possibly kindling. These taxa included cherry/blackthorn (*Prunus* sp.), sloe/damson (*Prunus*

spinosa/domestica), field maple (*Acer campestre*), alder (*Alnus* sp.) and purging buckthorn (*Rhamnus cathartica*).

5.16.10 Ecofacts from the heavy residues of the Saxon samples included mostly bone, of various size, burnt and unburnt, as well as land molluscs. Finds included pottery, fired clay, fire-cracked flint, stone and magnetic material.

Period 4 – Medieval: Samples <1> [3029], <23> [3262], <32> [2065], <40> [2154]

5.16.11 Sampled medieval ditches produced scarce charred plant remains. Free-threshing wheat, hulled barley and oat were identified from these contexts. The oat grain could have belonged either to a wild grass or a crop.

5.16.12 Ecofacts from the residues included bone, land snail shells and small amounts of charcoal, which did not warrant identification work. Finds included pottery, slag and magnetic material.

Period 5 – Post-medieval: Sample <47> [2310]

5.16.13 G96 pit produced a handful of charred caryopses of hulled barley (including a twisted grain), rye and possible wheat. A moderate amount of charcoal was present in both the residue and flot. Maloideae and hazel, with two fragments of ash, dominated the assemblage. Vitrification was noted on the hazel fragments. This happens when the wood anatomy fuses, becoming glassy. Experimental evidence (McParland *et al* 2010) has shown that high temperatures and prolonged burning are necessary but not sufficient conditions to cause vitrification. It is likely that other unknown co-factors must be at play for charcoal to become vitrified.

5.16.14 Ecofacts from the heavy residue consisted in burnt and unburnt bone, whilst finds included glass, stone, iron object, fire-cracked flint and magnetic material. The latter could be industrial or natural in origin.

Period 0 – Undated: Samples <4> [3040], <5> [3050], <7> [3103], <8> [3128], <9> [3130], <15> [3134], <17> [3178], <18> [3183], <20> [2017], <22> [3256], <24> [3272], <25> [3304], <30> [3033], <31> [3387], <33> [2067], <36> [3471], <41> [2167] and <45> [3525]

5.16.15 Undated features produced a limited amount of charred grains, including free-threshing wheat, hulled barley, oat and rye. Free-threshing wheat and rye are typical of post-Roman sites in Britain. However, large concentrations of grains are lacking from these undated deposits. Therefore, these caryopses either could be contemporary with the relevant fills, or have infiltrated from later periods.

5.16.16 Conversely, these features produced a large charcoal assemblage. Most fragments were identified as oak; with a few fragments of hazel, Maloidedeae and field maple. Radial cracks were present on the oak fragments and on the single hazel fragment. These splits across the length of the rays of the wood occur during the charring process and might indicate the burning of fresh as opposed to seasoned wood for fuel.

6.0 POTENTIAL AND SIGNIFICANCE OF RESULTS

6.1 Realisation of General Aims

6.1.1 The general aim of the archaeological excavations (3.1) was to determine the presence or absence of any archaeological remains and to establish their character, location, extent, date, quality, and significance, preserving these by record. Moreover, they aimed to assess all archaeological remains against the wider background of previous fieldwork in the area.

6.1.2 The excavation of the three mitigation areas within the site has successfully identified, investigated and recorded the archaeological remains present within them. This has generated a substantial data set that allows these remains to be studied and understood in their wider local and regional context.

6.1.3 The recorded remains date from four (technically five, including residual/reused Roman) archaeological periods and include: a Bronze Age barrow ring-ditch; the remnants of an early Saxon settlement including sunken-feature buildings, post-built hall-like structures, pits and artefact-rich soil layers; high medieval field systems; and post-medieval to modern field boundary ditches. A large assemblage of dateable/diagnostic finds was recovered across the features, primarily consisting of pottery and metalwork which, along with stratigraphic and spatial relationships, has allowed for most of the significant features to be phased into one of these five periods. Environmental remains were also retrieved by means of bulk soil sampling of selected features/deposits. A significant number of recorded pits and postholes across the site, especially in Area 3, are currently undated and unphased.

6.2 Realisation of Research Aims

6.2.1 The site-specific aims and the research aims and questions identified for the project (3.2–3.3) are considered in relation to the excavated evidence, below.

Bronze Age

- *OR1: The possibility that significant [Bronze Age] sites remain hidden under colluviation requires further study (Medlycott 2011, 21)*

6.2.2 Contrary to the findings of the evaluation, no true colluvial deposits were identified during the course of the excavations. Large expanses of early Saxon layers were found overlying naturally accumulated deposits in a number of hollows in Areas 2 and 3, but no prehistoric features were found to be present on their removal.

- *OR2: Patterns of burial practice need further exploration. This should include the relationship between settlement sites and burial, and the development and use of monuments, including burial mounds as key elements in determining and understanding the landscape. Later Bronze Age burial practices are now known to be variable, however we do not know why this is the case (Medlycott 2011, 20)*

6.2.3 The excavation has established that the ring cropmark in Area 3 relates to the below-ground remains of a ring-ditch, interpreted to be the remains of a barrow of possible earlier Bronze Age date. However, no burials were found in association with it and the dating of its construction requires clarification and confirmation. By inference, the unexcavated putative barrow BRF008 to its north may reasonably be presumed to be of similar date and nature. Together, they constitute evidence for funerary use of this river valley landscape. On the basis of the excavation results, they do not appear to have been accompanied or augmented by flat cemeteries, but stood prominent in the landscape in relative isolation. No contemporary settlement remains were encountered in the excavation areas, other than a few pits of uncertain prehistoric date and function. As such the barrow remains provide limited insights into the prehistoric landscape here, though do represent the typical trend of monument building with all its connotations of territorial display, creation of identity and sense of place, etc.

Anglo-Saxon

- *OR3: The development of Anglo-Saxon fieldscapes needs further investigation. How far can the size and shape of fields be related to the agricultural regimes identified? To what extent are Roman field systems re-used? What is the evidence for open field systems in the region in the Anglo-Saxon period? (Medlycott 2011, 58)*

6.2.4 No Roman land use remains or Anglo-Saxon boundary features that could be interpreted to define field systems were identified by the excavations. As such, the site has no potential to inform the study of fieldscapes in this period. As early Saxon settlement features extended over the majority of the excavation areas, little can be inferred about the presence of open field systems.

- *OR4: What forms do the farms take, what range of building-types are present, and how far can functions be attributed to them? (Medlycott 2011, 58)*

6.2.5 The excavations have produced good evidence for dispersed early Saxon settlement, comprising SFBs, post-built buildings, pits and apparent midden-derived layers. Whether this constituted a farm *per se*, or a farming community exploiting, grazing and/or cultivating the surrounding landscape in a loosely collaborative manner is unclear. The building remains have produced finds assemblages that may indicate their functions, though these have not been readily discerned to date. It is equally likely that they constitute general occupation rubbish from the settlement as a whole. The finds assemblages attest to a variety of domestic and craft manufacturing activities being undertaken within the settlement. Further consideration of building types and their functions can usefully be undertaken during the analysis phase.

- *OR5: The extent and nature of late Anglo-Saxon landscape reorganisation, village nucleation, field systems, etc. needs further exploration (Medlycott 2011, 58)*

6.2.6 No evidence for late Saxon occupation or other land use was identified, other than the recovery of a few metalwork finds that could be of such later date. It

is likely that the early Saxon settlement passed out of use by or in the 7th century, with tangible land use not resuming until the High Medieval.

- *OR6: The main communication routes through the region need to be established. This would include main routeways, secondary routes, valley corridors, rivers and marine transport (Medlycott 2011, 58)*

6.2.7 No formal routeways or tracks defined by ditches or other means were found within the early Saxon settlement. However, the spread of settlement remains along this location in the Gipping Valley suggests that the valley was a significant corridor along which people, animals and perhaps commodities moved. The Gipping river may have had a part to play in this, providing access to the tidal Orwell.

6.3 Significance and potential of the individual datasets

Stratigraphic sequence

6.3.1 The stratigraphic dataset has provided evidence for four main periods of occupation: Period 1 – prehistoric; Period 3 – early medieval; Period 4 – high medieval; Period 5 – post-medieval/modern (Period 2 – Roman being somewhat notional). The recorded remains predominantly comprise ditches, pits and postholes, sunken-featured buildings, a barrow ring-ditch and natural hollows, many of which contained artefact-rich soils in their upper parts. A low to moderate degree of intercut complexity is evident, though the homogenous nature of feature fills has resulted in a degree of uncertainty regarding the resolution of intercutting relationships. A number of pits and postholes are currently undated/unphased, a significant degree of residuality and intrusiveness is also noted. There is some linkage between this phase of excavation and that of the adjacent Oxford Archaeology East site located to the south and southwest.

Period 1: Prehistoric

6.3.2 A large amount of residual Prehistoric material, predominantly worked flint of a broad Mesolithic to early Bronze Age date and occasional pottery of a broadly Neolithic date, was recovered from later dated features across the site. Of note was a lower to middle Palaeolithic hand-axe retrieved from pit G6, which also contained an abundance of worked flint. A fragment of Bronze Age socketed axe was recovered – though this may be a later curated object.

6.3.3 However, a small number of pits were identified that contained *in situ* prehistoric pottery. Two pits in Area 1 are identified to be of Early to Middle Neolithic date, whilst Area 3 contains five pits of broad Mesolithic to Early Bronze Age date and an Early Neolithic pit. A further pit is of uncertain Early/Middle Neolithic or Bronze Age date. Area 2 was devoid of any Prehistoric features. This is perhaps surprising, given the presence of the barrow ring-ditch to the south in Area 3 and the unexcavated cropmark ring-ditch to its north.

6.3.4 The G12 ring-ditch (BRF003) excavated in Area 3 has been placed in Prehistoric Period 1, though lacks definitive dating to this period; it is assigned a Bronze Age date purely on its morphological characteristics. Its basal fill,

suggested to be the remnants of the slumped barrow mound on its west and south sides, contained broadly prehistoric worked flint. It is posited that the natural hollows to the west and north, G13 and G14, were exploited/re-worked in order to emphasise the barrow monument within the landscape. No other firmly-dated Bronze Age features are identified, with the exception of pit [3177], which contained three sherds of pottery of Early to Middle Neolithic or Bronze Age date.

6.3.5 Although interpreted as the remains of a barrow, no evidence of any burials were found in the interior of ring-ditch G12. However, the medieval period imposition of right-angled boundary ditch G19 across it may have removed any such interments, particularly if originally contained within the mound itself rather than underneath. No evidence of satellite burials or structured deposition were encountered within its vicinity either.

6.3.6 The barrow did not sit in isolation in the landscape, given the ring-ditch presence of cropmark BRF008 to the north of Area 2. This was not excavated, being situated beneath the overheads and preserved *in situ*, but indicates that barrow ring-ditch G12 was part of a wider funerary landscape alongside the River Gipping, here situated on a promontory of land created by a meander in its course. The river valley was perhaps a significant communication route in this and later periods, with funerary monuments positioned conspicuously in relation to it, as territorial markers, way-markers, or the suchlike.

6.3.7 The prehistoric remains encountered within the site suggest a transient or low-level occupation in the landscape with a low significance and low potential for further study. It would however be useful to more accurately determine the construction dated of ring-ditch/barrow G12. The apparent Bronze Age funerary use within the Gipping Valley, and the positioning of individual monuments within it, may contribute to further study of Bronze Age funerary practice, particularly when considered alongside such sites as Flixton and West Stow. The ring-ditch is therefore considered to have slightly greater significance and moderate potential, especially regarding its longevity in the landscape and early Saxon reuse.

Period 2: Roman

6.3.8 No Roman dated features are identified. Indeed, it appears that there is no Roman period land use at this site. However, a considerable amount of Roman material was recovered, predominantly CBM and metalwork. The recovered Roman metalwork includes coins and personal items. This material was all found in diagnostically later-dated features and deposits and has evidently been transported to the site during the early Saxon period where it has been utilised within the settlement. Only 30 sherds of Roman pottery were retrieved and it appears that the reuse of ceramic items was fairly minimal. The presence of this quantity of re-used Roman material is presumed to have derived from a nearby Roman site of some status – possibly a villa-like residence? Reused and curated artefacts are not uncommon within Saxon settlements in Suffolk, having been noted at sites such as West Stow and Flixton.

6.3.9 There is little to no potential for understanding Roman land use within the site. However, the reuse/repurposing of Roman material has a high significance and high potential to contribute to the understanding of the functioning of the early Saxon settlement.

Period 3: Early medieval

6.3.10 During the Early Medieval period (5th to 7th centuries) the site is occupied by dispersed settlement, typical of the period (Hamerow 2014, 70). In Areas 1 and 2, eleven sunken-feature buildings and another six suspected SFBs are identified, along with associated pitting. Within Area 3, a post-built hall structure is posited, with a second, possible structure recorded to the south. No evidence of contemporary ditches defining field systems were encountered, with the dispersed settlement appearing to be unenclosed. Nor were any Roman field-systems, or indeed any Roman features, identified on site and, as such, there is no evidence that the settlement was located in relation to any pre-existing landuse entities – apart from barrow G12 (see below). The early Saxon settlement was located on the western banks of the River Gipping where the river meanders, creating a bow out to the west, and *c.*4 miles upriver from the tidal River Orwell. There was no evidence uncovered for water management or transport within the site, though a single fish hook hints at some exploitation of riverine resources. It seems likely that the settlement would have extended further towards the east, extending toward the river.

6.3.11 The SFBs were dispersed across the site and show no real sense of conformity in orientation, though they generally seem to be of a similar size, *c.*4m by 3m, typical of these types of structure (Tipper 2004). The number and arrangement of postholes associated with these SFBs ranged in number, with only SFB G77 displaying the standard pair of gable-end posts. No clear picture can be gathered as to the function of these SFBs, although it is posited that such dispersed settlements were likely divided into functional zones (Hamerow 2014). As with the hollows identified on site, these building remains were generally infilled with apparent midden-derived deposits (see below).

6.3.12 Judging by the occurrence of Roman and early Saxon artefacts in the upper fills of ring-ditch G12, it appears that the barrow survived as at least a remnant earthwork that may have been utilised. It is not unusual for early Saxon settlements to be sited adjacent to prehistoric funerary monuments. Excavations at Flixton uncovered a multi-phase site comprising a range of funerary monuments including a Neolithic long barrow and ten early Bronze Age barrow ring-ditches around which an early Saxon settlement was established. This settlement comprised thirteen SFBs, six post-built hall structures and five miscellaneous post-built structures (Boulter 2022, 243). The early Saxon village at West Stow was also situated close to a later Neolithic burial mound (West 1985, 4). These funerary monuments, like those at Bramford, were situated within river valleys (the Waveney, with regards to Flixton and the Lark, with regards to West Stow), along at would have been major communication and transport routes during the early Saxon period.

6.3.13 It is further suggested that the post-built hall structure and the posited SFB G22 in Area 3, were deliberately situated around the Prehistoric barrow. It is

speculated that it may even have been used as a meeting or gathering place (e.g. a moot mound?). The spread of early Saxon high-status artefacts within the south and east of Area 3 has been conjectured derive from a ploughed-out burial inserted into the prehistoric monument. However, it is far more likely that these artefacts are associated with activity in and around the post-built hall structure G29.

6.3.14 A number of natural hollows were recorded within Areas 2 and 3. Whilst some of these contained very few if any artefacts, the majority contained a mix of re-used Roman and early Saxon material culture in their upper parts. The Roman material, primarily CBM and metalwork, seems to have been imported from elsewhere, perhaps from a nearby Roman site as yet unidentified, and reused by the early Saxon inhabitants. Material of diagnostically Saxon date mostly comprised metalwork, pottery, animal bone and fired clay objects. It is posited that the finds-rich soils in the tops of these natural hollows constitute dispersed midden waste that was perhaps spread more widely across the land surface of the settlement but only survived within these low-lying hollows. Further consideration of the formation processes involved in this would be useful. Similar-looking hollows were discovered at West Stow, within the Lark Valley where they were posited to have been utilised as animal pens (West 1985, 53).

6.3.15 The SFBs, pits and hollow deposits have produced artefact evidence of broad domestic activity, and for industry such as textile production (e.g. loomweights, spindle whorls, bone needles) and leather and bone/antler working. The animal bone assemblage testifies to the presence of pig, domestic fowl and cattle and associated animal husbandry.

6.2.16 The siting of the early Saxon settlement is not unusual within Suffolk. The dispersed settlement here was situated above the floodplain of the River Gipping, a river that would have been a main artery of transport and communication through to mid-Suffolk. This is similar to the early Saxon settlement at West Stow, sited above the floodplain of the River Lark (Tipper 2004, 53), and that discovered at Flixton Quarry, situated within the valley of the River Waveney (Boulter 2022).

6.3.17 It is posited that the settlement may have been abandoned in favour of the growing settlement at *'Gippeswic',* situated four miles down-river. The growth of this thriving settlement from the 7th century onwards, and then its subsequent expansion in the middle Saxon period with a booming industrial and economic role, would have drawn local populations from surrounding settlements.

6.3.18 The early Saxon features and deposits, along with their assemblages of Roman and Saxon artefacts, have a high regional significance and a high potential to inform on the nature of settlement in the Gipping valley, the exploitation of available resources (including reuse of Roman materials) and the basis of their economy. In particular, the site has the potential to add to the understanding of the acquisition / consumption, management and eventual disposal of commodities.

Period 4: High Medieval and Post-medieval

6.3.19 High Medieval land use is evidenced by two phases of boundary ditches that define agricultural field systems. Very few features (two pits) are identified to occupy these medieval fields. While this land use evidently disregarded the earlier, Saxon period settlement, the second phase of field system seems to have referenced the remnant barrow earthwork as a significant feature in the landscape. The orientation of both systems appear to be influenced by the adjacent River Gipping and also conforms to the alignments and orientation of similar High Medieval roadside field systems encountered by Oxford Archaeology East during excavations to the south-west, in 2016/17.

6.3.21 There is little indication of the agricultural regime practiced in these fields. However, Domesday records that Bramford was resident to nineteen plough teams, as well as thirty acres of meadow and livestock comprising twelve pigs and thirty sheep (opendomesday.org). It therefore seems likely that the field system recorded here was under arable cultivation.

6.3.22 This high medieval field system does not appear to be extensive, though may have extended further ENE into what are now the meadows of the floodplain of the River Gipping, with evidence of similarly aligned ditch segments recorded within evaluation Trenches 35 and 36. It evidently continued southwards into the OAE excavation located here.

6.3.23 Ditch G20 appears to have been the precursor to the southern boundary depicted on the 1848 Bramford Tithe Map, being the northernmost boundary to the Bishop's Hop Ground. No evidence to support the suggestion of a track/roadway was identified. Post-medieval features encountered across the site were few, but included boundary ditch G40 that is depicted on 19th-century historic mapping and was later utilised as the northern boundary of allotment gardens shown on the 1926 Ordnance Survey map and on the 1945 aerial photographs. A low level of modern pitting and a dump deposit that included a quantity of enamelled shop signs attest to continued land use activity into the mid/late 20th century.

6.3.23 The remains of the medieval field-systems are of moderate local significance and have some modest potential to contribute to the understanding of later agricultural land use in the Gipping Valley. The post-medieval remains are well documented by historic mapping and have low to negligible significance and potential for further study.

Flintwork

6.2.30 The assemblage is of local significance. It provides evidence for wide prehistoric presence in the local landscape. Unfortunately, except for a small quantity of worked flints recovered from prehistoric features, much of the material was found as residual elements in Saxon or later features or deposits (526 pieces of the worked flints or 73.8% of the total assemblage). Whilst these pieces are clearly redeposited, it seems that the majority have only been subject to minimal disturbance. The flintwork consists mainly of unmodified pieces or retouched material that is principally undiagnostic. This and the mixed nature of the flintwork make it difficult to closely date the

assemblage. Nonetheless, the assemblage seems to contain two main phases of activities (Early Neolithic and Middle Neolithic to Early Bronze Age). The morphological characteristics and the reduction strategies indicate the presence of Early Neolithic blade-based (and thin flakes) material as well as Middle Neolithic to Early Bronze Age flake-based material. A small quantity of more expediently-made material, typical of the later prehistoric, was also present, possibly more represented in Area 3. An Early or Middle Palaeolithic handaxe and very small quantity of Mesolitithic artefacts were also present.

6.2.31 The Early or Middle Palaeolithic handaxe was found in pit G6 in Area 1. Small cordate forms are sometimes associated with the Late Middle Palaeolithic (Late Pleistocene, MIS 3, *c.*60,000-40,000 years ago), and more typological and metrical comparisons with known British handaxes from the region are recommended before publication. Palaeolithic handaxes and Neolithic axes are occasionally found in later features, especially Iron Age and Roman features. The handaxe could therefore represent a surface find collected and deliberately deposited into the pit; however, given the geology of the site, it is equally plausible that the artefact became incidentally incorporated into the open feature.

6.2.32 Although the majority of the blade-based material seems to belong to the Early Neolithic, some of the blades might be Mesolithic in date. Althought no diagnostic microliths or microburins were recovered during the excavation, a possible microlithic was found during the evaluation (Headland Archaeology 2018). The core tool from Saxon SFB G75 [2053] and the exhausted single platform bladelet core from pit [3433] are also likely to be Mesolithic in date.

6.2.33 Whilst Early Neolithic material appears to be present in all three areas, small assemblages in Area 1 could be associated with small cut features. The construction date of ring-ditch G12 in Area 3 is currently undetermined; but if indeed condirmed to be Middle Neolithic / Early Bronze Age, a large proportion of the flintwork would be contemporary with this feature. Overall, the flintwork provides some evidence for flint knapping activities. In addition to the knapping waste recovered during the excavation, the evaluation produced a large group of knapping waste from pit [57/007] totalling 206 pieces (Headland Archaeology 2018, 21-2). Overall, tools were poorly represented. Large quantities of flints don't necessarily mean an occupation site, and the assemblage could simply relate to repeated use of the area over generations. The site could have been visited for example for the procurement of raw materials or because of the presence of barrows in the landscape.

6.2.34 The flintwork certainly forms part of a much more extensive spread, and its presence indicates that the area was widely used during the early prehistoric periods. Excavations by Oxford Archaeology just to the south of the site revealed the presence of Beaker pits, one of which contained a minimum of 14 Beaker vessels and a flint assemblage comprising knapping waste and retouched pieces including scrapers (Oxford Archaeology 2018).

6.2.35 The large quantity of burnt unworked flint clearly attest to significant burning. Burnt flints are frequently associated with prehistoric activities; however, they can also be found in later contexts (Roman or Saxon contexts). Here, very

few fragments were recovered from prehistoric features. Instead, they came from Saxon and later features. Nonetheless, most features contained small assemblages, and it is difficult to know how much of the assemblage is redeposited. The largest assemblage (over 20kg) derived from a post-medieval/modern pit. The exact use of burnt flints is often unclear and could be related to domestic, industrial or ritual activities. They are sometimes found in association with burnt mounds complex; and, as these involve the production of large amount of hot water, the proximity of the river Gipping would have been perfect. As the site has been subject to intense agricultural development, at least from the Saxon period, at least some of the burnt flints could also represent flints caught up in fires incidentally ignited by human during large-scale landscape clearances.

Prehistoric and Roman Pottery

6.2.36 The very small size and fairly undiagnostic nature of the Neolithic pottery assemblage means than it is of limited local significance with no further potential. The small size of the Roman pottery assemblage indicates that there is unlikely to have been substantial Roman settlement activity in the immediate site area. This emphasises that the much more substantial Roman CBM assemblage is likely to represent material which was purposefully collected and reused, rather than simply having been incidentally redeposited. Given the largely, possibly wholly, residual nature of the Roman pottery, it is of low significance with no potential for further work other than its appreciation as a minor component of Saxon period rubbish assemblages.

Post-Roman Pottery

6.2.37 The post-Roman pottery assemblage as a whole is in good condition, with little abrasion; most sherds were collected from stratified features. Although no intact vessels are present, there are enough data in the assemblage to add to existing information on the types of pottery vessels favoured for use in this community during the later 5th to early 7th centuries.

6.2.38 One of the original Regional Research Aims for this period (Wade 2000) involves the study of rural artefact assemblages, to feed into settlement studies, and this is a continuing need despite the increasing number of such sites discovered in recent years. The early Saxon pottery assemblage from Bramford is one of several large groups to have been recovered from rural settlement sites in recent years, a number of which have been studied by the current author. This makes potential for comparison very high, as there is less chance of inter-observer error in terms of fabric and form descriptions.

6.2.39 In the region as a whole, medium to large early Saxon pottery assemblages have recently been studied from West Stow (Anderson 2013), Eye (Anderson 2008), Flixton cemetery and settlement (Anderson 2005a and 2012), Carlton Colville (Tipper 2009), Bromeswell (Anderson 2000), Handford Road, Ipswich (Anderson 2005b), Eriswell cemeteries and settlement (Anderson 2005c; 2005d), Lackford (Anderson *et al*. forthcoming), and a few sites in Norfolk and Cambridgeshire. Although some of these sites have only reached assessment level, nevertheless basic catalogues of fabrics and forms are

available for comparison, which will help to place the site in context with regard to regional pottery studies for the period.

6.2.40 Large groups of pottery were recovered from the SFBs and pits, and analysis of these individual groups may provide evidence for patterns of use and disposal, potentially by individual households or within phases. This information will be considered together with pottery from surrounding features to provide a picture of rubbish disposal and pottery use within this part of the settlement. The vast majority of the post-Roman pottery assemblage was of early to middle Saxon date and it is here that the significance and potential lie.

6.2.41 Only a small assemblage of later Saxon, High Medieval and post-medieval pottery was recovered from the site. Only a single sherd of later Saxon Thetford Ware was recovered, whilst eleven sherds of High Medieval pottery and twenty sherds of post-medieval to modern pottery were retrieved. This assemblage is considered of low to negligible significance.

Ceramic Building Material

6.2.42 The Roman assemblage has low archaeological significance due to both its fragmented state and because none of the CBM appears to be *in situ*. However, the extensive reuse in Saxon features/contexts, as indicated by the presence of Saxon pottery, is of some interest as it can inform on this practice. The apparent deliberate recovery (and reuse?) of the Roman tesserae is of some significance and may warrant some further thought.

6.2.43 The post-Roman CBM assemblage has little archaeological significance and no further potential for study beyond that done for post-excavation assessment.

Fired Clay

6.2.44 The daub and amorphous fired clay is of limited local significance as it simply indicates the presence of daubed structures at the site during Period 3. However, one of the Regional Research Aims (Wade 2000) for rural Anglo-Saxon sites involves examining evidence for settlements during the early Saxon Period. The evidence for daub, although scant, does provide some information on an element of how the structures at land east of Lorraine Way may have been constructed.

6.2.45 The loomweights also fit within this research remit as they form part of the evidence that textile manufacture was occurring at the site. Of possible regional significance is the presence of seemingly intermediate form loom weights on an early Saxon site. They could potentially be an example of this form being utilised earlier than has been identified at other sites in Suffolk.

6.2.46 The daub is not considered to be of further potential for research and can be discarded. The loomweights should be re-examined with a view to comparison with other loomweights of early and middle Saxon date from the region. Additionally, closer comparison to the dating of pottery from the same

features and structures will potentially provide evidence for intermediate form loomweights being present in the early Saxon period.

Clay Tobacco Pipe

6.2.47 The assemblage comprises a single stem fragment. While it does contribute to the dating evidence, it represents an isolated find and is of no inherent interest. It is therefore not considered to be of potential for further analysis.

Glass

6.2.48 The assemblage is small and late in date, lacking pieces of inherent interest. It does provide a small contribution to the dating evidence and as such is considered to of limited local significance. It is not considered to be of potential for further analysis.

Geological Material

6.2.49 The geological material from the site consists mainly of unworked stone that can be considered natural to the site. These have no potential for further analysis and publication. The worked pieces of stone all appear to be either from querns or sharpening stones. The quern fragments are generally lacking in morphological detail and so do not have the potential to further our knowledge of the development of querns themselves. Those from Period 4 and currently undated contexts could easily be residual pieces and are not considered to hold any potential for further analysis. The same can be said for the undated sharpening stones from the site. The Period 3 Saxon assemblage is by far the more significant, but even this is quite poor. However, the material does demonstrate that processing crops/foodstuffs was part of the site's economy and further consideration needs to be given to the contemporary procurement or re-use of lava querns at this time. Examination and analysis of all quern fragments should be carried out with those from early Saxon contexts with consideration that quern fragments recovered from site could have been disposed of as waste during this period and be residual in later dated features.

Metallurgical Remains

6.2.50 The slag assemblage is small and suggests low level/domestic iron smithing was taking place during the early Saxon period, within the dispersed settlement. However, the related types from dated features are so negligible that the material here could be residual or intrusive. In the absence of more material and better dating, the slag assemblage is not considered to hold any potential for further analysis and does not warrant publication.

Bulk Metalwork

6.2.51 There is minimal potential for more detailed analysis of the nail assemblage. The majority of the nails recovered are for general structural use, especially type 1 and 2 which are the most common types. The largest group of nails are from Saxon features, but this is directly proportional with the high percentage of Saxon features excavated. However, the presence of a high

number of *post-Saxon* nail types provides evidence for intrusive material, with the majority being collected within Area 2 – perhaps resulting from later agricultural activity and processes on the site as well as the modern allotment garden activity. The majority of the nail assemblage was recovered through metal detecting and be associated with overburden deposits. No spatial patterning was identified at this stage. The Medieval assemblage contains a small number of contemporary horseshoe nails, but the overall number of nails it is too small to provide further interpretation. The Post-medieval/Modern and undiagnostic nails do not have potential to aid the site interpretation.

6.2.52 The bulk metalwork assemblage in general has no inherent potential to add to the site's interpretation. Further analysis is unlikely to provide useful insights. The main diagnosable metalwork were characterized as iron and lead strip, scrap or dribbles, most of which are from undated features. The Anglo-Saxon contexts included a variety of different material with no significant patterns or diagnostic features. Both the medieval and post-medieval features revealed assemblages too small to engage in any meaningful interpretation.

Human Bone

6.2.53 Human bone was retrieved from three contexts, all of which have been phased to the early Saxon period. Hollow G60 deposit [2101] contained the partial skeletal remains of an infant, including fragments of the cranium, spine and ribs and long bones, including the intact right humerus and left femur. Possible SFB G15 contained a single, worn, adult sized maxillary incisor, with only the base of the crown remaining, in fill [3052], and a piece of anterior mandible from fill [3054] which contained no teeth, possibly from a male individual. The human bone assemblage as a whole has no potential for further analysis with regards the skeletal remains themselves. However, the infant skeletal remains encountered within G60 is worthy of further study in relation to disposal of the deceased, particularly children, within early Saxon settlements.

Animal Bone

6.2.54 Regarding the animal bone assemblage, the greatest archaeological significance can be found in the Period 3 assemblage. The other period assemblages hold little significance due to their relatively small size.

6.2.55 The early Saxon assemblage has strong local and regional significance for understanding human-animal relations in this period. Saxon period sites tend to be poorly represented in zooarchaeological record (Holmes 2018), so this large and well-preserved assemblage makes a significant contribution. Early Saxon settlements such Bramford were likely agriculturally self-sufficient, with animals raised and consumed locally (Holmes 2018). For Bramford, this looks to be largely cattle and pigs, with preliminary skeletal part abundance and age-at-death data corroborating local production and consumption. The presence of very young animals suggested in the age-at-death dataset also suggests breeding animals on site, including horses.

6.2.56 The high proportion of pigs at the site reflects abundant pig remains often recovered from sites in coastal counties in the east of England. This abundance may be environmentally deterministic, with these sites commonly close to wetlands for foraging outside of the season of pannage (Holmes 2018). It may also be related to status, as in southern England, high proportions of pigs are more common on high status sites (*ibid.*). A pork preference has also been suggested to be indicative of the migration of Saxon settlers from across the channel, especially with the nature of pigs as a quick growing, easily sustained 'larder' food (Crabtree 1989, 210; Holmes 2016; Holmes 2018). Certainly, when compared with nearby West Stow, which was dominated by caprine remains (Crabtree 1989), Bramford's abundance of pigs is particularly striking.

6.2.57 The other domestic animals represented in the assemblage generally conform to regional trends. The presence of juvenile horse specimens on site may be evidence of breeding. For wild animals, the presence of deer is significant as it indicates intensive antler acquisition, presumably for subsequent craft production. The presence of fallow deer could be highly significant if the identification is accurate, given that the animals present in this period would have likely been a highly-prized founder population kept alive to old age in menageries (Sykes *et al.* 2016). Like the abundance of pigs, the representation of so many deer antlers might be environmentally deterministic, and further research into the historic biosphere of Bramford is required.

6.2.58 The vast majority of the archaeological potential of the assemblage can be unlocked by further work targeting the early Saxon assemblage. A much smaller program of investigation would be approproate for the medieval assemblage, and no further work is recommended for other periods.

Period 3: early Saxon (5th-7th centuries)

6.2.59 Detailed examination of good faunal assemblages has the potential to improve our understanding of early Anglo-Saxon agricultural practices (E of Eng Research Framework online: E-Sax 26).

6.2.60 The early Saxon assemblage should be recorded in full and further identification attempted on specimens with identification potential. A total of 20 early Saxon contexts were only assessed at this stage based on preliminary phasing. Of these contexts, 17 had moderate or high potential, comprising 811 specimens. Full recording would add a further 230 fragments identifiable to species to the assemblage, and fully unlock the potential of 47 cattle and 31 pig specimens carrying epiphyseal fusion information. Some also included evidence of interesting butchery or deposition, such as an articulated partial cattle spine in context [3421] and butchery indicative of decapitating pigs in context [2134]. Should updated phasing be made available, any further early Saxon contexts with moderate or high potential should be included.

6.2.61 In addition, a number of fully recorded specimens from the early Saxon assemblage require further identification, including possible wild boar, deer, and duck. The use of ZooMS is recommended for the single fragment of

fallow deer and for the confirmation of equid species for the juvenile horse remains. Full appraisal of the species in the assemblage will certainly give a better understanding of the contribution of wild species to Saxon diets. Following full recording of specimens, the Minimum Number of Individuals (MNI) and Minimum Number of Elements (MNE) should be calculated for this phase and comparable context groups to better understand the abundance of certain species and skeletal elements within.

6.2.62 The early Saxon assemblage yielded a considerable age-at-death dataset. With the additional assessed specimens added to the fully recorded database, and sexually dimorphic bones considered, the assemblage has the potential for a greater understanding of domestic animal husbandry, primary and secondary product use, and cultural tastes in reference to the ages of animals eaten. At many early Saxon sites non-specific culls reflect the self-sufficient economy where animals were slaughtered to fulfil the needs of the settlement (Holmes 2018). It will be interesting to see if Bramford fits in with that trend. Taxa with the highest potential for this would be cattle and pigs, but caprine age-at-death analysis may also yield some valid results, and horse age-at-death analysis may give indications about horse breeding on site. Slaughter profiles should be constructed for epiphyseal fusion, dental eruption and attrition. Similarly, the small dataset of measured specimens may give some implications for the size attributes of species on site, particularly cattle, for which some 16 metapodia were measurable, and also dogs and horses.

6.2.63 The brief analysis of skeletal part abundance has already suggested that animals were slaughtered locally, indicative of the self-sufficient agricultural practices of early Saxon settlements suggested by other sites (Holmes 2018). Further analysis has the potential to investigate the differences in spatial deposition. Separate areas for butchery and consumption may be identifiable, and carcass redistribution additionally has been suggested to reinforce definitions of social status, age and gender (Holmes 2018; Sykes 2010). Additionally, better understanding of the deposition of certain elements such as antler have the potential to increase our understanding of early Saxon artefact production (E-Sax 29).

6.2.64 In addition to skeletal abundance, evidence of butchery, burning, and peri-mortem fracture may be analysed to better understand carcass processing practices. This analysis will facilitate interpretation of cooking practices, taste preferences, the intensity of butchery and carcass product use. In addition, analysis of taphonomic fracture and evidence of taphonomic agents such as weathering, gnawing and abrasion will help give an understanding of deposition and site formation processes that has implications for the whole context, not just the animal bone assemblage. Fracture history profiles (Johnson *et al*. 2016) should be constructed for the largest individual context and context groups.

6.2.65 A crucial element in this assemblage's potential is intra-site comparison. As aforementioned, several large accumulations of bone were recovered on the site and should allow comparisons between these assemblages to be made. As with the skeletal part abundance above, this has the potential to inform about site use and deposition practices in different parts of the site, and may

reflect socio-cultural practices. Furthermore, comparison with similar sites will further increase this assemblage's potential and place it within the regional understanding of early Saxon animal exploitation. A key comparable site will be West Stow, where there was a strong representation of caprines compared to pigs (Crabtree 1989; Crabtree 2014). Comparisons with the middle Saxon site of Wicken Bonhunt may also prove fruitful as this produced large proportions of pig bones, suggested to be reflective of large-scale pork production that may have begun in the later part of the early Saxon period (Crabtree 2012).

6.2.66 The assessed material recovered from bulk soil samples has quite low potential for further analysis. Most samples contained only indeterminate fragments, and those where identifiable bones were present had low concentrations. Only 15 samples dating to the early Saxon period had moderate or high potential for further analysis based on the number of identifiable fragments or otherwise unrepresented fish bone. The fish bone and the samples with moderate or high archaeological potential should be fully recorded.

Period 4: High Medieval

6.2.67 The medieval period assemblage has some limited potential to improve our understanding of high medieval agricultural practices (Med [Rural] 03). Full recording of assessed contexts and samples with moderate or high potential is recommended, along with basic quantification of the MNI and MNE. Interpretation of other data including age-at-death, skeletal part abundance, carcass processing and taphonomy is also recommended, although this will be limited by the available dataset. Intra-site comparisons are unlikely to yield significant results given the small sample sizes per context. The data should be instead placed in its temporal and regional context.

Shell

6.2.68 Only seven oyster shell fragments, weighing 53g, were recovered during excavations from five separate contexts, including one unstratified fragment. Of these, three pieces were recovered from Period 4, High Medieval, ditch G19. A further fragment was retrieved from undated G50 ditch terminus. The shell fragments recovered are of no archaeological significance. The consumption of oysters was common during the medieval period, and in such small quantity they provide no spatial information to possibly inform site narrative. They are of no further potential for research.

Registered Finds

6.2.69 The registered finds assemblage constitutes a large body of objects primarily of Roman to medieval date, with a diverse range of functional categories represented. The Roman objects discussed below were evidently acquired and re-used during the early Saxon period, with no Roman dated archaeological features encountered within the site. It is unclear at present where these items were acquired from.

6.2.70 East Anglia is the exception to a national phenomenon of relatively few Anglo-Saxon settlement sites being discovered and excavated. In this regard, Suffolk plays a leading role and Anglo-Saxon settlement site research is of national importance. This is especially the case when there are indications for reuse of Roman artefacts within the early medieval period. Within the area of the site, a potential transition between the Roman and early Saxon periods may be present, though not evident within the site itself, and the implications for the population of England and its material culture is still very much subject of study and debate and is one of the questions contained in the 'East of England research framework' (e.g. E-SAX 3 and 4). The Bramford site is in this regard of regional to national significance and may offer the potential to further the existing knowledge regarding the reuse of Roman artefacts within the early Saxon period and Roman to early medieval period transition, perhaps with continuation of coin use.

6.2.71 Particular finds on site, including some dress accessories and weaponry are often associated with funerary rather than settlement archaeology. This raises the question whether this site has a close link with an early medieval cemetery and, if so, where this burial ground is situated. Whilst a close relationship between settlement and cemetery can be expected for reasons of practicality, especially in early medieval archaeology one or both often proves to be elusive. This applies to Anglo-Saxon England as well as to the Frankish realm on the Continent. As cemeteries are more commonly discovered than settlements, it is often the case that a related settlement is difficult to find. It may be that Bramford represents a reverse situation. Further research within this theme is in line with 'East of England research framework' (e.g. E-SAX 14). The potential of a cemetery site related to the Bramford settlement is of regional importance.

6.2.72 Evidence for the re-use of Roman artefacts during the early Saxon period is well attested to, having been transported to the site from an as yet unknown nearby Roman site. The concentration of early Saxon registered artefacts attests to a dispersed settlement, given the discovery of a number of early Saxon sunken featured buildings and a possible hall structure within the south of the site. The context groups containing the aforementioned re-used items may represent the earliest phases of occupation (Groups 20, 21, 75, 87 and 94).

Dress accessories and personal possessions

6.2.73 The assemblage of dress accessories and items of personal care represents activity from the early Saxon period (including re-used Roman artefacts) up to the present day. The re-used Roman artefactual remains were found exclusively within Area 2. In addition, two context groups belonging to Area 3 contain items which date to the transition period between Roman and early medieval influence (G20 and G21), again comprising re-used Roman artefacts. Brooches are the largest source of evidence for re-used Roman artefacts during early Saxon period activity and include later and continental types. In addition to brooches, the assemblage includes two bracelets, one finger ring and one bead with a Roman date, as well as one potential earring and one potential votive miniature pendant. A further bead represents the

transition period between Roman and early medieval influence. The same applies to two comb fragments, a bracelet and a brooch.

6.2.74 The category 'dress accessories and items of personal care' is most numerously represented by dress pins. Only four brooches with an early medieval date were discovered, of which one can be identified as a Continental import. A fifth brooch might be early medieval, but a later medieval date cannot be ruled out. The large assemblage of dress pins suggests that this was the most commonly used type of dress accessories. Whilst some pins are made of animal bone or copper-alloy, most items are made of iron. The use of a lesser material like iron may be indicative for a less affluent population; the absence of overseas imports amongst the dress accessories in general may also be evidence for this.

6.2.75 Not only is the assemblage of dress pins large, but it is also very varied. Many previously recognised types are represented, but none of the more luxurious examples. The assemblage of dress pins spans the entire early medieval period from the mid-5th century and continues into the Medieval period, up to *c*. AD 1400. The assemblage of dress pins is of regional significance and offers potential for comparison with other contemporary sites in a broader context.

6.2.76 The assemblage of belt- and strap fittings echoes the suggestion that the site does not represent a particularly affluent population. Most buckles are made of iron, do not feature a back plate and are of a simple shape. The exception to this is one silver buckle (RF<461> which was recovered from early Saxon hollow deposit G60. The assemblage of belt- and strap fittings is of regional importance.

6.2.77 With the well-studied Anglo Saxon settlement site of West Stow nearby, it would be interesting to compare dress accessories and their potential implication for population status and wealth as well as regional and overseas connections. This is in line with questions posed in the 'East of England research framework' (E-SAX 9, 10 and 31). The assemblage of dress accessories as a whole is of regional importance. In addition to West Stow, there are various other sites which allow for comparison.

6.2.78 The Anglo-Saxon combs found at Bramford are not easily comparable to those found elsewhere in England. The same goes for bone combs from West Stow and other sites in East Anglia. In this regard, Bramford can play a role in the creation of a regional comb typology which is likely more closely aligned with specimens known from the North Sea coastal region in The Netherlands and Germany. For this reason, the Bramford combs are of regional importance. They have the potential to add to the knowledge of comb manufacture and distribution in the North Sea region.

6.2.79 The High Medieval period is represented through a relatively low number of dress accessories. All medieval dress accessories are found in context groups in Area 2. Whilst most dress pins can be dated to the early medieval period, one type has a longer lifespan and continues up to AD 1400. This pin is found in the same context group G68 as a medieval buckle. Another

medieval buckle, however, was found in a Sunken Feature Building and is likely intrusive.

6.2.80 The relatively low number of dress accessories from the medieval period can indicate a decline in population and/or activity. Whether this is likely depends on comparison with other artefact groups. It may also simply mean a reduced use of dress accessories or a shift in usage nature of the site, for example from habitation to industry. Given the close proximity of Bramford to Ipswich and the North Sea coast, the discovery of more imported goods and a general picture of growth during the medieval period might be expected. The absence thereof indicates that the site's peak of activity was pre-AD 700, with a relatively rapid decline thereafter. In this regard, the site is of regional importance. It offers the potential for comparison with Ipswich and other medieval growth centres along the east coast to see where development starts to differ. It may offer an indication as to why some settlements continue to develop and others do not.

6.2.81 The late Saxon and medieval artefacts provide an opportunity to research the transition period from the early medieval to the High Medieval period. Whilst much of the research into Anglo-Saxon heritage is focussed on the period up to approximately AD 700, the years after that see a reduced use of grave furnishings and therefore an absence of material culture in the archaeological record. This is again related to the relatively low availability of Anglo-Saxon settlement sites nationwide. In turn, most well-studied medieval settlements produce finds from approximately AD 1100, leaving a period of 400 years underexplored. Bramford has a regional significance in this respect and has the potential to facilitate investigation of changes to artefact assemblages in the period between AD 750 and 1100.

6.2.82 In the category of dress accessories and items of personal care, the post-medieval and modern periods are mainly represented by buttons. Other items often found relate to footwear, for example shoe irons. Besides to the odd intrusive find, most post medieval or modern artefacts in this category were retrieved from subsoils and ditch features. These have low to negligible significance and potential for further study.

Weapons

6.2.83 Excavations at Bramford returned a modest weapon assemblage. Whilst divided over contexts currently assigned to three different phases, all weapons can be classified as early medieval. For both ferrules a placement in the early medieval period is most likely given the context, but a date in either the Roman or Medieval period cannot be ruled out. Both shotgun cartridges have no significance and can be disregarded given their very modern date.

6.2.84 A relatively small assemblage of weapons is commensurate with the suggestion that the site's main purpose during the early medieval period was settlement. Weapons are usually associated with funerary contexts, but no such discoveries have been made to date. However, given the presence of weapons, as well as some dress accessories, it cannot be ruled out that a

cemetery site is closely related to this settlement. The regional and national significance of this relationship is previously discussed.

6.2.85 Despite the small number of weapons recovered, the assemblage is remarkable. Of special interest is the presence of an axe, which is a rare weapon in early medieval Britain and, to a lesser extent, continental Europe. Especially noteworthy is the fact that the axe can be identified as a francisca. This type is found on a few occasions in England but is comparatively common on the Continent (e.g. German Rhineland and Low Countries, northern France). In general, it can be stated that axes are relatively early weapons during the early medieval period, as opposed to, for example, seaxes. The presence of a francisca is thus not only suggestive of contact with the nearby Continent, but also affirmative regarding the previously made suggestion of a relatively early settlement.

6.2.86 Another noteworthy item is the barbed arrowhead which is generally relatively rare in England as well as on the Continent. Whilst the weapon assemblage is of regional importance, the francisca and barbed arrowhead, are of national significance and may be useful for the study of contact and relationships with nearby continental neighbours as well as of the spread of potentially continental weaponry throughout East Anglia and beyond.

6.2.87 Interesting to note is the fact that the spearhead was found in the same context as a blade fragment of a Bronze Age socketed axe (RF <35.2>). These axes, dating roughly between 1250 and 700 BC, were most often used as tools rather than weapons. For this reason, the item is further discussed in the tools section. As the Bronze Age axe is residual, it is difficult to speculate on the significance of both items being found together, although the curation of heirloom objects during the early medieval is well attested. It may be that the early medieval population qualified the Bronze Age axe as a weapon rather than a tool and gave it an added significance. Purposeful deposition of historic items together with contemporary artefacts, however, is more often related to funerary or votive practice rather than to settlement. The spearhead and Bronze Age axe are of regional importance. Their combined occurrence in the same context, however, may be internationally significant. It offers potential for research into this and similar phenomena in early medieval archaeology in England. This would be valuable to the understanding of early medieval belief systems and ritual.

Craft and industry

6.2.88 The evidence suggests that craft or industry was present on site during the early medieval and medieval periods, but only on a very small scale. In many cases, it is likely that the craft activities were performed close to the home rather than in a designated zone for industrial activity.

6.2.89 Evidence from the early medieval period seems to suggest that some degree of antler and animal bone working took place, specifically focussed on a number of sunken feature buildings in Area 3. Woodwork seems to have been performed, as well as textile working. This evidence may aide the answering of questions from the ‘East of England research framework’ (e.g. E-SAX 29 and 30).

6.2.90 During the medieval period, it is likely that small-scale metalworking is added to the activities on site, whilst woodworking continues to be an active craft. No more evidence is found for antler and animal bone working. Textile working continues, as is evidenced by the shearboard hook and medieval thimble, although these may be isolated losses. Given the dating of the stilettos, it is likely that leatherwork was a craft of the medieval rather than the early medieval period in Bramford; however, this is an area for further analysis.

6.2.91 The presence of several modern thimbles suggests that a degree of textile working was practiced in the vicinity during the post-medieval or modern period. It is unclear whether other industries continued to exist, but this cannot be ruled out given the undiagnostic nature of some of the tools. It is possible, however, that the thimbles represent isolated finds.

6.2.92 The tool assemblage offers limited scope for further research into industrial- or craft processes and the existence and use of tools in different time periods. The evidence may confirm, however, that it is likely for small communities to have been able to cater for their own craft needs on a small and 'homely' scale. It would be interesting to compare this general picture with other early medieval and small medieval settlements elsewhere in East Anglia or indeed in the rest of England. In this respect, the assemblage is of regional significance and has the potential to add to knowledge about the self-sufficiency of communities and the various crafts that were important during different time periods.

6.2.93 The evidence for animal bone working, together with the assemblage of non-worked animal bones found on site, can shed light on the types of animals that were kept or hunted. It can potentially provide and insight into whether or not farm animals were used for production of bone objects and what role non-domesticated animals played in this. ZooMS analysis of the bone artefacts will aid in this analysis.

6.2.94 The excavation produced a knife assemblage which would be expected for a site which sees its usage peak during the early medieval and/or medieval period. Most knife types which were used during these periods are undiagnostic in the sense that their shape was used over a long period of time. This reduces the potential for this artefact group to aide dating and interpretation of contexts.

6.2.95 In general, it can be stated that the assemblage largely consists of relatively simple whittle tang knives. Out of both scale tang knives which form the exception to this, one can be dated to the post medieval period, and one is either late medieval or post medieval. Interestingly, a relatively large number of knives in the assemblage have a relatively narrow blade. This offers the potential to investigate whether this characteristic is indicative for either an early medieval or medieval date or that it could be linked to a particular craft or other form of usage. In this regard, the assemblage is of regional importance and offers scope for national comparison.

6.2.96 During different historical time periods, the use of knives varies. Given the fact that knives are often found in funerary contexts from the early medieval period, it can be suggested that they had a certain personal value to the user and were potentially part of the dress accessories or other personal equipment. In a settlement context represented by this site, it is more likely that knives had a utilitarian purpose. They could have been used in a domestic setting as well as in various industrial or craft processes. A considerable number of knives in the assemblage feature a concave cutting edge. This is generally interpreted as a sign of heavy usage in combination with repeated sharpening over a substantial period of time.

Vessels and containers

6.2.97 The assemblage of vessels, containers and related items from Bramford is very small. The presence of three copper-alloy early medieval bucket fragments, however, is interesting. Especially the decorated binding can be associated with ornamental early buckets which are often interred in funerary contexts. Together with the discovery of some weaponry and dress accessories, these are items which are not usually associated with settlement. Together, the items might indicate the presence of an early medieval cemetery near the site, as previously discussed.

6.2.98 The low number of vessels which could be associated with household use suggests that, in addition to pottery, most were made of wood and did not survive in the soil. The presence of a box catch indeed suggests that wooden containers were used. The few fragments of copper-alloy vessels are in a bad condition and unfortunately not indicative for their original shape and the period they belong to. The assumption of wooden crockery alongside pottery adds to the previously stated suggestion that the population was not particularly affluent. The assemblage of vessels, containers and their fittings is of regional importance and offers scope for comparison with other sites.

Security equipment

6.2.99 Security equipment is a very small finds category at Bramford. The assemblage is, however, representative for the time periods which are covered by other categories. It is apparent that some contexts phased as early medieval contain some intrusive items, including a modern lock part. The two latch lifters, however, evidence the use of locks during the early medieval period. Latch lifters occur in various forms, can be made of iron or copper-alloy and are common in Britain as well as on the Continent. Occasionally, they also occur in funerary contexts, often in bundles of three.

6.2.100 The assemblage of security equipment is of regional significance as well as to the understanding of site use over time. However, due to their small number, the assemblage offers little scope for further research.

Household equipment

6.2.101 The number of items from Bramford which can be identified as household equipment is low. This is somewhat surprising, given the fact that the site can be interpreted as a settlement. The fact that the site contains very few early

medieval household items indicates that the usage peak of the settlement may have been relatively early during the period. This is in line with the presence of sunken featured buildings. The material culture of mid to late Saxon households is not well understood in East Anglia. The flesh hooks, especially (RF<178> and <292>) are the earliest items in the category. Goodall notes that the style was already established pre-conquest, and this is evidenced by a depiction of a similar hook on the Bayeux Tapestry. No parallels, however, are known from other settlement sites such as West Stow. This suggests that the hooks became popular during the early medieval period but were not yet widely used in the earliest phase, prior to *c*. AD 700. In turn, this postulates that the hooks in Bramford are either very early examples or that they do not belong to the earliest phase of settlement. As the hooks are indicative for food choice, preparation methods and hygiene awareness, it is worth further exploring when the flesh hook became popular in Suffolk and indeed England.

6.2.102 If habitation on a substantial scale had continued into the medieval period, the discovery of more lighting equipment would have been expected. The only item found is likely part of a candlestick or lantern, but some further investigations into its exact nature and date may aid the interpretation of medieval activity. The household assemblage is of regional significance. Especially the fleshhooks offer potential for regional and national comparison and for increasing knowledge of dietary habits.

Animal husbandry and transport

6.2.103 The presence of horseshoes, ox shoes and harness-related equipment signals the use of animals for transportation. Most interesting is the discovery of two early medieval harness mounts of which one is elaborately decorated. This find somehow contradicts the overall picture that suggests that the site was not particularly affluent. The mount belongs to a small group of fairly poorly understood fitting and further research on this object is necessary. Evidence for early medieval animal husbandry and use of horses to transport people and goods is relatively rare. The finds from Bramford can, with further research, add to our understanding of this part of early medieval life. This is in line with questions posed in the 'East of England research framework' (e.g. E-SAX 26). Whilst the general assemblage is of regional importance, the harness mount with garnet inlay is of national significance. The item offers the potential to increase our knowledge on early medieval ornamental horse fittings across England and allows for comparison with items found on the continent.

6.2.104 There is limited evidence for horse husbandry during the medieval period. The presence of horseshoes as well as ox shoes suggests both species were utilised for transport and ploughing. The lack of harness equipment, however, may mean that the site was merely a pasture for animals rather than a place of active use.

6.2.105 The only item on site which is definitively related to subsistence provision is a fishhook. This suggests that the majority of the food which was consumed on site originated from either the keeping of animals or from sources which are invisible to us archaeologically.

6.2.106 Bell clappers are often linked to animal husbandry, but other uses cannot be ruled out. This is especially true for the somewhat larger clappers. During the early medieval period, bells are a very rare occurrence. West only lists one specimen in his gazetteer of early medieval finds from Suffolk and none are mentioned for the West Stow excavations. For this reason, it can be suggested that the clappers are related to the medieval phase of the site. They may be an indicator for the keeping of a larger number of animals on site. This offers potential for further research in conjunction with the large assemblage of unworked animal bone from Bramford.

6.2.107 The animal husbandry and transport assemblage from Bramford is of regional significance and has the potential to increase our knowledge of the use and keeping of animals during the early medieval period and how these habits changed during the transition to the post conquest period. In addition, further study of the early medieval harness fittings will aid our understanding of the material culture surrounding animals during this period from a settlement point of view. Currently, most information on this subject is gained from funerary contexts which are not necessarily a reflection of everyday life.

Fixtures and fittings

6.2.108 The assemblage of fixtures and fittings from Bramford is relatively large but contains a significant number of items which could not be identified or for which identification is uncertain. This is usually the result of their fragmented condition. As the nature and design of many fixtures and fittings only changes very little over time, many items are chronologically undiagnostic and therefore of no use for the purpose of context dating. A relatively large number of items within the assemblage seems to date roughly to the medieval period or thereafter. The scale on which these items are found, however, suggests that the area was not permanently occupied during this period. If this was the case, many more structural fittings would be expected.

6.2.109 Of particular interest are some early items, including the antler socket (RF<708>) and the stud which potentially belongs to an early medieval lyre (RF<271>). Both these items need more comparative research but can potentially shed light on the use of musical instruments during the early medieval period as a form of pastime and the potential creation and use of antler tools or fittings. The assemblage is of a regional importance and offers scope for comparison with other sites. Especially when comparing with known medieval sites, it may help to determine whether there was only an early medieval settlement or also continued to be occupied during the high medieval period.

Coins

6.2.110 The significance of the Greek coin is poorly understood; further investigation is required to ascertain this. As with other finds categories, the Roman coins are largely confined to Area 2. The volume of coins and the spike in 4th-century issues is suggestive of Roman activity nearby, although none of the Roman coins were recovered from contemporary features and the source of this activity has yet to be established. The 5th-century transition from Late

Roman to Early Anglo-Saxon settlement remains opaque (ESAX-03). As well as adding to the evidence for Roman activity in the area, the coin assemblage may contribute to the interpretation of other artefactual evidence in understanding the relationship between the two periods both locally and within a wider context. Further analysis should include a comparative Reece Period analysis with the county, regional and national mean. Comparison with material from local Saxon settlement sites should be attempted.

6.2.111 There is some sparse evidence for middle Saxon coin at Bramford. The presence of an 8th-century sceatta supports this evidence and contributes to the Research Question: MSax-Lsax 27: How can we increase our understanding of Middle and Late Anglo-Saxon coinage?

6.2.112 The post medieval coins have been recorded in full for the site archive and are not considered to hold further potential beyond dating evidence.

6.2.113 Summary of the registered finds potential:

- Overall, the Registered Finds assemblage has the potential to elucidate the nature of the relationship between Roman and Anglo-Saxon activity in the region. Analysis will contribute to the understanding of the use and reuse of Roman objects in the early medieval period. The origin of this material remains in question and comparison with regional settlements together with analysis of the assemblage may go some way to providing a hypothesis regarding the location of Roman activity.
- The early medieval assemblage is varied and contains a significant number of objects which are of individual regional and national importance. Analysis of this assemblage and detailed comparison to the settlement sites of Suffolk and the wider region will enable a clearer picture of early medieval activity and culture to appear. Spatial analysis may aid in the interpretation of specific features such as ring-ditch G12 and the two possible structures.
- There is less clear evidence for middle Saxon activity visible within the Registered Finds assemblage however clearer stratigraphic and spatial analysis may assist in the interpretation of settlement activity at this time at Bramford.
- Analysis of the medieval Registered Finds may augment the understanding of the relationship between the medieval town of Bramford and its environs.
- The post-medieval assemblage is considered to have little potential for further work; however the presence of intrusive material has been noted throughout the assessment and some limited further analysis may help to untangle any stratigraphic queries.

Environmental remains

6.2.114 The charred plant remains have a local significance. The results of the current assessment work have confirmed the botanical data gathered during previous work carried out at the site (Scott 2018, 23-4; Graham *et al* 2019, 185-189). All phases of fieldwork at the site uncovered small to moderate

assemblages of charred plant remains. These provide data on crop choices at the site during the different periods of site occupation, but do not have a wider regional significance. The charcoal assemblages have a low significance, due to their size and to their origin from secondary deposits.

6.2.115 The bulk soil samples from Land east of Loraine Way have produced plant macrofossil assemblages of various size and composition. All the plant remains preserved as a result of charring, which has resulted from burning accidents that might have occurred during the processing of storage of the crops or meal preparation. In most cases, the amounts of crop preserved represent a background signature and are not indicative of large-scale cereal processing happening in the proximity of the excavated features.

6.2.116 Crop choices in the Saxon and medieval periods included free-threshing wheat, hulled barley, rye, legumes such as beans, and possibly oat. These are common crop choices for these periods, having also occurred in features discovered during the evaluation at Lorraine Way (Scott 2018) as well as the excavation at The Street site (Graham *et al* 2019). Spelt (*Triticum spelta*) was also represented at the latter site, alongside free-threshing wheat. Spelt was commonly cultivated in the late Prehistoric and Roman periods in Britain. Its occurrence in Saxon deposits might represent either a weed or an 'accidental' crop, or be residual from earlier phases of site use.

6.2.117 Given the absence of chaff and small-headed weed seeds, these samples are likely to represent nearly fully processed assemblages of crops, possibly ready for consumption. The earlier phases of crop processing, which remove the straws and stems of the grains as well as the smaller weeds, are likely to have happened outside the settlement. It is also possible that fully cleaned grains were traded into the site.

6.2.118 The charcoal assemblages derive from secondary deposits, with no sign of *in situ* burning and are likely to represent fuel waste of mixed origin. Trees and shrubs typical of mixed deciduous woodland abound. These include oak, ash and hazel. Other taxa are light-demanding and indicate the co-presence of an open landscape that perhaps interspersed patches of thick woodland. This landscape might have included woodland margins, field boundaries delimited by hedgerows and scrub. Wet environments or riverbanks (alder) might also have been occasionally tapped into for fuel.

6.3.119 The most common taxa, such as oak, hazel, ash and to a certain extent Maloideae, tend to produce good fuel. It is likely that the wood from these trees was specifically selected to be used as fuel. Oak wood is prized for timber and joinery as well as fuel (Taylor 1981) and its common occurrence at the site might indicate a lack of pressure on woodland resources. This could have been granted by the presence of a reliable source of oak woodland, which was likely managed through coppicing or pollarding in order to guarantee wood supply.

7.0 ANALYSIS AND FURTHER REPORTING

7.1 Introduction

7.1.1 The preceding section has discussed the significance and potential of the various stratigraphic, artefactual, and environmental data sets to further the interpretation and understanding of the Land East of Loraine Way, Bramford excavations and to contribute to identified local, regional research and national research topics. In this section, revised research aims and objectives that will inform and shape further analytical work are presented (7.2) and the tasks to be undertaken to produce a Final Archive Report and publication are identified and quantified (7.3).

7.1.2 Assessment of significance and potential of the stratigraphic, artefact and environmental data sets demonstrate that further analysis and dissemination of the Early Medieval settlement results from the excavation is merited, as well as the high medieval land use. Where appropriate, this will reference the adjacent Oxford Archaeology East site and other surrounding excavations.

7.1.3 It is anticipated that on completion of the analysis and production of a Final Archive Report, wider dissemination of the results will be achieved by publication of monograph report, potentially in the ASE in-house SpoilHeap publications series.

7.2 Revised research agenda: Aims and Objectives

7.2.1 This section combines those original research aims that the site archive has the potential to address with any new research aims identified in the assessment process by stratigraphic, finds and environmental specialists to produce a set of revised research aims that will form the basis of any future research agenda. Original research aims (ORs) are referred to where there is any synthesis of subject matter to form a new set of revised research aims (RRAs) posed as questions below.

7.2.2 The following revised research aims (RRA) and objectives (RRO) have been identified and will be used to drive any further analysis undertaken on this data set for final archive reporting and publication, which will focus on the nature of the Early Medieval and High Medieval land use.

RRA1: To understand the nature of land use prior to its early Saxon occupation:

- *RRO1: Can a firm date for the posited Bronze Age barrow ring-ditch in Area 3 be determined, and its relationship in the landscape with cropmark BRF008 and the wider landscape on the western banks of the River Gipping established?*

- *RRO2: Can the formation of the natural hollows and their primary fills be better understood in terms of their geological formation and position in the site topography?*

RRA2: To understand the nature of the early medieval settlement in terms of its form, development and activities undertaken within it, including rubbish generation, management/use and disposal:

- *RRO3: Can the identification of both SFB and post-built buildings be made more definitive in order to better understand settlement form? Can the chronology of their development/replacement and their functions be discerned? Is there any patterning to their distribution? Can features such as pits be directly associated with the occupation/use of specific buildings?*

- *RRO4: Can the apparent early Saxon reuse of the prehistoric barrow be better understood? Does its remnant earthwork simply accumulate settlement debris or does it have a distinct function within the settlement – as a burial site, a moot mound, or other? Do the adjacent Area 3 buildings have an association with this?*

- *RRO5: The phenomenon of the preservation of early Saxon finds-rich soils in the upper parts of natural hollows is a distinctive aspect of this site. Can the formation of these deposits be better understood? Are they remnants of spreads of rubbish that accumulated in the settlement? Do they derive from levelled midden heaps? What does this tell us about the generation, use and eventual disposal of occupation rubbish in this settlement?*

- *RRO6: Curated and/or reused Roman artefacts form a significant component of the early Saxon rubbish assemblages, in SFBs, pits and hollows. Can the source(s) of material be ascertained in order to understand the significance and exploitation of former Roman sites in this period? Can the reasons for and uses of this material be discerned? Is it simply re-utilised, or curated/prized, heirloom, recycled?*

- *RRO7: Can the study of the finds assemblages contribute to the further understanding of the nature of the early Saxon settlement and the range/scale/importance of domestic and craft manufacturing activities undertaken in it? Do they indicate wealth and status of the settlement population?*

- *RRO8: Can the animal bone and environmental assemblages provide insights into the nature of the substance economy, diet, etc., of the early Saxon settlement?*

- *RRO9: Some of the metalwork is of potential Late Roman/earliest Saxon date. Is there compelling evidence for a transition from Roman to early Saxon occupation at this site? Do some of the finds indicate continental origin or contact?*

- *RRO10: Some of the metalwork is distinctive of items commonly found in early Saxon graves. Does this indicate the presence of a cemetery nearby? If so, how would the settlement relate to this?*

- *RRO11: How does the settlement at Bramford compare to other early medieval settlements in the region? Can it be better understood with reference to other Suffolk sites?*

RRA3: To understand the form and function of High Medieval agricultural land use alongside this part of the River Gipping:

- *RRO12: How identified field systems fit with those identified in the adjacent Oxford Archaeology East site and other sites around Bramford. Can the form and development of the wider medieval agricultural landscape be discerned?*

- *RRO13: Can the medieval finds and environmental assemblages inform on the nature of relationship of the site with the medieval settlement at Bramford village?*

7.3 Further analysis and final reporting

7.3.1 The various further analytical and specialist reporting tasks required to create a definitive account of the excavation results in the Final Archive Report are identified below and summarised in Table 29, which includes anticipated time allocations.

Stratigraphic tasks

7.3.2 After completion of the review of site dating/phasing/land use, regional parallels research and further specialist analyses, a period-driven narrative of the site sequence will be prepared. This will draw on the specialist information in order to address the revised research aims (7.2) and be developed and explored, as appropriate, in the discussion section of the final archive report. The stratigraphic tasks to be completed are as follows:

- Review/refinement of dating / grouping / phasing / land use in relation to site data from previous investigation phase, the changing emphasis of some context interpretation (esp. the hollows) and in light of dating of key artefact assemblages (primarily pottery and metalwork). Review of currently undated features and deposits. (5 days)
- Research, search for parallels and comparanda, etc. for early Saxon rural settlements and agricultural economies. Also reuse of prehistoric monuments and Roman materials/objects (5 days)
- Production of introductory text that includes location, circumstances of fieldwork, topography and geology, and archaeological and historical background. (1 day)
- Creation of a revised/developed site narrative by period, with a focus on the early Saxon and High Medieval land uses, referencing pertinent specialist information. Including detail of the early Saxon building evidence and formation of the hollow deposits, etc. (15 days)
- Integration of results of further finds and environmental analysis, reporting into the final archive report, and liaison with specialists. (3 days)

- Writing of discussion and conclusion texts, including reference to regional comparanda, etc. (5 days)
- Selection of relevant phase plans, figures, photographs, and finds illustrations and liaison with illustrator. (2 days)
- Collation of comprehensive data appendices for strat, finds and enviro data sets (2 days)
- Completion of bibliography, acknowledgements, etc. Final collation and checking of final archive report. (2 days)

Total: 40 days

Flintwork tasks

7.3.3 The flint assemblage demonstrates wide use of the site, principally during the Neolithic and Early Bronze Age periods. Unfortunately a large proportion of the flintwork was found as residual material in later features / deposits. Given the overall mixed and relatively undiagnostic nature of the assemblage, and given the absence of large well-stratified groups, the potential for further work is limited. It is recommended that no further analysis should be undertaken on the assemblage, with the exception of the handaxe in context [1059].

- The handaxe will be described in more detail, and a metrical exercise be undertaken to allow comparison with handaxes from other sites. A report will be prepared and illustrations done. (2 days)

Total: 2 days

Post-Roman Pottery tasks

7.3.4 A full quantification by fabric, context and feature has already been completed, and a catalogue of this data will be prepared for the archive. No further work is required on the High Medieval and post-medieval pottery. The following tasks will be carried out for the early Saxon assemblage during the analysis stage:

- Further work is required on spatial and stratigraphic analysis once final phasing and more detailed site information are available.
- Refine dating of vessels and contexts where possible, based on forms and fabrics.
- Comparisons with other East Anglian sites will be required.
- A more detailed report on fabrics, forms and decoration will be prepared for publication.
- If it is possible to obtain the evaluation assemblage, this should be re-recorded as, although it states in the evaluation report that it has been recorded using Suffolk fabric codes, this is not the case. There are also quantification discrepancies in the text. It would be worth checking that the Thetford ware is correctly identified, and not Roman or medieval. This information will be incorporated into the final report
- Diana Briscoe should be invited to add stamps to the Archive of Anglo-Saxon Pottery Stamps.

- Selection of vessels for illustration (up to 30 vessels/sherds)

Total: 3 days

Ceramic Building Material tasks

7.3.5 Further examples of Roman CBM being reused in Saxon contexts to be sought in order to confirm, or add substance to, their use in structures such as hearths and corn/grain-dryers.

- Research parallels for Roman CBM reuse in Saxon period (1 day)
- Update assessment report for final archive report (1 day)

Total: 2 days

Fired Clay tasks

7.3.6 No further analysis of the bulk fired clay / daub is required. The early Saxon loomweights require a small amount of further analysis.

- Re-examination of loomweights, comparison with pottery dating, and researching other examples of similar date from Suffolk (0.75 days)
- Updating report with phasing changes and land use (0.5 day)
- Preparing finds catalogue and incorporating into report (0.25 day)
- Selection of loomweights for illustration (0.25 day)

Total: 1.75 days

Geological Material

7.3.7 Some further limited analysis will be undertaken, on the quern fragments from Period 3 only. This will be limited to looking at the distribution of the fragments together with the other artefact classes associated within each context. This may allow a better judgement to be made regarding the level of residual/re-used Roman material present and thus the most likely source of the lava querns. Following this, a summary publication report outlining the Period 3 stone assemblage will be produced for publication. No pieces are proposed for illustration.

- Updating Excel archive with final site phasing (0.25 day)
- Study of distribution and associated finds (1 day)
- Research/identification of contemporary parallels (0.5 day)
- Preparation of revised report (0.5 days)

Total: 2.25 days

Bulk Metalwork

7.3.8 Both the nail and the bulk metalwork assemblages have been quantified and recorded entirely. All the information required has been organised in digital spreadsheets and can be used further if required for analysis. A revised text incorporating any phasing changes will be included in the final report.

- Revised report for final report (0.5 day)

Animal Bone

7.3.9 Full analysis is required for the early Saxon assemblage component, with a lesser amount of analysis of the High Medieval component, particularly with a view to understanding animal husbandry and consumption practices. Comparison with data from other sites with significant animal bone assemblages will be key.

- Full recording of assessed contexts and samples from the Period 3 and 4 assemblages (2 days)
- Further identification of select partially identified specimens using a comprehensive reference collection (2.25 days)
- Further identification of 3 juvenile equid specimens and 1 fallow specimen using ZooMS (1 day)
- Further quantification (MNI, MNE) (1 day)
- Skeletal part abundance analysis (1 day)
- Age-at-death analysis (1 day)
- Metrical analysis (0.5 day)
- Pathological analysis (0.5 day)
- Carcass processing analysis (butchery, burning) (1 day)
- Fracture freshness analysis (1 day)
- Taphonomic analysis (1 day)
- Intra-site comparison (2 days)
- Inter-site comparison (2 days)
- Production of report (5 days)
- Fish bone analysis, interpretation and report (2 days)

Total: 23.25 days

Registered Finds

7.3.10 Further analysis of the Bronze Age, Roman, early medieval and medieval Registered Finds will be undertaken. ZooMS analysis of the worked animal bone assemblage is recommended in order to interpret species/resource selection. A small number of coins require further work for identification. A revised report will be prepared for the final report.

- Identification and full catalogue of coins, including consultation with specialist and possible visit to the British Museum (3 days)
- Analysis, reporting and publication catalogue (4 days)
- Research into antler socket (0.5 days)
- Research into lyre stud (0.5 days)

- Research into early medieval harness fittings (2 days)
- Investigate nature and date of potential candlestick/lantern (0.5 day)
- Research the start date of flesh hooks (1 day)
- Research relationship between blade sizes and date/potential specific use for knives (2 days)
- Research parallels for the francisca and barbed arrowhead (2 days)
- Research instances where Bronze Age and Saxon tools/weapons are deposited together (1 day)
- Research parallels for votive spear, silver wire pin and combs (3 days)
- Analysis report production and revised catalogue (10 days)
- Selection of objects for illustration (*c.*200 objects) (2 days)

Total: 31.5 days

Other bulk finds

7.3.11 The following artefact assemblages do not require any further analysis for the final archive report or publication. The assessment texts will be reviewed following any adjustment of stratigraphic dating/grouping/phasing/land use and updated for the publication report. Information will be drawn from these and subsumed into the publication report, in the site narrative texts and/or find overview text.

- Prehistoric and Roman pottery
- Clay Tobacco Pipe
- Glass
- Metallurgical/magnetic material
- Human Bone
- Shell

Update of misc finds texts for final report, as required (1 day)

Environmental remains

7.3.12 No further analytical work is required other than what has been completed at assessment stage. A revised version of the assessment report will be included the final archive report.

- Production of revised report with update of phasing/landuse and tables (1.5 days)

Illustration

7.3.13 Appropriate illustration figures will accompany the stratigraphic and finds texts in the final archive report. The following illustration tasks have been identified:

- Production of revised phase plans, detailed feature plans, distribution plans, sections and photo illustrations (approx. 50 figures). (10 days)
- Handaxe RF<52> [1059] (0.5 day)
- Up to 30 early Saxon vessels/sherds (5 days)

- Up to six loomweights (1 day)
- Approx 200 registered finds (40 days)

Total: 56.5 days

7.4 Preliminary Publication Synopsis

7.4.1 It is proposed that, following completion of the Final Archive Report, the results of the excavations will be disseminated in the form of a monograph report. The article will describe, discuss and interpret the excavation results, drawing upon pertinent results from nearby sites. The publication will focus on the early Medieval settlement and medieval agricultural land uses and would seek to address and enlarge upon the research topics and questions stated in the revised research agenda (7.2, above).

7.4.2 The publication report is envisaged to comprise:

- Abstract
- Introduction, including background, geology, methodology, etc.
- Summary of prehistoric land use
- Early Saxon settlement
- Medieval (and later?) field systems
- Finds and environmental reports (selected)
- Discussion and conclusions
- Acknowledgements
- Bibliography

7.4.3 The publication will be accompanied by selective data tables, plans, figures, artefact illustrations and data appendices, as appropriate.

7.4.4 The content of the publication report will be largely drawn from the Final Archive Report. Further identification of tasks to facilitate its production will be determined as part of the Final Reporting process. Completion of a draft for submission to the volume editor is anticipated to take two years following the acceptance of the Final Archive Report by SCCAS.

Tasks	**Time**
Stratigraphic analysis & reporting	
Review/refinement of dating / grouping / phasing / land use	5 days
Research, search for parallels and comparanda, etc.	5 days
Write introductory text, incl. circumstances, location, topography, geology, and archaeological and historical background	1 day
Write revised/developed site narrative by period, esp. E Saxon settlement land use	15 days
Integration of further finds and enviro analysis into the final archive report, and liaison with specialists	3 days
Write discussion & conclusion texts, inc. reference to regional comparanda, etc.	5 days
Select phase plans, figures, photographs & finds illustrations, inc. liaison with illustrators	2 days
Collation of data appendices	2 days
Completion of bibliography, acknowledgements, etc. Collation & checking of final archive report	2 days
Subtotal	*40 days*

Specialist analysis & reporting	
Flintwork	2 days
Saxon & Medieval pottery	3 days
CBM	2 days
Fired clay	1.75 days
Geological material	2.25 days
Bulk metalwork	0.5 days
Animal bone	23.25 days
Registered finds	31.5 days
Misc finds rep update	1 day
Environmental Material	1.5 days
Subtotal	*68.75 days*
Illustration	
Stratigraphic plans, sections, photos	10 days
Pottery and finds illustration	56.5 days
Subtotal	*66.5 days*
Production	
Internal edit and amendment of final report draft	5 days
Project Management	4 days
Subtotal	*9 days*
Total	***184.25 days***

Table 29: Tasks for completion of analysis and final archive reporting

7.5 Artefacts and archive deposition

7.5.1 Guidelines in the *CIfA Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives* (CIfA 2014), and the Suffolk archive deposition guidelines (SCCAS 2021) will be followed for the preparation of the archive for deposition.

7.5.2 The site archive is currently held at the offices of ASE. Following completion of all post-excavation work, including any publication work, the site archive will be deposited with the Suffolk county archaeological depository. This will be subject to agreement with the legal landowner.

7.5.3 The finds and environmental remains ultimately deposited as part of the archive are dependent on specialist recommendations and regional archive requirements. Some discard may be carried out. The contents of the site archive are summarised in Tables 30 and 31.

Item	Count
Context sheets	1073
Section sheets	119
Plan sheets	0
Digital photos	1199
Context register	33
Drawing register	120
Watching brief forms	0
Trench Record forms	0

Table 30: Quantification of site paper archive

Bulk finds (quantity e.g. 1 bag, 1 box, 0.5 box 0.5 of a box)	30 boxes
Registered finds (number of)	502
Flots and environmental remains from bulk samples	50 bags
Palaeoenvironmental specialists sample samples (e.g. columns, prepared slides)	0
Waterlogged wood	0
Wet sieved environmental remains from bulk samples	0

Table 31: Quantification of artefact and environmental samples

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