



# Land at Quedgeley East Haresfield Gloucestershire

Archaeological Excavation



for St Modwen Ltd



June 2022



# Land at Quedgeley East Haresfield Gloucestershire

# **Archaeological Excavation**

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#### SUMMARY

Site Name: Land at Quedgeley East

**Location:** Haresfield, Gloucestershire

**NGR**: 380501 211080

**Type:** Excavation

Date: January–May 2019
Planning Reference: S.16/1724/OUT

**Location of archive:** To be deposited with The Museum in the Park, Stroud

Site Code: CAQUED19

An archaeological excavation was undertaken by Cotswold Archaeology between January and May 2019 at the request of St Modwen Ltd on land at Quedgeley East, Haresfield, Gloucestershire. The excavation comprised two areas, which together amounted to an area of 6.6ha.

The earliest remains comprised two flints, both residual within later deposits. One is only broadly datable as prehistoric, whilst the other is a Mesolithic or Early Neolithic blade. A small ring-ditch is undated but may be the remains of a prehistoric barrow, and there was also a sherd of Early to Middle Bronze Age pottery and a small assemblage of later prehistoric pottery, all residual within later deposits.

A single Roman inhumation burial was found. The bones were in very poor condition, but radiocarbon assay produced a determination of cal. AD 130–320 (SUERC-88058; 95.4% probability). The grave may have been laid along what was probably a Roman droveway and within site of the possible barrow. A small assemblage of late prehistoric and Roman pottery reflects the site's location south of extensive Iron Age and Roman enclosures identified at Hunt's Grove.

The majority of the remains date to the medieval period and relate to an enclosed farmstead. Pottery from the site, radiocarbon dating, and the settlement form, together suggest that this farmstead was in use from c. AD 1000 to 1150/1200 and, as such, is one of only a very few such dispersed settlements to have been excavated. Additional significance arises from the fact that most of the recovered pottery, fabric TF41B in the Gloucester type series, seems to have been unused or wasters, suggesting that this pottery was produced on site. Haresfield is one of only three locations mentioned in Domesday Book as having potters, and so the identification of the site as having included one of the five potters mentioned in the Haresfield entry is significant. The occupants were primarily farmers, most probably engaging in dairying on the wood-pasture of the vale, and perhaps also having a sheep flock which was grazed on

the nearby Cotswold uplands, where the animals would also have manured arable fields. The farm may have had late pre-Conquest origins, in which case it survived the Norman invasion and the occupants seem to have taken advantage of the new market opportunities this provided, adapting the pots they produced to suit Norman tastes.

Although the farmers adapted to the new regime, its effects eventually caused the abandonment and probable deliberate demolition of the farm during the mid to late 12th century when it was replaced by an open field system, along with what seems to have been a moated windmill. This was perhaps part of a wider landscape reorganisation, which, beyond the excavated area, saw the creation of a deer park within Haresfield, along with the construction of the church (extant) and at least one moated manor house – an exercise in Norman power expressed through a formalisation of the landscape which also maximised its capacity to produce and process food and allow for the leisure, domestic and religious pursuits of the new elite. The discovery of a moated windmill is unusual but sits comfortably within a wider trend towards moated sites, which was adopted by the more prosperous peasants through to the higher elites. The moated windmill seems to have been abandoned no later than *c*. 1500, and although the causes for this are unclear, social, political and economic uncertainties of the 15th century may have contributed. Later remains were of field boundaries which can be seen on historic mapping.

A synthetic article on the finding complementing this report will be submitted to *Medieval Archaeology* and the archive will be deposited with The Museum in the Park, Stroud.

#### 1. INTRODUCTION

- 1.1 Between January and May 2019, Cotswold Archaeology (CA) carried out an archaeological excavation at Quedgeley East, Haresfield, Gloucestershire (centred on NGR: 380501 211080; Fig. 1).
- 1.2 The work was undertaken at the request of St Modwen Ltd as part of an outline planning application submitted to Stroud District Council for the development of a business park (SDC; ref: S.16/1724/OUT, and varied permission ref. S.19/2744/VAR) relating to planning Condition 18 of the varied permission (previously Condition 19 of the original permission).
- 1.3 The archaeological work was undertaken in accordance with a detailed written scheme of investigation (WSI) produced by CA (2018) and approved by Charles Parry, at that time the Archaeologist for Gloucestershire County Council (GCC), the archaeological advisors to Stroud District Council. The fieldwork also followed the Standard and Guidance for Archaeological Excavation issued by the Chartered Institute for Archaeologists (2014); the Management of Research Projects in the Historic Environment (MoRPHE): Project Manager's Guide and accompanying PPN3: Archaeological Excavation issued by Historic England (2015), and the Statement of Standards and Practices Appropriate for Archaeological Fieldwork in Gloucestershire issued by GCC (1996). The fieldwork and post-excavation assessment was monitored by Charles Parry, including site visits on 26 February and 9 April 2019. Subsequent monitoring was undertaken by Rachel Foster, the present Archaeologist for GCC.

#### The site

1.4 The overall site comprises 14ha of former agricultural land between Haresfield village to the south-east and Quedgeley and Hardwicke to the north (Fig. 1); the latter two settlements adjoin the city of Gloucester, the centre of which is 8km to the north-east. Two areas were excavated, Areas A and B, together amounting to 6.6ha (Fig. 2). The site lies south and west of a former RAF station, now utilised as a business park, and is bounded to the north and west by the M5 and an associated junction, to the east by Haresfield Lane, and to the south by Stonehouse Road. It lies at approximately 25m aOD on low-lying flat ground which forms part of the Severn vale (Fig. 3). The River Severn flows 4km to the west, whilst higher ground of the Cotswold uplands lies 1km to the south-east (Fig. 4). The Budge Brook arises from

springs located east of the site on the Cotswold scarp, flowing past the northern site boundary on its way to the River Severn; west of the site, this brook forms part of the current boundary between the parishes of Hardwicke and Haresfield.

1.5 The underlying bedrock geology of the area is mapped as the Blue Lias and Charmouth Mudstone Formations, sedimentary mudstones which formed in the shallow lime-mud seas of the Jurassic and Triassic periods, 183–210 million years ago; no superficial deposits are recorded (BGS 2019).

#### 2. ARCHAEOLOGICAL BACKGROUND

- 2.1 The site lies within an area of known archaeological potential, in particular relating to Iron Age and Roman settlement. A trial-trench evaluation undertaken in 2012 at Hunts Grove, Hardwicke, 200m north of the site, revealed an Early to Middle Bronze Age pit, along with Middle and Late Iron Age enclosures, some of which remained in use after the Roman conquest (CA 2012; Fig. 1). The Hunts Grove site remained in use into the later Roman period and excavations at the site undertaken by CA in 2021 uncovered 5th to 8th-century Anglo-Saxon occupation, including remains provisionally interpreted as post-built halls. The Roman town of *Glevum* (Gloucester) was 8km north-east of the site, and the Roman road running south from *Glevum* to *Abonae* (Sea Mills) ran 1km to the site's west (Margary route 541; Margary 1973, map 11; Fig. 1).
- 2.2 The documentary and landscape history of Haresfield, the parish within which the site is located, have been researched as part of this project and the results are presented in detail in Appendix T. Haresfield village, 260m south-east of the site, has medieval origins and of particular note is a record in the 1086 Domesday Survey that potters operated there (see Appendix T). Place name evidence suggests that the later Saxon settlement pattern at Haresfield comprised dispersed farmsteads. Haresfield includes the site of The Mount, a square moat believed to have surrounded a medieval manor house (Scheduled Monument (SM) 1020655; Gloucestershire County Council Historic Environment Record (GHER) ref. 388; Fig. 1). South of The Mount, Haresfield Court was likely the centre of a second manor. The excavation area lies within what was part of the agricultural land belonging to Haresfield in the later medieval and early post-medieval periods. Research presented in Appendix T indicates that the site lay within an open field (Windmill

Field, see below) during the medieval period, one of eight within Haresfield which followed a three-course crop rotation system. Ridge-and-furrow earthworks are visible on aerial photographs of the site taken in 1946 (Fig. 5); these were not extant at the time of the excavation, although the sub-surface remains of plough furrows were found. Piecemeal enclosure occurred within the parish, although Windmill Field itself survived until parliamentary enclosure in 1831.

- 2.3 A map of 1813 names a field making up much of the site as Windmill Field, whilst the 1831 enclosure award names it as 'Windmill Leaze', leaze meaning enclosure, grassland or pasture (see Appendix T). A later map of 1856 names two fields within the site, separated by a boundary found during the excavation reported on here, as 'Windmill Lease' to the north and 'Windmill Tump' to the south, a tump being an earth mound (Appendix T).
- 2.4 During the 1930s 'expansion period' prior to the Second World War, land around Quedgeley was purchased by the Air Ministry to provide storage facilities for the RAF. This became No. 7 Maintenance Unit, RAF Quedgeley (RAF 7MU) when it opened in 1939. One part of RAF 7MU, No. 6 Motor Transport, occupied the northern part of the current site. The base continued in military use until 1995, and extant military buildings within the site have been subject to a standing building recording programme which forms a separate part of the archaeological work undertaken as part of the archaeological Condition attached by SDC, and has been reported on separately (CA 2019a). No excavation was undertaken within that part of the site.

#### Site investigation history

- 2.5 The site was partially investigated during a trial-trench evaluation undertaken in 1992 as part of an unrelated project, at which time seven trenches were excavated, five of which lay within the site (Catchpole 1992). The only findings were of a former field boundary ditch depicted on Ordnance Survey mapping (ibid.).
- 2.6 The site's archaeological potential was subsequently summarised in a heritage assessment report compiled in support of the current development (CA 2016a). Following this, the entire site was investigated by means of a geophysical survey which indicated the presence of a ring-ditch and an enclosure in the eastern part of the site, and an area of disturbance to the west, the latter suggested as a possible kiln site (PCG 2016). The ring-ditch (recorded as Ring-ditch B during the subsequent excavation) is visible on aerial photographs of the site, as are ridge-and-furrow earthworks (Fig. 5), although it did not survive as an earthwork at the time of the

excavation. It was located within the part of the site belonging to the field known as Windmill Tump.

- 2.7 Based on the findings of the geophysical survey, a trial-trench evaluation was undertaken across the entire site, comprising 22 50m-long trenches (trenches 1–22; most are shown on Fig. 2, although some lay beyond the depicted area, although within the site boundary) targeting features identified during the geophysical survey, as well as investigating areas where no geophysical anomalies were recorded; a further 32m-long trench (trench 27; Fig. 2) was excavated to test for the possible kiln identified during the geophysical survey (CA 2016b). The latter feature proved to be of modern origin, stemming from the disposal of materials associated with the former RAF station, and is not discussed further.
- 2.8 Evidence for Roman activity identified during the evaluation was restricted to five small sherds of Roman pottery recovered as residual finds from medieval contexts.
- 2.9 The majority of the datable features identified during the 2016 evaluation comprised two areas containing medieval ditches associated with enclosures and boundaries. These yielded pottery in a locally produced fabric known as TF41B which is datable to the mid 11th century to the mid to late 12th century (the type is discussed in detail in Appendix C, along with the associated dating which is currently uncertain, particularly for the start date of the pottery type) and is believed to have been manufactured somewhere in the environs of Gloucester. Although the precise location of the kilns from which it derived had not been detected at the time of the evaluation, given the potters recorded at Haresfield in the 1086 Domesday Survey, it was thought possible that the medieval pottery recovered during the evaluation may have derived from a kiln or kilns very nearby. The evaluation also confirmed the presence of the ring-ditch (Ring-ditch B) visible on the 1946 aerial photograph and geophysical survey plot, and recovered medieval pottery from its fills, although its function and origin remained undetermined.
- 2.10 A number of the ditches recorded during the evaluation correspond to boundaries depicted on the 1831 Haresfield Inclosure map and are probably later medieval to post-medieval in date. These were subsequently exposed during the excavation.

#### 3. AIMS AND OBJECTIVES

- 3.1 The objectives of the excavation were set out in the WSI (CA 2018). The aims and objectives of the subsequent post-excavation work were detailed within a *Post-Excavation Assessment* (PXA) report and accompanying *Updated Project Design* (UPD) (CA 2019b), which highlighted the following objectives:
  - Objective 1: date and resolve the nature of a possible prehistoric ring-ditch (Ring-ditch A);
  - Objective 2: identify the extent of any later prehistoric activity within the site;
  - Objective 3: identify the extent of the Roman activity within the site;
  - Objective 4: elucidate the phasing and morphology of the earlier medieval remains;
  - Objective 5: examine the economic basis and landscape context of the earlier medieval remains;
  - Objective 6: investigate the origins, duration and ending of the earlier medieval settlement;
  - Objective 7: examine the evidence for pottery production on or near the site;
  - Objective 8: elucidate the nature of later medieval Ring-ditch B;
  - Objective 9: undertake a programme of radiocarbon dating in order to assess the origins and duration of the post-conquest farmstead; and
  - Objective 10: characterise the nature of late medieval to early post-medieval agriculture within the site.

#### 4. METHODOLOGY

#### Fieldwork

4.1 The fieldwork followed the methodology set out within the WSI (CA 2018). Based on the findings of the preliminary works detailed above, the archaeological advisor to SDC advised that an archaeological Condition be attached to the Outline Planning Consent requiring excavation in two areas (Areas A and B) in order to investigate the two foci of medieval ditches, and the ring-ditch (Ring-ditch B). Area A was within the eastern part of the site and comprised a rhomboid-shaped plot of land 270m by 170m in extent; Area B was within the western part of the site and comprised a rectangular plot measuring 170m by 95m (Fig. 2).

- 4.2 The excavation areas were set out on OS National Grid (NGR) co-ordinates using Leica GPS and surveyed in accordance with CA Technical Manual 4: *Survey Manual* (2017).
- 4.3 Fieldwork commenced with the removal of topsoil and subsoil from the excavation areas using a mechanical excavator equipped with a toothless grading bucket, under the direction of experienced CA staff.
- The archaeological features thus exposed were hand-excavated to the bottom of archaeological stratigraphy. Priority was attached to features which yielded sealed assemblages which could be related to the chronological sequence of the site. All funerary deposits were 100% excavated. All discrete features (postholes and pits) were sampled by hand excavation to a minimum of 50% per feature. All ditches were typically sampled to a maximum of 20%, although the exact sample percentage was varied to reflect the quality and quantity of dating evidence recovered from the excavated sections. This was determined on site and in consultation with the archaeological advisor to SDC. Two ring-ditches were identified; the smaller of these (excavated as Ring-ditch A) was at least 50% sampled by hand, whilst the larger one (that visible on aerial photographs and identified during the geophysical survey and evaluation, and subsequently excavated as Ring-ditch B) was investigated by five hand-excavated interventions and three mechanically excavated slots, totalling approximately 40% of the ditch circuit by length.
- All archaeological features were planned and recorded in accordance with CA Technical Manual 1: Fieldwork Recording Manual (2013). Each context was recorded on a pro-forma context sheet by written and measured description; principal deposits were recorded electronically using Leica GPS and drawn sections (scale 1:10 or 1:20 as appropriate). Where detailed feature planning was undertaken using GPS/TST, this was carried out in accordance with CA Technical Manual 5: Survey Manual (2017). Photographs (digital colour) were taken as appropriate. All finds were bagged separately and related to the context record. All artefacts were recovered and retained for processing and analysis in accordance with CA Technical Manual 3: Treatment of Finds Immediately after Excavation (1995). Deposits were assessed for their environmental potential and recovered in accordance with CA Technical Manual 2: The taking and processing of environmental and other samples from archaeological sites (2012).

#### Post-excavation

- The case for a programme of post-excavation analysis leading to publication and subsequent deposition of the archive was presented in the PXA (CA 2019b). In accordance with the UPD within that report, selected context groups were targeted for detailed analysis in order to elucidate the phasing, nature and date of key features within the site. For other context groups, the initial analysis undertaken during the production of the PXA was felt to be sufficient, given the lack of complexity to those features. Where detailed analysis was undertaken, this was done within a *Stratigraphic Assessment* document, supported by an Access database (both available within the site archive), which included a detailed analysis of the relationships between cut features and their fills, along with any artefactual and ecofactual remains from their fills and the associated dating evidence.
- 4.7 This report presents full details of the site, including all specialist reporting, and will be deposited with the Gloucestershire Historic Environment Record, as well as being published online via the *Reports Online* page of the Cotswold Archaeology Website <a href="https://reports.cotswoldarchaeology.co.uk/">https://reports.cotswoldarchaeology.co.uk/</a> (report CR0237\_1). A summary of the medieval remains will be published within *Medieval Archaeology*.

#### 5. **RESULTS (FIGS 6–26)**

- This section provides an overview of the excavation results; detailed summaries of the stratigraphic record, finds, palaeoenvironmental evidence and radiocarbon dating evidence are to be found in Appendices A–T. A summary of information from this project, set out within Appendix U, will be entered onto the OASIS online database of archaeological projects in England.
- Archaeological features were identified throughout Areas A and B (Fig. 2). Predominately, these comprised enclosure and trackway ditches, but, in addition, Area A included two ring-ditches and a few pits and postholes, whilst Area B also contained a single grave and a few pits. The smaller ring-ditch (Ring-ditch A) contained no finds but may have been early prehistoric. A small assemblage of later prehistoric pottery was recovered, all residual within later deposits. Human bone from the grave was radiocarbon dated to the Roman period whilst ditches flanking a droveway may have been Roman, although this is uncertain, and Roman pottery was found in small quantities within medieval deposits across much of the site. The

majority of the ditches are dated by the presence of medieval pottery and radiocarbon assay to the late 10th/11th to mid/late 12th centuries, although some relate to later field boundaries depicted on historic mapping. The larger ring-ditch (Ring-ditch B) was associated with medieval pottery and radiocarbon dates indicating use no later than c. AD 1500, and likely originated some time after c. AD 1150/1200.

- Despite the problems associated with excavation on clays, notably standing water during wet periods, and the cracking of the clay substrate when it dries out, features were clearly identified across the site. Stratigraphic relationships between features were often uncertain, due the very similar nature of their fills, whilst horizontal plough truncation may have removed some slighter features and deposits prior to the excavation. Based on spot dates provided by the pottery and radiocarbon dates, information from cartographic sources, and assessment of the spatial and stratigraphic relationships between the features, the remains have been divided into five periods, as follows:-
  - Period 1: prehistoric (10,000 BC to AD 50)
  - Period 2: Roman (AD 50 to 400)
  - Period 3: medieval (AD 1000 to 1150/1200)
  - Period 4: later medieval (AD 1150/1200 to 1500)
  - Period 5: post-medieval to modern (AD 1500 to present)

# Natural deposits and overburden

The natural geological substrate was exposed throughout the two excavation areas and predominately comprised Blue Lias clay with small patches of orange and brown sands and gravels. In the south-eastern part of Area A, the substrate comprised light orange brown silty sands. These natural deposits were covered by a sandy clay subsoil above which was a silty clay topsoil. The presence of ridge-and-furrow remains, visible as earthworks on aerial photographs (for example, see Fig. 5) but surviving only as sub-surface features at the time of excavation, reflects the site's historical use for open field agriculture, followed by a period of post-medieval to modern ploughing and pastural use.

# Period 1: prehistoric (10,000 BC to AD 50; Figs 6 and 7)

# Early prehistoric

5.5 Evidence for prehistoric activity within the site was restricted to residual flints and pottery sherds; an undated ring-ditch may have been an early prehistoric feature. Only two flints were found: a flake broadly datable as prehistoric, and a Mesolithic or Early Neolithic blade. The earliest ceramic is a single abraded sherd in a coarse grog-tempered fabric; this was recovered as a residual find from a medieval ditch fill and likely dates to the Early or Middle Bronze Age.

#### Later prehistoric

5.6 A later prehistoric presence within or near to the site is suggested by a small assemblage of 25 sherds of handmade pottery, mostly recovered from the vicinity of medieval Enclosure A (Fig. 6 shows late prehistoric and Roman pottery densities from the site) but found within features that also produced medieval pottery. Much of this pottery is limestone-tempered and probably of local origin, but there are also sherds in Palaeozoic limestone-tempered fabrics for which a source within the Malvern Hills or Woolhope Hills of Worcestershire/Herefordshire is likely, with dating probably within the Middle and later Iron Age. No cut features were found that can be certainly attributed to the later prehistoric period, and all the Iron Age pottery seems to have been residual. However, the sherds are fairly unabraded, and it is possible that the medieval ditches of Enclosure A had entirely truncated one or more Iron Age features, or that Ditch A30 of Enclosure A, which produced the largest assemblage of late prehistoric pottery (17 sherds in total from several excavated sections) should more properly be ascribed to the Iron Age. It is certainly possible that Ditch A30 could have defined part of a small rectilinear Iron Age enclosure; 19 sherds of medieval pottery were found within its lower fill during the evaluation (CA 2016b, Trench 18, Ditch 1808, fill 1809), but no further medieval pottery was recovered from the ditch during the excavation. However, on balance, the concentration of medieval pottery from the lower ditch fill suggests that Ditch A30 was medieval and that the Iron Age pottery within it was residual, although the possibility that it was Iron Age cannot be excluded, nor can the possibility that this was an Iron Age earthwork re-used in the medieval period. The ditch itself is described under Period 3, below.

Possible prehistoric ring-ditch (Ring-ditch A)

The only other cut feature on site which may date to the prehistoric period was Ringditch A, found towards the eastern edge of Area A (Figs 6 and 7). It comprised a ringditch 11m in diameter with no breaks along its circuit. The ditch itself was up to 1.25m
wide and 0.3m deep with moderately sloping sides and a slightly rounded base. Its
single silty clay fill was a homogenous deposit which produced no finds, whilst
samples from the fill produced only a few amorphous fragments of fired clay and
some shells from the terrestrial snail *Vallonia* sp, an open landscape species. No
remains suitable for radiocarbon dating were recovered from the ditch fill and the
date and function of this feature therefore remain uncertain. However, whilst it is
possible that the ring-ditch dates to the medieval or later period, perhaps having
enclosed a structure, this is considered less likely than a prehistoric date given the
absence of medieval pottery from the fills, material that was common in the fills of
the medieval ditches described below. The possible date and function of this ringditch are considered more fully in the Discussion section, below.

# Period 2: Mid to Late Roman (AD 50-400; Figs 6 and 8)

5.8 Roman remains were sparse, with only a single feature, a grave, having been securely dated to this period. A Roman presence on or near the site is also indicated by a small assemblage (60 sherds) of Roman pottery, most or all residual within later deposits (see Fig. 6 for the density distribution of Roman pottery). Closely datable sherds include Oxfordshire red-slipped ware and shell-tempered ware dating to after AD 270/300. Several ditches may also have been Roman, but this is very uncertain, and medieval dating for these is just as possible.

#### Grave 6399

Grave 6399 was found close to the eastern edge of Area B (Fig. 6). It was a shallow north/south-aligned cut, 1.95m long, 1m wide and 0.15m deep which contained the very poorly preserved remains of a single individual, SK6400, tentatively identified as an adult male (Fig. 8). This individual had been laid out in an extended supine position, aligned north/south, with the head to the south, and was not accompanied by grave goods. Radiocarbon dating of the right femur (recalibrated since the production of the PXA, CA 2019b) produced a determination of cal. AD 130–320 (SUERC-88058; 95.4% probability), a range within the Mid to Late Roman period. The poor bone preservation meant that further details of this individual, such as any pathological traits, were not recoverable. The grave had been backfilled with silty

clay from which samples yielded a few small and unidentifiable bone fragments as well as a few snail shells indicative of open country conditions.

#### Droveway A

5.10 Immediately west of grave 6399 was a north/south aligned ditch, B30, re-cut by Ditch B29. These were parallel to a further ditch, B38, and together they may have flanked a droveway (Droveway A). A continuation of this to the south into Area A was recorded as Ditches A1 and A2/A4. Of these, Ditches A2 and A4 were aligned on the possible prehistoric ring-ditch, with the gap between them respecting the ringditch itself which presumably remained as a visible earthwork when the droveway was laid out. Overall, this droveway was 20m wide, narrowing to the north. However, the date of the droveway is uncertain. Stratigraphically, Ditches B29, B30 and B38 were earlier than medieval-dated ditches in that area, but of all the droveway ditches, only Ditch B29 produced pottery, this comprising a small late prehistoric sherd, five abraded sherds of Roman Severn valley ware, and a small and abraded medieval sherd. The five Roman sherds came from a single sondage, but the ditch was very shallow, generally no more than 0.2m deep, and so it is unclear whether the prehistoric, Roman or medieval pottery should be taken as dating the ditch and therefore the droveway. However, on balance, the paucity of medieval pottery from these features, when contrasted to the generally ubiquitous presence of such material across the site, perhaps favours a pre-medieval date. It is worth noting that this droveway lead north towards the extensive enclosures recorded at Hunt's Grove (see archaeological background, above). Whilst not specifically correlating to a feature within that site, the droveway may therefore have formed part of the wider landscape of that enclosure system.

#### Period 3: earlier medieval (c. AD 1000–1150/1200; Figs 9–19)

5.11 Medieval remains were found across the site, but with a focus likely relating to settlement within the north-eastern part of Area A, with enclosures south and north of this and further enclosures within Area B. Between was a largely open area and a trackway. Dating for this period rests on radiocarbon dates and on the presence of pottery which consists almost exclusively of the locally made fabric, Gloucester TF41B (hereafter TF41B), datable to the mid 11th to mid/late 12th centuries (see Appendix C for a fuller discussion about the date of this pottery type). The origin date for this ceramic type is uncertain, although it lies within the 11th century, but pre-Conquest forms are present within the TF41B assemblage from the site whilst possible pre-Conquest origins for the settlement are also suggested by the presence

of a Late Saxon ceramic lamp fragment. This ceramic dating is supported by four statistically consistent radiocarbon determinations on short-lived charred plant material from the ditch fills of four separate enclosures (Appendix S: BRAMS-4282 to 4285). These determinations are cal AD 1031–1159 (BRAMS-4282), cal AD 1021– 1157 (BRAMS-4283), cal AD 1021–1158 (BRAMS-4284), and cal. AD 996–1157 (BRAMS-4285). When placed in a simple phased model the results (shown in italics for modelled results) suggest that activity started in 1068 to 1118 cal AD (45% at 68% probability: modelled as start early medieval period 3 activity) and ended, mostly likely, between 1102 to 1164 cal AD (modelled as end early medieval period 3 activity). It is likely that this activity took place within a century (modelled as span early Medieval period 3 activity - up to 100 years at 95% probability). However, it should be noted that this statistical model is based on only four samples and should be taken alongside the evidence for pre-Conquest origins in the form of the Late Saxon ceramics and those dates which extend back to the pre-Conquest period. Further evidence that the settlement may have pre-Conquest origins comes from its dispersed nature and from Saxon place names likely to relate to other such sites within Haresfield; this evidence is presented in Appendix T and the date and duration of the settlement is considered more fully in the Discussion section.

- 5.12 Further refinement of the medieval sequence is based on stratigraphic and spatial relationships between the medieval features and has allowed the medieval remains to be sub-divided into three phases (3.1–3.3), all of which seem to represent an organic and continuous development of the medieval settlement until its abandonment, probably *c.* 1150/60, but perhaps as late as *c.* 1200.
- 5.13 In addition to the pottery, the medieval features produced iron working debris. No hammerscale was identified, which would be diagnostic of a smithy location, and the quantity of debris is small.
- 5.14 The medieval features produced only a small assemblage of animal bone, mostly from larger and older animals, with no micro-mammals, amphibians or fish represented. In part, this reflects the local soil conditions, which are not conducive to the good preservation of unburnt bone, and where bone did survive, it was in poor condition, restricting analysis. Isotope analysis was considered but no suitable bone survived. A few burnt animal bones were also found. The majority of the bones by count were from cattle, with sheep/goat bones present in smaller quantities, along

with a few from equid (horse, donkey, or mule) and pig. A single unworked antler fragment was also found.

#### Period 3.1

5.15 Medieval occupation began with the creation of an enclosure (Enclosure A), which likely contained a dwelling and was the focus of activity with the site, remaining in use throughout Period 3 as a farm (Fig. 9). Beyond the enclosure were further enclosures and trackways, a pattern that persisted, with modifications, throughout the life of this farmstead.

#### Enclosure A

- 5.16 Enclosure A was situated near the highest point of the site, with the ground falling away very slightly to the east, south and west. It was defined by Ditch A22, which bounded the northern, eastern and south-eastern sides of a small rectilinear enclosure, 45m wide and 40m deep; the southern and western sides of this enclosure may have been open during this period, but were certainly enclosed by ditches by Period 3.3 and it is possible that this enclosure was fully bounded during Periods 3.1 and 3.2, either by ditches that were entirely truncated in Period 3.3, or by boundaries which have left no trace (such as hedges or hurdles). Equally, however, the 'enclosure' might have been open to the south and west during its early iterations. An internal ditch, A30, created a square sub-enclosure (A1) within the south-eastern part of Enclosure A, this measuring 22m by 20m and accessed from the south-west through a 9m-wide entrance defined by distinct ditch terminals. The possibility that Ditch A30 was instead late prehistoric, or had late prehistoric origins, has been raised above. Although no structural remains were found, the shape and size of Sub-enclosure A1 allow the possibility that it enclosed a dwelling.
- 5.17 The enclosure ditches were substantial and probably long-lived, the latter suggested by the site phasing which indicates use throughout Period 3, a duration estimated as being up to 100 years but perhaps as long as *c*. 150–200 years. Ditch A22 was a moderate to steep-sided cut 0.75m–2m wide, and was 0.95m deep along its southern extent (Fig. 10), shallowing to a depth of 0.5m–0.7m along its eastern and northern extents. No re-cuts were evident, but the likely duration of this enclosure ditch, taken with the low-lying situation of the site, means that it must have been cleaned out fairly regularly, and so its fills likely date to towards its end of use and may well reflect deliberate slighting of accompanying banks, whilst a blueish tinge to the fills suggests that the lower parts at least became waterlogged at times.

5.18 The Enclosure A ditches produced relatively large quantities of animal bone when compared to the rest of the site, although the pottery densities were focused away from this enclosure (further discussion of this, linked to finds distribution plans is presented after Period 3.3, below). Also of note are five fragments of fired clay from the northern terminal to the entrance to Sub-enclosure A1, and a further four fragments of fired clay from the north-western corner of the sub-enclosure. Although none of these fragments are diagnostic as to function, possibilities include that they were parts of former oven structures, or were clays that had become scorched around hearth edges, or that they were from the wattle and daub walls of a former building.

#### Trackways and enclosures

# Trackway A

5.19 The northern extent of Ditch A22 continued westwards to form the southern side of a 7m-wide trackway (Trackway A) running east/west along the northern side of Enclosure A. The northern side of Trackway A was defined by a further ditch, A77; although much of this had been removed by later ditches, the trackway continued in use throughout Period 3, and its alignment was clear from surviving remains attributable to Periods 3.2 and 3.3. The trackway ditches were broad, shallow and fairly irregular cuts, varying from 0.7m to 2.5m wide and 0.15m to 0.4m deep. Some of this variation may reflect periodic efforts to clean the ditches out, although no recuts were evident. Their homogenous silty clay fills produced a few flecks of charcoal and sherds of medieval pottery.

#### Enclosure C

- 5.20 Ditch A77, which formed the northern side of Trackway A, turned at its westernmost extent to run northwards as Ditch A79 before terminating to form the southern edge of the east-facing entrance to another enclosure (C). Enclosure C, an ovoid space, was defined by intermittent ditches (Ditches A9, A10, A11, A16 and A64) defining an area 37m by 30m in extent and perhaps open to the south or fronting Trackway A. The eastern side of the enclosure seems to have been accessed via a 2.5m-wide funnel-shaped entrance defined by an inwards turn of Ditch A64 and a corresponding inwards turn at the northern extent of Ditch A79.
- 5.21 The ditches defining Enclosure C were broad, shallow cuts, 0.7m to 1m wide but no more than 0.2m deep, and often as shallow as 0.05m; it may be that in their original

form they were more extensive, but it seems likely that their primary purpose was to act as quarries for banks or hedge-banks. They contained silty clay natural infills which produced small quantities of medieval pottery, whilst a sample from upper fill 3489 of Ditch A64 produced charred remains of free-threshing wheat, mostly grains, with some chaff also present. The same sample also yielded a few charred celtic bean seeds and charred hazelnut shells, along with charred seeds of weeds associated with grassy environments. A charred celtic bean from this assemblage produced a radiocarbon determination of cal. AD 1021–1157 (BRAMS-4283 at 95% probability).

#### Enclosure J

5.22 Immediately east of Enclosure C, a large rectilinear field or enclosure (Enclosure J) is suggested, its southern side resting on Trackway A, its south-eastern corner defined by Ditch A80, and its western side by Ditches A79 and A13. Much of Ditch A80 may have been lost to truncation by ridge and furrow cultivation: this short ditch segment was unexcavated but in plan appears to fade out to the north, rather than terminating formally.

#### Enclosure E

5.23 South of Enclosure A was an open area extending southwards for some 45m as far as another enclosure, Enclosure E. Enclosure E was only partially exposed along the site's southern edge but would seem to have been a second ovoid enclosure, probably some 35m by 25m in extent. It was defined by Ditches A50, A51 and A58, with a gap between Ditches A50 and A51 forming a funnel-shaped east-facing entrance. The importance of this entrance is suggested by successive re-cutting of Ditch A51 where it defined the northern part of the entrance.

#### Enclosure I

West of Enclosure A was a further open area, beyond which, within Area B, ditches along the western edge of the site defined a further enclosure (Enclosure I). This enclosure survived only intermittently, having been truncated by later features, and its status as an enclosure is by no means certain. Ditch B15 bounded the putative enclosure's western edge and included a return at its northernmost extent suggesting that there may have been a continuation towards the eastern boundary of the enclosure, perhaps lost to truncation. The enclosure's eastern side was bounded by Ditch B19, which curved to form the south-eastern edge of the enclosure and likely continued to form its southern edge, although this had been lost to later ditch cutting.

Overall, a D-shaped enclosure some 40m by 40m in extent is suggested, perhaps with entrances along the south-western and/or northern/north-eastern perimeter. Both enclosure ditches produced medieval pottery, and further medieval pottery came from two short intercutting ditches within the enclosure (B16 and B17), although it is not apparent whether or not these were contemporary with the enclosure or belonged to one of the later phases of medieval occupation. Ditch B13, exposed along the western edge of the excavation, also contained medieval pottery and was parallel to the western edge of Enclosure I. Its limited exposure restricts interpretation, but it may have flanked the western side of a trackway (Trackway B) running north-east/south-west alongside Enclosure I.

#### Period 3.2

5.25 Period 3.2 saw the maintenance by re-cutting of the domestic enclosure (Enclosure A), as well as modifications to, or replacement of, the surrounding enclosures (Fig. 11).

#### Enclosure A

5.26 Enclosure A and Sub-enclosure A1 were both retained into this period, with the ditches likely having been cleaned out. This wasn't directly evidenced in the stratigraphical record, but such longevity is implied by the sequence of re-cutting and developments north of Enclosure A, described below, and its extension and continued use in Period 3.3. As above, it is unclear whether Enclosure A really was an enclosed area as it was in Period 3.3, or whether Sub-enclosure A1 lay within an otherwise partially open part of the farmstead.

#### Trackway A

5.27 Trackway A was maintained through Period 3.2, its southern ditch having been kept open as part of Enclosure A, whilst its northern edge was defined by a new ditch, A78. Ditch A78 had been largely re-cut along its length in Period 3.3, but was a fairly substantial, steep-sided cut, up to 1.2m wide and 0.55m deep where it survived to its full width. It contained a single homogenous silty clay fill which probably formed naturally, with no evidence for deliberate infilling, although relatively large quantities of finds were recovered, with the fills overall having yielded 77 sherds of medieval pottery, along with a residual Roman sherd. There was no corresponding southern boundary to the westward extension of Trackway A. It is worth noting that had such a boundary existed and was as deep as Ditch A78, it is unlikely to have been entirely truncated, suggesting that the trackway opened into the open space to the south,

Ditch A78 perhaps having formed a boundary to this along which livestock could be driven.

#### Enclosure B

- 5.28 Enclosures C and J were abandoned during this period, and replaced by a long, narrow rectilinear enclosure (B) which ran along the northern edge of Trackway A. Enclosure B was 112m long and 20m wide, its southern edge defined by trackway Ditch A78, its northern side by Ditch A8 and its north-eastern corner by Ditch A70. A gap between the Ditch A70 and Ditch A8 may have been an entrance along the enclosure's northern side, whilst its western side tapered towards Trackway A. A 6m-wide entrance at the enclosure's south-eastern corner was later blocked by the insertion of Ditches A18 and A20, the latter continuing the alignment of the trackway, although it is possible that access to the enclosure remained possible, west of Ditch A20.
- 5.29 The ditches themselves were reasonably substantial cuts with u-shaped profiles, often up to 1m wide and 0.5m deep, although this varied widely, and narrower, shallower sections were also present, this variability perhaps arising from ditch cleaning, or indicating that the boundaries were primarily banks or hedge-banks for which the ditches acted as quarries. They contained homogenous sandy clay/silty clay fills which seem to reflect natural infilling; mottling and manganese flecking noted within many of the fills may indicate episodic waterlogging, although this was not tested by geoarchaeological analysis. The fills collectively produced 248 sherds of medieval pottery, with Enclosure B having been one of the foci of medieval pottery sherds found across the site (see below and Fig. 6). However, only 31 fragments of animal bone came from the ditch fills, whilst samples from the fills yielded no charred remains suggestive of debris from domestic hearths.

#### Enclosure F

5.30 South of Enclosure A, Period 3.1 Enclosure E was replaced by a larger enclosure (F). This was only partially exposed along the edge of the excavation where it was defined by Ditch A40/A41 which had been re-cut on at least two occasions. As with Enclosure B, the ditches of Enclosure F produced a large assemblage of medieval pottery, but only small quantities of animal bone, although there was a localised dump of charred plant remains (described below). In addition, Ditch A40 yielded a worked bone scoop, possibly fashioned from a cattle ulna. A sample from fill 4066 of Ditch A40 was dominated by charred free-threshing wheat grains, a few identifiable

as bread wheat. There was also charred cereal chaff, hazelnut shells, seeds of celtic bean/pea, and oats, the latter possibly a cultivated variety. Alongside these were charred weed seeds from species associated with grassland, bushy areas and hedgerows. Free-threshing wheat grains from this deposit produced a radiocarbon date of cal. AD 1021–1158 (BRAMS-4284 at 95% probability).

#### Ditches east of Enclosure A

5.31 Several intercutting ditches were partially exposed at the eastern edge of the site.

Their limited exposure restricts interpretation, but of note is curvilinear Ditch A36 which may have defined a small enclosure or perhaps surrounded a structure of which no physical traces were found.

#### Enclosure H

Period 3.1 Enclosure I within Area B was abandoned during Period 3.2 and was replaced by larger enclosures to the north and south (Enclosures K and H respectively), with an open area between these. Enclosure H was partially exposed at the site's south-western corner and had been modified on several occasions into Period 3.3. In its earliest form, only its eastern boundary survived, defined by intermittent Ditches B4—B8. Gaps between these might reflect truncation, or their primary function as quarry ditches for hedge-banks, but an east-facing entrance may also have been present. Overall, the enclosure was at least 50m wide and 85m deep, its southernmost recorded extent being a ditch revealed within trench 3 of the evaluation. Three parallel ditches were present within the enclosure, at least two of which (Ditches B2 and B3) were, on stratigraphic grounds, contemporary with this early manifestation of the enclosure. The third (Ditch B1) lacked stratigraphic relationships with other ditches and is of uncertain phasing, although it produced medieval pottery and likely relates to one or another phase of Enclosure H.

#### Enclosure K

5.33 Enclosure K was located north of Enclosure H, and was stratigraphically later than Period 3.1 Enclosure I, which had now been abandoned. As part of this process, the ditches defining Enclosure I were levelled. Although much of this infilling may have occurred through natural processes, at least one instance of deliberate backfilling was recorded which comprised a substantial dump of pottery, limestones and charcoal along part of Ditch B19 of Enclosure I (Figs 12 and 13). This was recorded in the field as having been within a distinct re-cut (B41 on Fig. 11) but is perhaps more convincingly seen as a localised area of backfilling along some 4m length of

Ditch B19 and to a thickness of 0.2m–0.3m. Approximately 50% of this fill was excavated, producing 724 sherds (7.1kg) of TF41B pottery, accounting for 15% of the entire assemblage of this type from the site. Detailed analysis of this pottery (presented in Appendix C) indicates that it consisted mostly or wholly of waste from a pottery kiln, this suggested by the presence of wasters, sherds with patchy surface colouring, and by the lack of the burnt food and soot residues that would be expected had the pottery been used for cooking on a fire. A dump of limestone within the same fill may represent material originally intended for use as temper but which proved surplus to requirements. Samples from the same deposit produced moderately large quantities of charcoal fragments, mainly oak, and a small number of cereal grains which, where identifiable, were from free-threshing wheat, along with charred seeds from celtic bean/pea, brassica, oats and vetch/wild pea. A radiocarbon determination of cal. AD 996–1157 (BRAMS-4285 at 95% probability) was obtained from charred grains from this deposit.

- 5.34 Enclosure K was partially exposed at the site's north-western corner and was defined to the south by curvilinear Ditch B23 which extended from the western site limit before terminating. Ditch B25 along the southern part of the enclosure edge turned to run south-eastwards to provide access from the south-east, probably from Trackway A. North of this, curvilinear Ditch B36 defined the northern side of the enclosure entrance, continuing north to form the enclosure's eastern edge; as with Ditch B25, a return to the south-east from the entrance may have linked to Trackway A. The enclosure's northernmost extent lay beyond the excavation limit but overall, an ovoid enclosure at least 90m by 90m in extent is indicated by the ditches. There was evidence for modification of the entrance, which was made narrower by the insertion of a short ditch segment (Ditch B32) which turned inwards.
- 5.35 Ditch B34 was the only feature found within Enclosure K; its function is uncertain, but it may have been to separate out livestock entering the enclosure from Trackway A, in which case suggesting that the enclosure contained sub-enclosures such as pens or corrals, surrounded by boundaries which have left no trace, most likely hurdle fences.
- 5.36 As with the other medieval ditches on site, those of Enclosure K varied in size, here from 0.4m to 1.3m wide, but were nowhere greater than 0.4m deep and were thus presumably accompanied by banks and/or hedges. Their fills were homogenous silty clays which produced moderate quantities of medieval pottery, along with small

assemblages of animal bone. Ditch B25 contained a fragment of worked limestone up to 90mm across but of uncertain function (Appendix I).

#### Period 3.3

5.37 The medieval settlement continued into Period 3.3 (Fig. 14). The TF41B pottery which characterises the site was produced until *c*. 1200 (see Appendix C), and, with the absence of later material from these ditches, abandonment no later than the end of the 12th century and perhaps, based on the radiocarbon dates, no later than the middle of the 12th century, seems likely. The overall character of the settlement remained the same, with a central enclosure (A) likely for the home farm, and now fully enclosed, lying within a network of larger enclosures, open areas and trackways. Evidence for pottery production, in the form of wasters and unused sherds, also came from features of this date, with several deposits large enough to suggest that this waste production material belonged to this phase of occupation, rather than being residual.

#### Enclosure A

- 5.38 Enclosure A continued in use until the abandonment of this medieval settlement, reaching its most extensive form during this phase. Ditch A22, which marked the eastern end of the enclosure, was extended westwards by the digging of Ditches A23, A24 and A25, creating a rectangular enclosure 75m long and 45m deep. A gap between Ditches A24 and A25 provided a 3.5m-wide west-facing entrance. These ditches were all fairly shallow with gently sloping profiles, standing in contrast to the substantial ditches (Ditches A22 and A30) forming the earlier phases of the enclosure, and they were presumably quarry ditches for an associated bank or hedge-bank.
- Sub-enclosure A1 also remained in use, and a ditch (A28) was added to its western side, creating a small yard or back plot in the north-eastern corner of Enclosure A. West of this, Enclosure A was devoid of features, but a later modification saw the creation of a further sub-enclosure (Sub-enclosure A2) along its northern side. This new sub-enclosure, defined by Ditches A26 and A27, was 15m by 14m in extent and was open to the south, with a 5m-wide entrance along its eastern perimeter. No structural remains were present, but its size and shape allows for this enclosure to have contained a building of which no traces have survived. The fills of the ditches defining this sub-enclosure produced a sherd of medieval pottery, a relatively large assemblage (102 fragments) of animal bone and six pieces of fired clay, the latter

undiagnostic as to function. The ditches otherwise contained silty clay infills which rarely included charcoal flecks.

#### Trackway A

North of Enclosure B, Trackway A was re-aligned slightly to the north to traverse across former Enclosure B, which was now disused. This re-alignment of the trackway ran across much of the site, its easternmost recorded extent perhaps indicated by Ditch A35 which extended beyond the eastern limit of excavation; east of here, Haresfield Lane was probably extant during the medieval period (Appendix T) and the trackway likely connected with this. From there, the trackway ran westwards past the northern edge of Enclosure A before following a more northwesterly course to Enclosure K, which had been retained from Period 3.2 (see below).

### Enclosures G and D

- 5.41 South of Enclosure A, Period 3.2 Enclosure F was superseded by Enclosure D. This was defined by an intermittent ditch (A39, A65, A66, A67, A54) enclosing a rectilinear area 170m wide and extending beyond the southern limit of excavation. This arrangement was modified by re-cutting along the western extent of the enclosure ditch, with this re-cut turning to run south, thereby creating a sub-enclosure (Enclosure G), partially exposed at the north-western corner of Enclosure D.
- A sample from fill 3150, the only fill of Ditch A66, contained charred free-threshing wheat grains, along with smaller quantities of cereal chaff and a few charred hazelnut shells, sloe stones, seeds of celtic bean/pea and brassica, and some oats, the latter possibly a cultivated variety. Along with these were charred seeds from weeds associated with grassland, field margins and arable environments, including some (curled docks) which reflect damper areas, such as field boundary ditches. Charred free-threshing wheat grains from this deposit were radiocarbon dated to cal. AD 1031–1159 (BRAMS-4282 at 95% probability).
- 5.43 Several pits were found in this area; all lacked finds but may have been medieval based on their location within the enclosures. Amongst these, pit 3753 was cut through Period 3.2 ditch A40 and would seem more certainly to belong to Period 3.3. A substantial steep-sided cut, with a flat base, this pit was 1.8m wide and 0.75m deep. It contained a sequence of fills and is of uncertain function. Its upper fill (3757), a charcoal-rich backfill, produced a moderate assemblage of charred cereal remains,

dominated by free-threshing wheat grains, along with cereal chaff and a few charred celtic bean/pea seeds, oats and hazelnut shells. The same deposit contained a few eggshell fragments and a disc made from old red sandstone; this had traces of burning and was perhaps a pot lid.

#### Enclosure H

5.44 Within the western part of the site, Enclosure H was maintained into Period 3.3. Its perimeter ditch was re-cut and extended eastwards (Ditches B9 and B10), enlarging the enclosure. An entrance along the eastern edge of this extension paralleled that via which the enclosure was accessed in Period 3.2.

#### Enclosure K

5.45 Enclosure K saw re-cutting along its perimeter ditch whilst Ditch B33 was added to continue the alignment of Trackway A into the enclosure's interior, suggesting that, as was probably the case in period 3.2, the enclosure was sub-divided into areas used for different livestock groups.

#### Period 3 Finds distributions

5.46 Figures 15 to 19 illustrate the distributions of pottery and animal bone by count and weight, and of fired clay by count. These plans show a clear trend, with the fired clay (albeit limited to a small assemblage) and animal bone concentrated within the ditches of Enclosure A. In contrast, the medieval pottery shows a marked distribution away from Enclosure A, clustering instead within the ditches of Enclosure B to the north and Enclosures D–G to the south, and with further notable concentrations within Enclosures H, I and K to the west. The possible significance of this is presented within the Discussion section, below.

# Period 4: later medieval (AD 1150/1200-1500; Figs 20-25)

5.47 Pottery post-dating *c*. AD 1200 was almost entirely absent from the Period 3 farmstead and abandonment no later than that time seems likely, and perhaps, based on the radiocarbon determinations, as early as the early to mid 12th century. The deep ditch (A22) forming the eastern end of Enclosure A had probably been kept open throughout Period 3, but there was evidence for deliberate backfilling after a period of natural infilling, and this probably dates to the abandonment of the farmstead.

#### Ring-ditch B

- Within the southern part of the site, the Period 3 enclosures were overlain by a large ring-ditch, Ring-ditch B, which truncated the ditches of medieval Enclosures F and D (Fig. 20). Ring-ditch B was initially identified as a crop mark on aerial photographs examined during the production of the heritage assessment (Fig. 5). Its presence was further indicated during the geophysical survey, and was confirmed during the evaluation, during which it was examined within evaluation trench 16 (Fig. 2). Subsequent excavation revealed the full inner edge of the ditch circuit, although the outer edge along the southern site boundary was not exposed due to the presence of a hedgerow (Figs 20–22). The enclosed area was hand-cleaned and the ditch itself was examined by the machine and hand excavation of eight sondages (see Section 4 *Methodology*, above). Hand-cleaning of the area enclosed by the ring-ditch revealed only post-medieval or modern features (see Period 5).
- 5.49 The ring-ditch comprised a full circuit with no entrance gaps, enclosing an area 31m in diameter. The ditch itself was substantial, being up to 5m wide and 2m deep, and had an asymmetrical profile, with a steep inner edge and a more moderate outer edge (Fig. 23). Along much of its length, the inner ditch edge had been under-cut by water action. The ditch contained between five and seven silty clay fills, most of which could be traced around much of its length (Figs 24 and 25). Aside from the pottery, considered below, the only artefacts to come from the ditch were a single iron carpentry nail and a spindle whorl fashioned from a pottery sherd.
- 5.50 Monolith and bulk samples taken from the ditch fills allowed the recovery of waterlogged plant remains, including pollen (Appendices N and Q), and molluscs (Appendix P), as well as allowing for a geoarchaeological assessment (Appendix M) of the fill deposits themselves. The fill sequence within sondage 4010/4014 (Fig. 23) described below is broadly representative of the fills throughout the ring-ditch circuit.
- 5.51 The geoarchaeological assessment confirmed that the ditch was cut into the solid geology. The basal fill, 4015, had formed by natural erosion of the ditch edges soon after the ditch was cut, with silty clays from the clay geology through which the ditch was cut settling into the ditch base, probably within standing water, to a depth of 0.2m. Pollen samples (Appendix Q) from this lower fill were made up of over 50% of tree pollen, mostly oak, with lesser quantities of hazel. Other tree species represented included elm, beech, birch, alder and ivy. These are considered (Appendices Q and R) to reflect the surrounding tree cover around the time the ditch was created, and so provide an indicator of the vegetation during the latter part at

least of Period 3. Other pollen came from species such as meadowsweet and lesser clubmoss which would have grown within and alongside the damp ditch. Grass pollen accounted for only 20% of the assemblage, and included small quantities of cereal pollen, although whether this came from nearby fields or from harvested crops being processed within the site but grown elsewhere is not apparent. Fill 4015 was separated from the overlying fill, 4016, by a diffuse boundary, suggesting that the ditch continued to be infilled by siltation within standing water.

- 5.52 Fill 4016 comprised mottled silty clay, 0.45m thick. It contained numerous mollusc shells dominated by Bithynia tentaculata and Bithynia sp., species favouring moving water. More specifically, Bithynia tentaculata favour large bodies of slow-moving, well-oxygenated hard water, particularly muddy bottomed, well-vegetated areas. Overall, the mollusc assemblage from fill 4016 suggests that the ditch at this level was permanently water filled and well oxygenated, creating a well-vegetated and muddy environment. These findings are compatible with the presence of root channels within the fill which indicate the growth of vegetation within the ditch at this level, with plants colonising both the ditch edges and base. Waterlogged plant remains from the fill reveal some of the species growing within and alongside the ditch, the former having decayed where they grew, the latter having tumbled into the ditch once dead. Amongst these, clustered dock, welted thistle, marsh thistle, spiked sedge, and glaucous sedge would have favoured damp grassy areas within or alongside the ditch edge, whilst common water-crowfoot and stonewort would have thrived in the wet environment within the ditch itself. Brambles, docks and bristly oxtongue show that rough grassland, waste ground or scrub was present alongside the ditch. There were also the waterlogged remains of downy birch, a species which prefers wetter soil and which here would suggest at least one birch tree growing alongside the ditch into which it shed twigs and leaves.
- 5.53 Pollen from fill 4016 showed a clear change from that within the underlying fill, with the woodland component reduced from over 50% to some 10–20%, although with a similar mix of species, along with some willow. This reduction would have been contemporary with the early years of the ring-ditch. In contrast, grass pollen showed an increase to around 50% of the assemblage, including an element of cereal pollen. There were also species associated with disturbed, nitrogen-enriched ground, such as dandelion and chicory, and these may reflect grazing in the immediate environs of the ring-ditch. Bracken was also represented, and this could have been a useful source of both fuel (for kindling or to generate rapid heat) and flooring.

- Above fill 4016 was a further mottled clay deposit, 4017 (which equates to fill 4011 but was excavated at a step in the section). Again, a diffuse boundary between fills 4016 and 4017 suggests that deposition continued to occur within ditch levels that were at least intermittently water filled. Mollusc species from fills 4017 and 4011 continued to include those of moving water, as with the underlying fill, whilst the pollen assemblage from fill 4017 was similar to that from fill 4016, being rich in grass pollen. Fill 4011 also included a few shells from *Acroloxus lacustris*, a limpet which attaches itself to aquatic vegetation, typically within still or slow-moving bodies of water. Again, these molluscs indicate that the ditch was filled with water at this level, with aquatic vegetation colonising the ditch edges and base, whilst the ditch continued to silt up gradually. These lower deposits together filled the ditch to a depth of 1.2m, leaving the uppermost 0.6m or so of the ditch open.
- 5.55 The geoarchaeological analysis of the uppermost fills, silty clays 4012 and 4013, showed a continuation of the slow deposition of sediments within the ditch, again with at least episodic waterlogging. The mollusc assemblage from the upper part of fill 4012 was markedly different to those from the underlying ditch fills, comprising a wider range of taxa, mostly amphibious species including *Anisus leucostoma*, a snail typical of swampy pools and ditches, especially those drying up in the summer. This suggests that much of the ditch had silted up and dried out, only becoming damp during wetter weather.
- The dating evidence provided by the pottery for the construction and duration of 5.56 Ring-ditch B is discussed in detail in Appendix C. TF41B pottery came from all of the excavated sections where pottery was found, both in earlier and later fills, and a crucial question is whether or not this material was residual. Ring-ditch sondage 4008 produced twelve large, unabraded sherds (189g) from a Minety Ware jug, some of which joined. These seem to have been a primary deposit, in contrast to the three small sherds (7g) of TF41B from the same sondage, which are likely residual. The Minety jug probably entered the ditch fill when the ring-ditch was in use and is datable to c. 1250–1350. Sherds from a similar jug came from ring-ditch sondage 4020, here found alongside further TF41B sherds which, again, must be residual. Ring-ditch section 4018 produced a spindle whorl made from a re-used Brill Boarstall sherd datable to the 13th to 14th centuries whilst also containing heavily leached residual TF41B sherds. The latest pottery from the ring-ditch was Malvernian pottery TF52 recovered from several of the ring-ditch fills and which dates to the 15th to 16th centuries. To this ceramic evidence can be added two radiocarbon determinations,

both obtained on waterlogged plant remains from the second fill of the ring-ditch, one of cal. AD 1309–1416 (BRAMS-4287), the other later at cal. AD 1429–1491 (BRAMS-4286), both at 95% probability. Excluding the TF41B pottery, the earliest evidence for use of the ring-ditch is therefore for c. 1250/1300; if the TF41B sherds include at least some that were not residual, that would extend the origin date for the ring-ditch beyond c. AD 1200. Use into the 15th century is indicated, with nothing to suggest activity beyond c. 1500, although the partially filled ring-ditch persisted as an earthwork into the mid 20th century.

#### **Furrows**

The remains of east/west-aligned plough furrows relating to ridge and furrow cultivation were seen intermittently across parts of Area A. These were poorly preserved but correspond to those seen on aerial photographs which have the sinuous shape characteristic of medieval ridge and furrow cultivation. They are visible on the aerial photograph of 1947, although the resolution means that their relationship with Ring-ditch B is very uncertain (Fig. 5). Further sinuous east/west aligned furrows were seen along the western side of Area B and these also correspond with earthworks visible on the 1947 aerial photograph. Ridge and furrow cultivation remains are visible on aerial photographs dating to the 1960s, but these earthworks had subsequently been levelled by modern ploughing and they are not visible on later aerial photographs.

# Period 5: post-medieval to modern (AD 1500 to present; Fig. 26)

- 5.58 Within the north-eastern part of Area B, further north-west/south-east aligned furrows were found. These were the best preserved on site, and their long, straight orientation and close spacing are indicative of post-medieval steam ploughing. To the west of these was a gap of some 20m, beyond which were further closely spaced straight furrows set at right angles to those to the east. The space between these two groups of furrows was presumably a headland or trackway, the line of which was later preserved by Ditches B20 and B28 (see below).
- 5.59 The westernmost furrows within Area B described above were truncated by Ditch B11. This corresponds to a boundary depicted on an 1813 Estate Map of properties belonging to Daniel Niblett (illustrated in Appendix T), where it is shown as marking the easternmost limit of a series of four small fields, with a trackway running alongside the northern edge of these opening into a large rectilinear field to the east, within excavation Area A. The four small fields west of Ditch B11 include three

broadly north/south aligned boundaries, all of which are of sinuous plan, suggesting that they preserve the shape and alignments of medieval furrows. The trackway, partly defined by the northern extent of Ditch B11, is shown on the 1813 map (illustrated in Appendix T) as having extended westwards to join with the road to Gloucester.

- 5.60 Re-cutting and a partial re-alignment of Ditch B11 was subsequently undertaken, with Ditch B18 re-cutting the southern part of the ditch, turning westwards to re-align the northern boundary of the field slightly further north. This is apparent on the 1831 (Viewed Know Place Enclosure Map on your https://maps.bristol.gov.uk/kyp/?edition=glos) which shows this re-aligned ditch and also shows that the trackway leading to the Gloucester road was no longer extant. Further developments are shown on the 1856 Map of the Parish of Haresfield. By that time, a further ditch had been added, extending the north-west/south-east alignment of Ditch B18 further north-westwards beyond the site limit; this extension was identified within the site as Ditch B20. To the east, parallel ditch B28 was likely a later addition since it is not shown on the 1856 map.
- A further ditch (A37), within Area A, dates to the 19th century. This was found along the southern site edge and defined a partially exposed rectilinear area. It is not depicted on the 1813 Estate Map (illustrated in Appendix T) but is shown on the 1831 Enclosure Map where it encloses a projecting part of a larger field to the east. By the time of the 1856 Map of Haresfield (illustrated in Appendix T), this projecting area had become entirely enclosed and is labelled as *Windmill Tump*. The field to the north, which extends from Ditch A37 northwards, and as far west as Ditch B18/B20 is labelled on the 1813 Estate Map as *Windmill Field*. Neither map shows a physical windmill standing at the time they were drawn up.
- 5.62 Cleaning across the interior of Ring-ditch B revealed a small dumped clay deposit, 3980 (not illustrated), some 2m across, above which was a further dumped deposit, 3979 (not illustrated). Both layers produced post-medieval to modern bricks and so post-date the use of the ring-ditch. In addition, layer 3980 produced a perforated stone disk, perhaps a roughout for a spindle whorl. The ring-ditch itself survived as an earthwork when these layers were dumped, and a 19th-century or later horseshoe and two fragments of post-medieval to modern brick came from one of the uppermost ditch fills. A possible iron buckle, also from an upper fill of the ring-ditch, is not closely datable. Pit 3982 within the same area contained further post-medieval bricks and

limestone blocks. Given the absence of any structure at this location on the historic mapping, it is unlikely that the bricks and stones relate to a structure that was standing into the later post-medieval to modern periods, although it is possible that a structure was present relatively late but had been demolished before the 1813 Estate Map (illustrated in Appendix T) was drafted. A second pit, 3987, was cut through the upper fills of the ring-ditch and is likely of 19th-century or later date.

## 6. THE FINDS

6.1 Finds recovered are listed in the table below. Details are to be found in Appendices B to J.

Туре	Category	Count	Weight (g)
Pottery	Prehistoric	26	66
	Roman	60	311
	Medieval	4555	43163
	Total	4641	43540
Flint	Worked	2	11
Fired clay		39	385
Ceramic building material		23	5487
Coins	Modern	1	13
Metalwork	Iron	6	259
	Copper alloy	3	19
Metalworking debris			826.7
Worked bone		3	10
Worked stone	Objects	4	251
	Architectural	1	515

# Prehistoric and Roman pottery

6.2 Pottery pre-dating the medieval period totals 26 prehistoric sherds (66g) and 60 sherds of Roman date (311g). One sherd of prehistoric pottery is Early to Middle Bronze Age and the remainder is of probable Iron Age date, including a rimsherd which accords with the Middle Iron Age Croft Ambrey-Bredon Hill style. The composition of the Roman pottery assemblage is typical for the area, mainly consisting of Severn Valley ware and greywares, with Southeast Dorset Blackburnished and Oxford Red-slipped ware included amongst the regional imports. All of the prehistoric pottery and most of the Roman pottery has been redeposited.

# Medieval and later pottery

An assemblage of 4555 sherds (43,163g) was recovered, the majority of which presents as oolitic limestone-tempered ware (Gloucester fabric code TF41B). This represents the largest excavated assemblage of this ware type. Vessel forms are mostly handmade jars/cooking pots, in particular straight-sided examples with club rims. Other forms include spouted pitchers and West Country dishes. Several of the pitchers feature stamped decoration, which is unusual in fabric TF41B. Single examples of a clay disc and a pedestal lamp were also recorded. The almost total lack of sooting and limescale deposits on the TF41B sherds indicates that they do not represent a typical domestic assemblage and many or most are likely instead to

be waster sherds from a kiln or kilns. Only a few sherds in other medieval wares were found, and there were also a few post-medieval and later sherds.

#### Worked flint

Two prehistoric worked flints (11g), a flake and a blade, were recorded as residual items in deposits assigned to Period 3 (medieval).

## Metal items

6.5 Metal items totalling ten (291g), four of copper alloy and six of iron, were retrieved from seven deposits. Included are two copper alloy buckles: one of medieval date and one of medieval/post-medieval date. The remaining items are an iron nail of uncertain date, a copper alloy coin and fitting, along with an iron horseshoe and four iron fragments all modern or of uncertain date.

## Worked bone

6.6 Two worked bone items (10g) were recorded from Period 3 (medieval) features. The example from Ditch A40 is a scoop; that from natural hollow fill 3182 is too fragmentary to allow classification.

# Ceramic building material (CBM)

6.7 A total of 23 fragments of CBM were recovered from five deposits. One possible fragment of Roman tile was retrieved from Period 2 (Roman) Ditch B11. The remaining CBM is post-medieval in date, mostly consisting of brick fragments.

## Fired clay

6.8 The fired/burnt clay totals 39 fragments (385g) from 20 deposits. It presents in sandy fabrics with secondary inclusions such as shell, ferrous material and clay pellets. None of the fragments display features which might indicate original function, although several have one or more external surfaces.

## Worked stone

6.9 A total of four worked stone items (251g) was recorded from three deposits. These comprise two sandstone discs and two fragments which are too small for classification. Stone discs are commonly found in medieval assemblages. A fragment of architectural oolitic limestone (515g) recovered from Period 3 Ditch B25 is too fragmentary to determine its original function.

# Metalworking debris

6.10 A small assemblage weighing 826.7g was retrieved from eleven deposits. Most is represented by smithing slag cakes and the remainder also probably derived from iron smithing. These residues are indicative of blacksmithing during the medieval period but on a small and/or intermittent scale.

# 7. THE BIOLOGICAL EVIDENCE

7.1 Biological evidence recovered is listed in the table below. Details are to be found in Appendices K to R.

Туре	Category	Count
Human bone	Inhumation burials	1
Animal bone	Fragments	600
Samples	Environmental	36
Monoliths	Sequences	1 (4 tins)
Pollen	Samples	9

## Human bone

7.2 A single individual (SK6400) was laid supine extended in grave 6399 in Area B. Despite the poor preservation, it was possible to determine that this was an adult, and most likely to have been male. The individual has been radiocarbon dated to the Roman period.

# Animal bone

7.3 Some 600 fragments of animal bone were recovered, largely from medieval features, of which approximately 140 could be identified to taxa. They are in very poor condition. Cattle were most commonly recorded, followed by sheep/goat, then equid, with a few pig bones also present.

#### **Monoliths**

7.4 Four monoliths were examined from Period 4 Ring-ditch B. Most likely the sediments recorded from this feature represent a slow, natural silting over a long period of time, with wind-blown sediments and those derived from the cut edges settling into the ditch, at least sometimes into standing water. Oxidation features also suggest the presence of standing water.

# Charred and waterlogged plant remains

7.5 The charred plant assemblages from five samples were analysed, along with a single waterlogged assemblage. Free-threshing wheat is predominant within the cereal remains in the Period 3 medieval assemblages, and these likely indicate domestic food preparation. Other potential food sources and crops include hazelnuts, sloes, brassicas, peas and beans, and possible cultivated oats. The charred weed seeds are generally those typical of grassland, field margins and arable environments, and are likely to have mainly been brought in with the crops. The waterlogged assemblage provides an indication of some rough grassland/waste ground/scrub and damper grass in the area of Period 4 Ring-ditch B.

#### Charcoal

The medieval Period 3 charcoal assemblages are dominated by oak (*Quercus*) timber fragments (mixed sapwood and heartwood), with smaller amounts of blackthorn/plum (*Prunus spinosa/domestica*) type, blackthorn/plum/cherry (*Prunus*) and hawthorn group (Pomoideae) fragments. The latter groups incorporate wild and cultivated species. In addition to hedgerow, scrub or woodland edge locations, the Period 3 charcoal may also include some derived from orchard trees.

### **Molluscs**

7.7 Samples from Period 4 Ring-ditch B included mollusc remains which indicate a generally permanently wet, well-oxygenated, well-vegetated muddy environment within the ring-ditch, one that became drier at times and as the ditch filled in. There is also a small indication from these assemblages of some damper/marshy grass in the immediate vicinity of the ditch, possibly directly alongside the ditch and on the ditch sides.

## Pollen

7.8 Pollen samples from Ring-ditch B show an initially wooded environment, with woodland reducing in the overlying deposits coinciding with increased local arable activity and ground disturbance. After local woodland clearance, the local area around the ditch was predominantly grassland with evidence for arable activity and some disturbed ground, possibly associated with grazing.

## 8. DISCUSSION

- 8.1 The updated objectives set out in the UPD (CA 2019b) were achieved. Excavation and subsequent analysis confirmed the results of the geophysical survey and field evaluation, that the remains of medieval enclosures and a medieval ring-ditch were present on the site. The excavation revealed additional evidence for small scale prehistoric and Roman activity, including a Roman burial, and, most significantly, provided evidence that the medieval enclosures were probably the location of at least one pottery kiln, this being one of the sources of the locally produced TF41B pottery, the kiln sites for which have previously escaped detection.
- The natural clay substrate was exposed throughout the site. The tendency of the site to hold standing water following heavy rainfall was readily apparent during the fieldwork as was the way in which open cuts began to erode and infill soon after excavation, especially during and after wet conditions. The excavation took place during winter months, but during the summer, the clay soils would have baked hard during any prolonged dry spells, and these are characteristics common across the Severn vale clays. The nature of the soils, and the flat vale topography, bisected by numerous small tributaries of the River Severn arising from springs along the Cotswold scarp to the east, will have influenced human land use from early prehistory through to the present day. The evidence for such land use recovered from the excavation at Quedgeley East is discussed below.

## **Prehistoric**

## **Flints**

8.3 Only two flints were recovered from the site, one a Mesolithic or Early Neolithic blade, the other a flake to which only broad early prehistoric dating can be applied. In the absence of knapping debris, these must be assumed to have been accidental losses from people traversing this part of the vale. The locality would have provided a range of resources, from the River Severn to the west, across its floodplain to the Cotswold hills to the east.

# Ring-ditch A

8.4 The date of Ring-ditch A is uncertain, given that it lacked finds and any material suitable for radiocarbon dating. The single sherd of Early to Middle Bronze Age pottery from the site had no association with this ring-ditch. Although it is possible that this was a medieval feature, perhaps having surrounded a small structure, the

shallow ditch seems inappropriate for drainage around a structure, whilst the absence of medieval pottery would be uncharacteristic (although not unparalleled) for a medieval feature on this site. There were no indications from the fill, in the form of charcoal or pottery wasters, that this was connected with medieval pottery production. Given these considerations, on balance Ring-ditch A is more likely to have been prehistoric, probably the remains of a Bronze Age round barrow. An alternative possibility, that this was a drainage or foundation trench of a former roundhouse, seems less likely, given the absence both of an entrance gap along the ditch and of any other early prehistoric settlement features.

8.5 Bronze Age round barrows are recorded above the vale on the Cotswold uplands to the east, including what may have been a small barrow cemetery at Haresfield (GHER 546, 696 and 3581), whilst upland round barrows are a familiar part of the wider Cotswold hills. Lowland barrows are far less common in the archaeological record, although examples are known, including within the Severn vale (Darvill 2011, fig. 65). This disparity may in part reflect later ploughing regimes, which will have removed more of the vale earthworks than is the case for the uplands, where sheep grazing is still common (ibid., 135). That Ring-ditch A may have been a round barrow might also be suggested by its relationship to the ditches of Droveway A, itself of possible Roman date: these seemed to respect the ring-ditch, and whilst this may be an illusion created by truncation of these shallow droveway ditches, an alternative possibility is that there was an upstanding barrow mound when the Roman ditches were laid out. This possibility is discussed further below, under the Roman section.

## Middle to Late Iron Age

An Iron Age presence on or near the site is indicated by the 25 sherds of handmade limestone-tempered and Palaeozoic limestone-tempered pottery. Amongst these is a rim sherd datable to the Middle Iron Age, and the assemblage as a whole spans the Middle to Late Iron Age. Most of the sherds came from ditches associated with medieval Enclosure A and seem to have been residual. However, the sherds were fairly unabraded, suggesting that they derive from activity nearby, and it is possible that Ditch A30, interpreted as part of medieval Enclosure A, was a late prehistoric feature re-used in the medieval period, or that the medieval ditches truncated one or more Iron Age features. If so, then given the lack of any other Iron Age remains on the site, these remains may represent outlying activity, albeit of an unknown nature, to the south of the Middle and Late Iron Age enclosures identified during trenching

and subsequent (2021) excavations at Hunts Grove, 200m to the north (CA 2012, CA 2022; Fig. 1).

## Mid to Late Roman

- 8.7 The earliest certainly dated remains on site belong to the Roman period. Of these, a single grave is confidently ascribed a Roman date on the basis of a radiocarbon determination, whilst the flanking ditches of a droveway are phased as Roman since they were stratigraphically early, although only one of these produced pottery: five Roman sherds and a small sherd each of late prehistoric and medieval pottery. As with Ring-ditch A, though, the general absence of medieval pottery from these features is perhaps the best evidence that they pre-dated the medieval period. The site itself was probably fields or open grazing during the Roman period: the small Roman pottery assemblage consists of abraded sherds which probably derive from manuring whilst Roman settlement features were absent.
- 8.8 The droveway, 12m to 20m wide, runs north towards Hunt's Grove, where Iron Age enclosures were shown to have continued into the later Roman period (CA 2012; Fig. 1). It was likely to have been just one of a network of such droveways linking farmsteads with the Roman town at Gloucester, allowing cattle to be driven to market on the hoof. The grave was located alongside one of the droveway ditches. Isolated burials alongside boundaries are a common feature of the outlying areas of Romano-British farmsteads (Smith 2018, 245), and so the presence of an example here, that of an adult, probably a male, is unsurprising. Unfortunately, the very poor survival of the bone, a product of the clay soils, precludes further discussion about this individual.
- The droveway seems to have been aligned on Ring-ditch A, and the possibility that the droveway ditches respected an upstanding barrow mound associated with Ring-ditch A has been raised above. The use of existing landscape features for aligning Roman routes is paralleled elsewhere; a Roman trackway, part of a network of Roman enclosures and trackways at Thompson's Hill (Site 1) along the Wormington to Sapperton pipeline, was aligned to run directly past a group of at least two Bronze Age barrows located on a gravel plateau (Hart *et al.* 2016, fig. 4.2). In that instance, Roman burials had been placed along the trackway, some 200m north of the barrows (ibid., 87–89), and it may be that the barrows were still visible monuments that were deliberately referenced. Conceivably, the Roman grave at Quedgeley was also placed in reference to Ring-ditch A: the grave lies 90m north of the ring-ditch and

any barrow would have been easily visible from the grave side. The implication is that these barrows were more than simply convenient markers used when laying out routeways, and were conceived of as significant parts of the inherited landscape, although the precise manner in which they were thus appropriated remains opaque.

# Earlier medieval farmstead and pottery production (late 10th/11th to mid 12th centuries)

8.10 The most significant discovery made during the excavation is of a medieval enclosed farmstead associated with trackways and further enclosures, and likely to have been the home of at least one of the potters mentioned for the Haresfield entry in the 1086 Domesday Book.

## Date and duration

- 8.11 The pottery from the medieval site consists almost entirely of sherds in fabric Gloucester TF41B. Absolute dates for this type are absent, and dating instead relies on stratigraphic evidence from a range of sites to which pottery of this type was traded, notably within Gloucester, and these have been taken to indicate production from *c*. 1050 to *c*. 1200; evidence for the date and character of TF41B pottery generally, and from the site in particular, is discussed in detail in Appendix C. It was hoped that the current site might yield sherds with residues suitable for radiocarbon dating, which would then provide absolute dates for these sherds, but no suitable material was forthcoming because the majority of sherds were unused wasters lacking residue deposits. However, the four radiocarbon determinations (modelled values are shown here, see Appendix S for details) from the medieval enclosures do sit comfortably within the date range suggested for the pottery type: *cal. AD 1024–1152 (BRAMS-4284)*, *cal. AD 1025–1152 (BRAMS-4283)*, *cal. AD 1025–1152 (BRAMS-4284)*, and *cal. AD 1024–1152 (BRAMS-4828)*.
- 8.12 These dates allow the possibility that the farmstead originated during the early 11th century, whilst providing no evidence for activity beyond the mid 12th century. These are only spot dates, and it is possible that activity both pre and post-dated this range, something which should also be borne in mind when applying these radiocarbon dates to TF41B pottery production as a whole. However, a lack of later radiocarbon dates, and the almost complete lack of any earlier or later pottery from the Period 3 farmstead indicates a floruit for the medieval farmstead between the second quarter of the 11th century and the mid 12th century, with occupation unlikely to have continued beyond *c*. AD 1200 at the latest. A single Late Saxon sherd, some TF41B

sherds with Saxon affinities and a Late Saxon ceramic lamp from the site provide further indicators of pre-Conquest origins, whilst a lack of Early or Middle Saxon features perhaps suggests that activity of that date focused further north at Hunt's Grove where recent (2021) excavations have identified an Early to Middle Saxon post-built hall (CA 2022), although that must remain as speculation. Haresfield itself is an Anglo-Saxon place name whilst settlement of that date is also suggested by two field names with –worth suffixes (–word in Old English), both derived from an Old English word indicating enclosed farmsteads dating to the Middle or Late Saxon period (Appendix T). Neither farmstead is that found at Quedgeley East, but both may have been similar in character to that excavated there, and it is possible that the Quedgeley East farmstead had similar Late Saxon origins, with a name ending with the same -word suffix.

- 8.13 As such, this is a very early example amongst only a small corpus of medieval farmsteads to have been excavated nationally. An enclosed farmstead at Cedars Park, Suffolk dated to the 13th to mid 14th centuries although some Anglo-Saxon features were identified (Woolhouse 2016, 21, 30). Other excavated rural settlements of this period tend to have been villages or hamlets, such as West Cotton, Raunds, in Northamptonshire (Chapman 2010), and Upton on the Gloucestershire Cotswolds (Hilton and Rahtz 1966; Rahtz 1969). Two medieval buildings excavated at Overley Wood, between Stroud and Cirencester, Gloucestershire were dated to the 11th to 13th centuries by pottery, including, amongst other wares, TF41B sherds (Hart et al. 2016, 158-9, 218). Further probable stone-founded medieval buildings survive as earthworks at Pinbury, 500m from the excavated examples at Overley Wood, and together these may have formed part of a dispersed settlement (ibid., 208). Unlike the Quedgeley East farmstead, at least in its later form, that at Overly Wood was seemingly unenclosed and included a postbuilt house replaced by two stone-founded buildings, but it too was sited to take advantage of valley pasture although the buildings there may have had a specialist function relating to a manorial official (ibid., 209).
- 8.14 At Quedgeley East, the proposed occupation represents a very approximate duration of some 100 to 175 years, or five to eight or nine generations assuming a generation of around twenty years: a recent study of medieval pregnancy, albeit for aristocratic women, has suggested that the average age for the last pregnancy amongst those sampled was 28 (Podd 2020, table 2), whilst most marriages across the social strata occurred when the couple were in their early 20s (Gowland and Penny-Mason 2018,

767). Statistical modelling of the four Period 3 radiocarbon dates, presented in Appendix S, suggests a shorter duration of up to 42 years (68.3% probability) or 104 years (95.4% probability), but this is based on only a small number of radiocarbon dates and, based on the evidence discussed above, actual occupation may have been longer. This estimation of the number of generations occupying the farmstead can only be very approximate, and, in archaeological terms, one or two centuries seems like a short time, but to the generations living there, the farmstead must have seemed an enduring part of the landscape.

# Settlement morphology and development

- 8.15 The duration of the medieval settlement is reflected in its apparently organic and continuous development, seen in the re-establishment of, and gradual changes to, the various enclosures and trackways. Although no *in situ* building remains were present, Enclosure A seems to have been the focus of settlement, this being reflected in the concentrations of animal bone and fired clay in the ditches defining this enclosure. The medieval pottery assemblage was focused away from this enclosure, but, as discussed below, much of this assemblage likely reflects pottery production rather than domestic use and discard, whilst those sherds that had clearly been put to domestic use were abraded and small, suggesting that they had been redeposited into ditches from middens, and so do not provide secure indications of settlement foci.
- 8.16 If Enclosure A was the location of a settlement, then there may have been a dwelling located within Sub-enclosure A1, with a second or replacement building added in Sub-enclosure A2 during Period 3.3. The form of such buildings is not evidenced within the archaeological record, and there are only a few excavated examples from elsewhere in the county (Dyer and Harward 2017, 181). At Overley Wood, the earliest building was a rectangular wooden structure which survived as postholes, and which was then rebuilt with stone foundations alongside a similar, slightly larger, stone-founded building, these later builds probably having taken the form of stone dwarf walls with timber-framed structures above (Hart *et al.* 2016, 158–64, 208–9).
- 8.17 Buildings with dwarf stone walls supporting timber framed superstructures were also suggested at Upton (Hilton and Rahtz 1966, 102; Rahtz 1969, 86–7) on the Cotswold hills, where they dated to the mid/late 13th to later 13th/14th centuries and were preceded by timber buildings of the 12th to early 13th centuries, probably timber-framed structures based on sleeper beams and upright earthfast posts (Rahtz 1969,

- 84, 95). An absence of tiles suggests that both the earlier and later buildings at Upton were roofed in thatch.
- 8.18 At Bourton-on-the-Hill, also on the Cotswold hills (Dyer *et al.* 2017, 166–174), buildings dating to the later 12th to mid/late 15th centuries were probably stone built to eaves level but this difference in build may reflect their relatively high status, since they formed part of a manorial complex (Dyer and Harward 2017, 179, 181). Manorial buildings were also found at Allcourt Farm, Lechlade, where they dated to the 13th to 15th centuries (Stansbie *et al.* 2013).
- At all these sites, the stone foundations were either built from the ground level within larger terrace cuts, or within very shallow foundation trenches (Dyer and Harward 2017, 179; Hart et al. 2016, 162–3; Rahtz 1969, fig. 94; Stansbie et al. 2013, 41–4). Where not fortuitously preserved, such foundations might easily be lost to late medieval or later ploughing, and such a loss is possible at Quedgeley East where medieval and later ridge and furrow cultivation is evidenced. However, at Quedgeley East, the farmstead began earlier than the stone-founded buildings cited above, and it is more likely that the buildings were timber structures based on sill beams and/or on posts resting on pads at ground level or only very slightly earth fast. This accords with the absence of stone rubble deposits from the site and is consistent with the evidence from Overley Wood and Upton that the local vernacular tradition of stone-founded buildings with timber superstructures was preceded by one where the entire structure was of timber, a trend also apparent on a national scale (Gardiner 2000, 159–60).
- As at other medieval rural sites in Gloucestershire, the absence of tiles suggests that roofing was thatched. Flooring may have been beaten earth, with straw or bracken which would have been replaced periodically, and with an open hearth built above ground level, or not set deeply enough to have left a trace. The stone-founded dwelling at Overley Wood was 13m by 4m in extent, whilst at Upton a stone-founded building was 18m long by 5.5m wide (Rahtz 1969, fig. 6). At each, the earlier timber buildings were a little smaller. At Quedgeley, the internal area of Sub-enclosure A1 was 22m by 20m, which would easily accommodate such a building, whilst Sub-enclosure A2 at 15m by 14m might have contained a smaller building.
- 8.21 At Overley Wood, it was suggested that the two buildings represented a dwelling and an ancillary building, the latter perhaps with an additional residential aspect (Hart *et al.* 2016, 209). The dwelling was divided by internal partitions into three rooms of

equal size (ibid., 209) and similar arrangements could be discerned at Upton (Rahtz 1969, fig. 6). This is the immediately recognisable groundplan of medieval buildings found across much of England (Gardiner 2000, 161–2), including the Cotswolds (Dyer 2019, 207), with a cross passage bisecting the building on its long axis, on one side of which was a service room acting as a kitchen and store, and on the other, the hall, which provided the social space and which would have had an open hearth with smoke rising to the rafters. Beyond this was the chamber, used as sleeping quarters, which might be supplemented by sleeping spaces in the hall. Most were single storey (Gardiner 2000, 159). This groundplan, which pertained through the social classes and endured until the great rebuilding of the early to mid 16th century, has its likely origins in the 10th to 12th centuries (ibid., 159, 169) at which time the Quedgeley farmstead was in existence and likely had a dwelling based on a similar plan.

- 8.22 If ancillary buildings were present close to the Quedgeley dwelling, potential uses for these include as stores, workshops, or for dairying: some of the ceramic West Country dishes found on site may have been used for cheesemaking. It is also possible that they provided additional accommodation for servants or labourers, the latter being a social and economic group below peasants (Hilton 1975, 22), or for elder members of the family who were sometimes given separate accommodation upon the marriage of the heir (Dyer 2018, 195).
- 8.23 The remainder of Enclosure A seems to have been open, and indeed may not have been enclosed in Periods 3.1 and 3.2. Here, a range of uses is possible, including as a yard, perhaps with further lightweight agricultural buildings, and probably with a kitchen garden and small orchard, these suggested by charred plant remains. A few eggshell fragments suggest chickens were kept, although their bones did not survive, and these probably loitered around the farm buildings searching for food scraps and spilled fodder and grains. Indeed, some of the more amorphous pit-like features, lacking finds and not ascribed to a particular period, might have been dug by chickens creating dust baths: the author has observed chickens digging through soils into the underlying substrate, creating surprisingly deep holes.
- 8.24 North of Enclosure A was a sinuous trackway (A) which ran broadly east/west across the site. Like many medieval rural trackways (Hindle 1982, 21), it was fairly irregular in plan. The flanking ditches were shallow and were perhaps accompanied by hedges or hedge-banks which would have been sources of kindling and gathered wild food, as well as providing habitats for wild fauna. Trackway A presumably

extended eastwards to link with Haresfield Lane which likely has medieval origins (Appendix T), thereby connecting the farmstead with the wider village and the world beyond. Haresfield Lane was probably the main route along which pre-Conquest settlement was distributed in tofts (see Appendix T for a fuller discussion of this). The lane running along the southern site boundary may also have medieval origins, although this is supposition and not supported by documentary evidence (Appendix T). An extant minor road (that leading eastwards past The College on Fig. 1) connecting the lower part of Haresfield with the upper parts on the scarp likely has medieval origins (Appendix T), whilst the old Roman road (the A38, Fig. 1) led to the major market centre at Gloucester. Such routes, along with Trackway A, would have been enduring features, linking and structuring the disparate parts of Haresfield and the world beyond, both physically and conceptually across the generations inhabiting the Quedgeley farmstead.

- 8.25 During Period 3.1 an ovoid enclosure (C) was created north of Trackway A. Relatively few finds came from the ditches of Enclosure C, and it may have been a livestock corral, a suggestion supported by the provision of a funnel-shaped entrance leading from the east, a form useful for driving livestock (Pryor 1998, fig. 52). Period 3.1 Enclosure E, located south of Enclosure A, was of similar size to Enclosure C, and also included a funnel-shaped east-facing entrance. It too produced relatively few finds and use as a livestock corral again seems likely. A further enclosure of this size, Enclosure I, lay at the western extent of the site and here again, use for corralling livestock is plausible.
- Subsequent years through Periods 3.2 and 3.3 saw the development of both the farmstead enclosure (A) and the surrounding enclosures. It is from these later enclosures surrounding, but not including, Enclosure A that the majority of the pottery was recovered (Figs 15 and 16). The exception, an upper fill of Period 3.1 Ditch B19 (the fill recorded as ditch B41) of Enclosure I, relates to deliberate backfilling during Period 3.2 in advance of the construction of one of the new enclosures (K), but there is sufficient pottery from Period 3.1 to indicate production throughout the site's medieval (Period 3) occupation. These new enclosures were on broadly the same footprints as their earlier counterparts but were generally larger. North of Trackway A, trapezoid Enclosure B replaced Enclosure C, running alongside the trackway edge. To the south, Enclosure E was superseded by Enclosure F which itself was remodelled as Enclosure D. Both were large enclosures extending beyond the site limits. In the western part of the site, a further large enclosure (K) replaced Enclosure

I and was linked to Trackway A, whilst an additional enclosure (H) was added to its south. In between was a broad space lacking archaeological features. Although seemingly open, it is possible that this included agricultural buildings such as barns, or that it was grazed or used for horticulture, or a mixture of such uses.

# **Economy**

- 8.27 The settlement comprised a farmstead, enclosed at least during its later years, along with trackways and enclosures. Funnel-shaped entrances to some of the enclosures (B, C, E, K and I) imply use for livestock corralling. Enclosures D and F extended beyond the site limits, and the nature of their entrances is unclear. The successive entrances along the edge of Enclosure H were placed along its perimeter, rather than, more suitably for driving livestock, at a corner, and so this may have been an arable field, unless the entrance was supplemented by an additional barrier, such as a movable hurdle fence. The primary economic basis of the farmstead seems therefore to have been pastoral, with an element of arable. Other foods may have been grown close to the farmstead within a kitchen garden and orchard, the latter indicated by charred remains from plum and cherry trees; apples, although not identified on the site, may have been grown too. Charred remains of brassicas, peas and beans indicate some of the foods that might have been grown in a kitchen garden. Hedgerows and woodland would have provided readily accessible sources of wild food, perhaps reflected in the archaeological assemblage by the charred hazelnut shells, whilst beech trees could have provided leaf fodder for cattle.
- It is unfortunate that the animal bone has survived so poorly. Sophisticated analytical techniques, such as isotope analysis to estimate whether beasts were grazed on the vale or the uplands, and to investigate any possible transhumance and importation of breeding stock, were not possible, and nor was the bone suitable for radiocarbon dating or analysis of age at death or other features relating to different farming practices. There were no animal burials on site, and the bones, which clustered within the ditches of the domestic enclosure (A), likely represent food waste. On such a modest farm, these were probably animals raised by the inhabitants. Amongst the small assemblage, cattle bones were the most common, followed by sheep/goat; the latter are indistinguishable in the assemblage but are more likely to have been sheep, based on the widespread record of these in the Cotswolds (for example, Dyer 2019). There were a few horse and pig bones too, the former presumably reflecting working animals later butchered, the latter kept for meat. The poor condition of the bones means that it is not possible to determine whether, for example, the cattle included

those kept for draft, dairy, breeding or meat, and perhaps a mixture of these should be envisaged. Sheep too would have been kept for dairying as well as for meat and wool (ibid., 201).

- 8.29 Eggshells may reflect the presence of chickens on the farm, presumably along with a cockerel: although eggs could have been imported, a small farm such as this is more likely to have been self-sufficient for eggs as well as dairy products, meat, and food that could be readily grown in the kitchen garden or orchard. Cereals too may have been grown, and were certainly processed on site. There is little evidence from the archaeology that a grain surplus was produced, but of course the record only includes those grains that were charred during food processing on site, and so production may have been more extensive than is apparent, allowing for the production of a surplus with which to pay manorial dues and to earn cash at the market. Some grain may been used for brewing, both for domestic consumption and to earn cash; late 14th to early 15th-century records show that Gloucester received ale from almost every village within a six-mile radius (Holt 1985, 150), which would have included Haresfield, and this pattern may have been true when the farmstead was occupied. Surplus grain could have been sold direct at Gloucester's market, or might have been traded to dealers who acted as intermediaries between, for example, Gloucester's bakers and peasant grain producers in the surrounding villages (ibid., 150). The farm's livestock may also have produced a surplus, either of meat or dairy products, or a combination of both, which could have been traded at Gloucester. Beef in particular was a favourite meat amongst medieval town dwellers, and, along with mutton, mostly came from mature animals which had been used for other purposes, such as dairying (cattle and sheep), wool production (sheep), and traction (cattle), prior to slaughter (Dyer 2018, 198–9). Pottery too may have been traded at Gloucester, and the evidence for pottery production is considered below.
- 8.30 The small quantity of ironworking debris from the site indicates very low intensity smithing and could have been produced in as little as a few days. Such smithing might have been undertaken by the occupants themselves or by an itinerant smith making and repairing tools for farmsteads and villages. One surprising aspect of the medieval finds assemblage is its paucity of artefacts relating to textile production, these comprising a few spindle whorls of stone or fashioned from old pottery sherds. The reasons for this low incidence are not apparent: conceivably those who might have engaged in spinning at comparable settlements were engaged instead in pottery production here, but this seems unlikely given that pottery production was

likely seasonal (see below) and that the inhabitants probably included sheep amongst their livestock. More probably, the rather crude but functional nature of the impedimenta used (as evidenced by the surviving spindle whorls) means that specialised tools were somewhat *ad hoc* and either have not survived or are not specifically identifiable except in a few instances.

# Pottery production

- 8.31 The ceramic evidence presented in Appendix C suggests that pottery production was part of the site's economic basis. Although no kilns survived and no kiln furniture was found, there are enough pottery wasters and seemingly unused sherds from the site to suggest pottery production at the farmstead. It is important to note that the majority of these sherds are not from discrete dumps of pottery wasters and may instead have entered the ditch fills from which most were retrieved through secondary deposition, via middens, thus becoming mixed with pottery that had been used domestically. As such the locations of these sherds cannot be taken to equate with those of kilns. However, there were a few larger dumps of wasters, these coming from Ditch B19 (Period 3.2 Ditch B41) in Area B, and from Period 3.3 Ditch A66 and pit 3753 in Area A, and these may have been dumped close to where kilns were operating; in the case of Ditch B19/B41, these wasters were associated with a dump of limestone, a stone not local to this clay-based site and which may have been surplus material originally intended for use (after crushing) as pottery temper and which was perhaps dumped after the end of a particular potting season. These waster dumps, taken with the paucity of sherds (evident throughout Period 3) showing evidence of domestic use (sooting and limescale or burnt food accretions), provide the most compelling archaeological evidence from the site that TF41B pottery was produced at this farmstead throughout Period 3.
- 8.32 This is a significant discovery since Haresfield is one of only three manors mentioned in Domesday Book (1086) as having potters (Ecclestone 2000, 47). This doesn't mean that potters were a rarity of course, rather that they were generally not relevant to the surveyors who at Haresfield chose to record five potters. Pottery production during this period was undertaken using small kilns. At Pontefract, West Yorkshire, a kiln used in the production of Stamford Ware pottery during the late 11th and 12th centuries survived as a figure-of-eight-shaped pit with vitrified clay edges and an internal clay wall (Weston and Hudson 2013, 115–18). At Pound Lane, Canterbury, a 12th-century pottery kiln survived as a pear-shaped cut into the substrate, with stakeholes suggesting a clay dome built onto a wicker frame (Musty 1997, 5–8). A

Late Anglo-Saxon kiln at Michelmersh, Hampshire, survived as a figure-of-eight-shaped pit and displayed scorched clay at its base, as well as containing charcoal and some of the last pots to have been fired (Mepham and Brown 2007, 38–40).

- 8.33 No kilns were found at the Quedgeley East farmstead. It is possible that the below ground remains, as well as the superstructures, have been lost to ploughing. An alternative possibility is that the potters used clamp kilns built onto the ground surface. This method involves stacking the unfired, partially dried, vessels on a bed of fuel laid on the ground, with further fuel placed in amongst the pottery, and then the whole covered with further fuel and/or turf before firing (HE 2015, 34). Archaeologically, the lack of structural elements means that this method leaves little trace aside from the pottery itself. At Quedgeley, several of the sherds displayed the variably oxidised and unoxidised colour which can characterise pottery fired in clamp kilns where the ingress of oxygen cannot be easily controlled, and use of such a kiln or kilns would seem most likely here. Although pottery came from all of the Period 3 phases, the largest part of the assemblage was found in features belonging to Periods 3.2 and 3.3; this may indicate an intensification of potting during the later years of the farmstead, although it might instead indicate different patterns of waste disposal, particularly as these figures are skewed somewhat by the presence of the few larger waster dumps phased within Periods 3.2 and 3.3.
- 8.34 At Michelmersh, it was proposed that pottery production was most likely a seasonal activity engaged in by farmers (Mepham and Brown 2007, 55). Clay would have been quarried in the winter and left to weather, whilst the pots themselves would have been made during the summer when drier weather might be hoped for to facilitate drying. A single kiln might be in use for as little as one season to five or ten years, with firings taking place weekly during the summer (ibid., 55). At Quedgeley East, the clay, along with the limestone temper, would have been sourced within Haresfield, and individual potters paid annual licences to obtain these materials (Ecclestone 2000, 47). A potter would have had to pay clay rent to the manor, regardless of whether the clay was won from the lord's land or that occupied by the potter (Jean Le Patourel 1968, 113). There were no indications of clay quarry pits on the Quedgeley farmstead and research by Martin Ecclestone (2000) identified Crockers Hill as a possible source, a place no longer thus named but likely located on what is now called Ring Hill on the uplands above the village. This place name (Crockers Hill), recorded in 1442 but likely dating to the Norman period, if not before, implies an association with potters (see Appendix T) and is a source of suitable clay

(ibid., 49, 53). If so, then the clay was presumably carted down to the farmstead, a distance by track and road of some 2.5–3km, arriving at the farmstead along Trackway A via Haresfield Lane.

As at Michelmersh, where at least two kilns were identified, the farmers at the Quedgeley farmstead were probably only one example of several potters located at Haresfield where this small local industry supplied pottery to Gloucester and to other settlements, including as far afield as Droitwich, Bristol, Chepstow and Hereford. Whether the initial marketing was by direct trade, or through the agency of intermediaries, is not apparent, but would be worthy of further research; sale to the further reaches of its distribution must surely have been through merchants.

# Landscape

- 8.36 Haresfield parish straddles the Cotswold uplands down the west-facing scarp and across part of the Severn vale. This pattern of parishes stretching down from upland to lowland was common in medieval England where the topography allowed, including the Cotswolds, providing access to sheep pasture and arable fields on the uplands and to meadows on the clay vale (Dyer and Harward 2017, 175). The Quedgeley farmstead was not part of the Cotswold uplands pattern of nucleated villages, such as Hazeleton (Dyer and Aldred 2007, 41), and should instead be regarded as part of a dispersed settlement pattern within the wider township (a territorial unit broadly equating to a modern parish, although modern parish boundaries may differ), a pattern that here likely had Late Saxon origins, as suggested by —worđ place-name suffixes and the name Haresfield itself (Appendix T).
- 8.37 The role of geology in influencing patterns of settlement, economy and even the social and political lives of populations has been reconsidered recently, after a period from the 1960s during which environmental determinism fell from scholarly favour (Rippon et al. 2014, 200). For the current site, the location on the heavy and low-lying Jurassic clay soils may well have been a fundamental factor in the development of the economic landscape and settlement pattern. The overlying soils are capable of cultivation, particularly oats (ibid., 211), of which a few charred examples of a possible cultivated variety were found. The majority of the small charred cereal assemblage from the farmstead comprised charred free-threshing wheat grains (some identifiable as bread wheat) and perhaps this came from fields on the hills above. In most cases, there was little chaff, and so the grains were probably threshed

and winnowed in the fields. They may also have been dried in field ovens to prevent germination during storage, something essential in a temperate climate; a number of such ovens, together spanning the Roman to post-medieval periods, were found along the South Wales Gas Pipeline, and they must have been common features of the landscape, located, for convenience, at field corners or entrances (James 2020, 124–5). If so, this may account, at least in part, for the fairly low numbers of charred cereal remains found within the site, with primary processing having occurred elsewhere.

- 8.38 Although sheep bones were found on site, the relatively damp clays of the Severn vale would have been unsuited to sheep, making them prone to foot rot and liver fluke (Rippon *et al.* 2014, 200), and so this area was best used primarily for cattle grazing, although this would have been carefully managed to reduce damage to the woodland itself, and may have been done in conjunction with pig pannage, with pigs able to consume acorns which can be dangerous in large quantities to cattle (Margetts 2021). Sheep would have been more suited to the uplands where they would also have been essential to manure the relatively poor upland soils used for arable (Dyer 1987, 177). This suggests that the Quedgeley East farmers had access to land on the uplands as well as in the vale, and provides another indication that at least some of their cereals were grown on the higher ground.
- 8.39 What the lowland landscape around the farm looked like is suggested by the palaeoenvironmental evidence. The abundance of tree pollen in the lower levels of Period 4 Ring-ditch B is interpreted (Appendices Q and R) as reflecting the vegetation prior to the excavation of the ring-ditch, providing an indicator for Period 3. This suggests a landscape with plentiful woodland, with oak dominant alongside lesser quantities of hazel, and with elm, beech, birch, alder and ivy also present. To this list can be added blackthorn/plum/cherry and hawthorn group identified from charcoal. The charcoal from the Period 3 farmstead was from a more restricted range of species, primarily oak, but with blackthorn/plum/cherry and hawthorn, and a fragment of beech, suggesting that woodland was plentiful enough to allow the inhabitants to be selective about what fuel they chose. Within this partially wooded landscape, there were areas of grazing, and the overall impression is of a woodpasture landscape, where grassy areas were interspersed with stands of woodland and isolated trees. The limited charcoal assemblage from the site produced no evidence for woodland management, but a mixture of underwood (coppiced trees) and standards (mature trees) was probably encouraged (Stamper 1988, 131) in

order to provide a range of resources for structural timbers, wattles, hurdles, basketry, and a range of fuel sizes and types suited to different tasks including domestic cooking and pottery production, as well as to provide suitable foraging for cattle and pigs. The timber framing for the buildings on site may have included locally sourced oak, although particularly large timbers were likely purchased from elsewhere.

This landscape, with its numerous streams, would have been ideal for cattle, which require ready access to water and are happy to graze areas with a high water table (Rippon et al. 2014, 215–16). Beech leaves would have been suitable fodder for the cattle. The few pigs could have been penned close to the farmhouse and fed on kitchen scraps or allowed to roam the woodland (pannage) (see Margett 2021 for a discussion of the relationship between woodland management and cattle husbandry in wood-pasture landscapes). This fits with a broader national pattern revealed by close analysis of medieval sites recorded primarily through developer-funded excavation, as in the present instance, which indicates a strong association between claylands and cattle bones, whilst lighter soils display an association with sheep/goat, a pattern supported by the documentary evidence and, for archaeological sites, by evidence extending back into the Anglo-Saxon period (Rippon et al. 2014, 243).

## Social networks and people

8.41 The size of the farmstead suggests that the inhabitants at any one time comprised two or three generations of a family. A typical family of this time would have included the parents and two or three surviving children, with grandparents living in the same home or nearby (Orme 2001 and Schofield 2010 cited in Gowland and Penny-Mason 2018, 763). These were certainly peasants, most likely villani: peasants who were legally free and held land as tenants of the manor, to whom they owed dues (Dyer 1987, 168; Appendix T); villans and bordars (bordarii, who held smaller amounts of land than villans) are both recorded at Haresfield in Domesday Book, which lists nine villans and eleven bordars for Haresfield manor (see Appendix T for details of Haresfield's medieval population). Domesday Book also lists four servi, landless slaves, for Haresfield; these likely worked the lord's demesne farm, but it is possible that some of the better off villans used servi since slaves were relatively numerous in the Cotswolds, and in Gloucestershire more particularly, at the time of the Domesday survey (ibid., 168), whilst slavery continued as a legal concept in England until the 12th century (Spicksley 2017), around the time that the Quedgeley

farmstead was abandoned. In addition to those groups noted above, seasonal labourers might also have been employed to help with tasks such as harvesting and lambing.

- 8.42 The first two or three generations at the farm may have lived within the Anglo-Saxon kingdom of England during the upheavals of the 11th century which culminated in the Norman Conquest of 1066. The Haresfield potters recorded in the 1086 Domesday survey presumably included those within the Quedgeley East farmstead who may therefore have encountered the Norman officials, perhaps their only direct contact with the new regime. Occupation survived the Conquest, continuing to around c. 1150/1200. Despite the wider political changes, life at the farm seems to have continued fairly unchanged, although as discussed in Appendix C, some of the TF41B pottery from the site shows a continental influence. Whilst this may indicate the presence of a continental potter, as postulated at Pound Lane, Canterbury (Cotter 1997), a simpler explanation is that a Saxon potter already established at the Quedgeley farmstead adapted to exploit a new market, providing pottery for Normans based in Gloucester and in Haresfield itself, where the Anglo-Saxon brothers Godric and Eadric had lost their lands to the Norman Durand. Sheriff of Gloucester (Appendix T). The smaller corrals of Period 3.1 were replaced by larger enclosures in Periods 3.2 and 3.3, which coincides with a possible increase in the levels of pottery production suggested by the quantities of pottery recovered (although see the caveat noted above), and it is tempting to see this as a response to growing market centres after the Conquest, and perhaps too to the expanding population recorded nationally between the 11th to early 14th centuries (Bowden 2006, 172). However, that must remain as speculation for now, given the dearth of comparable excavated farmsteads which might provide a broader data set within which to place this evidence.
- In some respects, the farm would seem to have been fairly humble; there is little in the way of traded imports, and metalwork was rare. Aside from a single unstratified medieval buckle, personal dress items were absent, and, aside from the pottery, cereals and animal bone, finds were restricted to two unidentifiable iron items, two worked bone finds (a scoop and an unidentified object), a stone block of unknown function and a few spindle whorls. This can be contrasted to the nucleated upland village of Upton where far more finds, and of greater variety, were found (Hilton and Rahtz 1966, 111–113; Rahtz 1969, 103–110), and Overley Wood, where again, finds were both more numerous and more diverse (Hart *et al.* 2016, fig. 5.6, 209). What

does this imply for the Quedgeley farmstead? The relative paucity in finds compared to Upton may reflect the fact that the latter was a nucleated village, and so would be expected to have a larger assemblage, whilst at Overley Wood it is possible that some items, such as horse trappings, belonged to a manorial official (ibid., 209). At Quedgeley, metal items may have been carefully re-used or recycled, perhaps by itinerant smiths.

- 8.44 Some buying power by the inhabitants can be implied: shoes and at least some clothing would have required purchasing, whilst the buildings themselves would have required the paid labour of tree-fellers, carpenters and thatchers, as well as the purchase of any notably large timbers, perhaps all or most of those making up the timber frame. Breeding stock would also have been imported, and cash would have been needed to pay for any seasonal labourers and to pay taxes where payment in kind was not made. Not all the inhabitants' investments need have been on necessities, and wealthier villans enjoyed luxuries that are not evidenced in the archaeological record, such as in the food they ate, which here may have included imports such as fish from the Severn, and in the way they actually dined, which for those with social aspirations emulated lordly dining practices (Dyer 2018, 201). Later sumptuary laws, which were supposed to limit the type of clothing those of a certain social standing could wear, are a further reminder that those lower down the social scale often had aspirations which those above regarded as being above their station. Whether the Quedgeley East farmers had such aspirations is not knowable; potters were regarded as lowly, but this was not always the case, with some potters being fairly prosperous (Jean Le Patourel 1968, 107). At Quedgeley East, pottery making seems to have provided a supplementary income and the inhabitants likely regarded themselves primarily as farmers, free tenants who were the middle rung of medieval rural society. Much like many present day farmers, they supplemented farming with other income streams, readily adapting to take advantage of new market opportunities following the Norman Conquest. Thus, despite finding themselves in a colonised land, the farmers at Quedgeley East found ways to turn their situation to an advantage whilst others, including their former lords, lost out.
- 8.45 The farmstead would have been one of many such dispersed settlements and hamlets in the vale; at least two others are implied in Haresfield by place-name evidence (Appendix T), and there were presumably more as indicated by the number of villans recorded in Haresfield in Domesday Book. Here, and west of the Severn, such dispersed settlement was the norm, contrasting with the nucleated villages of

the Cotswold hills (C. Dyer pers comm. to J. Hart 18 November 2020). The Quedgeley farmers had access to the site itself, where they engaged primarily in cattle farming, supplemented with pottery production, and probably also to the Cotswold uplands where they grazed sheep and grew cereals. To what extent, if any, this may indicate transhumance (the seasonal movement of a population, or part of a population) is not clear, but some of those living at the Quedgeley farmstead may have spent part of the summers on the hills to the east. In Cornwall, where transhumance is recorded historically, those accompanying livestock to upland grazing were usually teenage girls and young unmarried women who lived for half the year in upland huts, or *havos*, the remainder of the community staying at the home farm (*hendre*) to tend and harvest arable fields (Dudley 2011, 39). Cornwall and Gloucestershire are far apart, and similar patterns need not have pertained at both, but the example is a useful reminder that part of the farm's population may have spent a significant part of their life elsewhere, in company with similar sections of the wider Haresfield community.

- In an age lacking a police force, crime could be an issue, both in rural and urban centres (Bowden 2006, 172), and it is possible that the enclosed form of the Quedgeley farmstead, at least in its later manifestation, was a response to this. Unlike at Upton (Rahtz 1969, 105), no security devices in the form of iron locks or padlocks were found, but perhaps these were re-used or recycled. There were no canine bones from the site, but animal bone survived poorly and dogs may have been kept as working animals, for guarding the property, and to assist in herding; a terrier-sized dog was recorded at Upton (ibid., 125) whilst a second, larger, dog at that site was suggested as suitable for guarding or hunting (Yealland and Higgs 1966, 142).
- 8.47 Archaeology should always be about people and it is worth considering how the occupants of the farmstead experienced their surroundings. Living on the vale, with its wood-pasture landscape, the viewscape would have been restricted, except towards the Cotswold hills to the east, where some of the inhabitants, perhaps young women, might have spent a large part of the year tending sheep, there experiencing a contrasting landscape of open fields and panoramic views as far as the Forest of Dean and Wales to the west. Back at the farmstead, there would have been a fairly open area in and around the farm, with the sounds and smells of the farmyard. Beyond, the interspersed woodland, primarily oak and hazel, and grazing would have felt noticeably different, as would the stream beyond, alongside which the alder

recorded amongst the pollen assemblage most likely grew. Those working alongside the cattle and pigs would have experienced all these environments. Children no doubt helped with agricultural and other tasks from an early age but would have experienced their environs in a way that differed from the adults, whilst the elderly, the infirm and pregnant women would have had different experiences again (Johnson 2012, 277). The open area near the farmstead contained what may have been a prehistoric barrow, apparently still upstanding during the Roman period. Was this still visible to the medieval occupants? It may have been, having survived until deeper ploughing evidenced by the remains of ridge and furrow cultivation undertaken in later centuries. If the mound did survive, was it recognised as the work of ancient people, perhaps providing a source for local folklore and storytelling? The Roman ditches themselves were slight, and there is no evidence that they survived or influenced the medieval topography.

8.48 The medieval inhabitants were not buried at the farmstead, and by the time it was in use burial within a churchyard had become the norm in most areas (Magilton 2008, 34), although at Upton, a baby aged 6–9 months was buried in the corner of one room of a house beneath a flooring slab, a burial perhaps associated with a spindle whorl and whelk shell (Rahtz 1969, 87–88) and suggestive of magical practices, the concealment of an illegitimate birth, or the desire to keep a deceased newborn close to the hearth. St Peter's church at Haresfield is first recorded in 1161, but was presumably extant before then as the document of that date records Henry of Hereford, the lord of the manor, granting the church to Llanthony Priory (Morgan and Smith 1972a).

## The end of the settlement

8.49 The latest radiocarbon dates from the settlement are within the mid 12th century, whilst TF41B pottery is believed to have been produced until no later than *c*. 1200 (see Appendix C for a discussion of the date range of this pottery). The modelled radiocarbon dates have the end of the settlement as mostly likely between 1102 to 1164 cal AD (modelled as end early medieval period 3 activity), but as noted above, this is based on only four radiocarbon dates and actual occupation may have extended beyond the modelled ranges. Taking the evidence as a whole, abandonment of the medieval farm probably occurred during the mid 12th century, and no later than *c*. 1200. Population decline and the shrinking of some settlements, along with the desertion of a minority, pre-dated the 1349 plague (the Black Death), beginning generally around *c*. 1300, and had many contributing causes, at national,

regional, local and village levels (Dyer 1987, 175–79). At Quedgeley, local factors may have been at play in the fate of the farmstead and, as discussed below, it is possible that abandonment was prompted by population increase and a period of wealth, rather than by decline. The farmstead formed only one part of the wider dispersed settlement within the Haresfield township; whether or not its last inhabitants survived to move to another location within the village must remain as a tantalising question.

# Later medieval Ring-ditch B (mid/late 12th century to late 15th century)

Origins and duration

- 8.50 Ring-ditch B overlaid the latest Period 3 enclosure (D) within the south-eastern corner of the site. Although the stratigraphy allows for a continuation of Enclosure A when the ring-ditch was created, this is not supported by the ceramics, with Period 3 features lacking all but a few sherds of later medieval pottery, these likely to have been intrusive or infilling slight earthworks. Based on this, a clean break is suggested, with the earlier farmstead having been abandoned no later than c. 1200 and perhaps as early as c. 1150, before Ring-ditch B was in use. The seemingly deliberate backfilling of the deeper Enclosure A ditches allows the possibility that the farmstead was deliberately levelled, in which case conceivably in advance of the ring-ditch construction. It was perhaps at this time that the site became part of an open field (see Appendix T): pollen from the ring-ditch suggests that an earlier more wooded landscape which existed immediately prior to its creation had been cleared in favour of one with fewer trees but a greater arable component by the time the ring-ditch was in use.
- 8.51 However, how much time elapsed between the abandonment of the medieval Period 3 farmstead and the construction of Period 4 Ring-ditch B is not clear, and the two events could have been closely contemporary or separated by a period during which the farm lay abandoned within its familiar wood-pasture environment. Pottery from the ring-ditch fills included TF41B sherds, but these were generally abraded and/or leached (although the leaching might reflect specific conditions within the water-filled ditch). Use of the ring-ditch within the period *c*. 1250–1350 is indicated by sherds from Minety Ware jugs and a spindle whorl made from a Brill Boarstall sherd, whilst the two radiocarbon determinations from the second ditch fill, a deposit which formed when the ditch had been open for some time, span the early 14th to late 15th centuries (cal. AD 1309–1416; BRAMS-4287 and cal. AD 1429–1491; BRAMS-4286). These relatively broad ranges leave the origin date of the ring-ditch uncertain,

but, on the basis of the ceramic and radiocarbon dating evidence and the ring-ditch's suggested function, discussed below, a date within the 13th to mid 14th centuries seems most appropriate for its creation. The latest pottery, Malvernian TF52 sherds, suggests use into the 15th to 16th centuries.

## Form and function

- 8.52 Historic mapping for 1856 (illustrated in Appendix T) shows that Area A then lay within two fields, *Windmill Tump* to the south and *Windmill Lease* to the north, the two separated by a boundary shown on the mapping which was recorded during the excavation as Ditch A37 (Fig. 26). The 1831 enclosure award also refers to *Windmill Leaze* for the northern part of Area A, whilst on a map of 1813 (illustrated in Appendix T) this is called *Windmill Field* (Appendix T). The historic maps mentioned above do not depict Ring-ditch B which must have been disused by that time, but these field names provide the most obvious clue as to the function of the ring-ditch, the word *tump* signifying an earthen mound such as was often used to site a medieval windmill. That these field names associated with the site had earlier origins is suggested by a documentary reference from 1457 to *Wyndemyllefeld* (Appendix T). Ring-ditch B occupied a very unpronounced but definite high point within the southwestern part of the site, and the field name and documentary evidence suggest that this was deliberately selected as the site of a windmill.
- Windmills were built in England from the 12th century, although their earliest origins are uncertain. Dates within the 1130s for early examples in England have been posited based on documentary sources, but, more certainly, there are references to windmills in the 1180s (Watts 2002, 103). The earliest of these references are to windmills in the east of England, but their use seems to have spread westwards and Watts (ibid., 150) estimates that there were at least 4000 operating in England by c. 1400. Only a small number have been excavated, and, prior to the findings reported on here, none of these were in Gloucestershire, so that their suggested dating and diffusion remains largely untested. A recently excavated windmill site at Manor Farm, Humberstone, Leicestershire was considered to be an early example originating in the 12th or 13th centuries (Thomas 2009, 127) and, if the earlier part of that dating is accepted, may indicate that the suggested model of diffusion during the 13th century needs to be reconsidered.
- 8.54 The majority of medieval English windmills were post mills, that is they consisted of a wooden structure raised above ground level. This structure housed the working

mechanisms and rotated about a substantial wooden post set vertically onto a pair of cross-shaped horizontal timbers called cross trees. This allowed the canvas sails to be faced into the wind (Watts 2002, 106-10; Langdon 2004, 116-125). An evolutionary sequence for the way in which the vertical posts and cross trees were set has been postulated, with late 12th and 13th-century examples including at least some that simply had a large post set into the ground with or without wooden braces (known as quarter bars) jointed into this (ibid., 116, fig. 310). Subsequent developments saw the post resting on the central point of the cross trees. It was these cross-tree foundations which, along with the lower parts of the post and quarter bars, were buried beneath mounds, at least until the 14th and 15th centuries when the cross trees were increasingly placed on brick or stone piers above ground level and not buried within a mound (ibid.). The mounds varied in height from just above ground level to examples 2-3m high and allowed for the sweep of the sails (canvas built onto hurdles) as well as raising these above the turbulent ground level air, making the mill more efficient (Watts 2002, 106-7). An alternative type of windmill was the tower mill, based on stone foundations to ground level, with a rotating wooden superstructure above; this seems to have been a later development (although there may have been an overlap), the earliest known record being for one at Dover Castle in 1294–5 (Langdon 2004, 112). These had substantial stone towers, being at least two storeys high, as is the case for an extant example at Tidenham, Gloucestershire (Watts 2002, 112-3, fig. 49).

- 8.55 It is possible that Ring-ditch B did not surround a windmill, despite the field name evidence, and was instead a moat, something defined by the Moated Sites Research Group as 'islands surrounded by ditches which in antiquity were generally, though not invariably, filled with water' (Jean Le Patourel cited in Johnson 2015, 234). Ringditch B, with a large ditch up to 5m wide and 2m deep enclosing a full circuit, is consistent with this interpretation, whilst geoarchaeological and palaeoenvironmental analysis of the fills indicates that it held water for most of its depth, although in later years, when the ditch had partially in filled, water may have been present only during wetter months.
- At least 5000 moats are recorded within England, mostly within the central part (Campbell 2018, 252) which includes Gloucestershire, but these include a wide range of features from broad sheets of water surrounding castles to smaller ditches surrounding the homes of wealthier peasants, as well as those where no dwelling was included, the moat being ornamental or surrounding a garden or orchard, and

sometimes being used for freshwater fish. The floruit of moat building in England was between 1200 and 1325–1350 (ibid., 252; Johnson 2015, 234), and there is the possibility that circular moats, which seem to be a minority type, may belong to the earlier part of that range: Rigold (1978, 41) proposed a 12th-century date for this type, but moats are notoriously difficult to ascribe an origin date to (Johnson 2015, 234), and this early dating should be treated with some caution. Platt (2016, 306) considered smaller moats to be late, although still mostly belonging to the 13th to 14th centuries. At 31m in diameter, the Quedgeley ring-ditch is far smaller than the moated site located within Haresfield village and known as The Mount (SM 1020655; Fig. 1), which is almost square and encloses an island 50m by 48m in extent, but that was presumably a far grander part of the village, being the centre of one of the manors (see Appendix T).

8.57 Whilst the appearance of the Quedgeley East ring-ditch is moat-like, and it lacks a mound or evidence for cross trees, the reference to a windmill tump at that location is compelling evidence that this was indeed a windmill site. The lack of any substantial stone dump within the platform and the similar absence of stone rubble in the upper ring-ditch fills suggests that the ring-ditch did not surround a tower mill. On the other hand, it is puzzling that there was no direct evidence that the ring-ditch had surrounded a mound, whilst no cross-trees or foundation slots for such were found. The only features within the area enclosed by the ring-ditch were two small dumps which included modern brick and a 19th-century horseshoe which must postdate any windmill, given that none is depicted on 19th-century historic mapping. Another unusual feature, if this was the site of a windmill, is that Ring-ditch B describes a full circuit, whereas it is generally considered (for example, Rynne 2018, 504) that the guarry ditches surrounding windmills had one or two causeways, with at least one facing away from the prevailing wind to allow access to the mill away from the dangerous area of the sails. The excavated windmill site at Manor Farm, Humberstone had surviving timber cross-trees and was surrounded by a penannular ditch with somewhat out-turned terminals (Thomas 2009, 115-6, fig. 2). There seem to be no known examples where a windmill was surrounded by a complete ditch circuit. However, it is possible that this reflects the small corpus of excavated medieval windmill sites; an excavated example at Tansor Crossroads, Northamptonshire was interpreted as having been defined by a penannular ditch (Chapman 1997, 19–20, fig. 2), but part of the circuit lay beyond the excavated area, and it is conceivable that a full ditch circuit was present. The ditches surrounding windmills are described in the literature (Watts 2002, 106; Rynne 2018, 504) as being shallow, but that at Tansor was 1m deep (Chapman 1997, 19), whilst the example at Manor Farm, Humberstone was up to 4m wide and 1.6m deep, with a later re-cut (Thomas 2009, 119). The enclosed area at Tansor was 13m–14.5m in diameter (Chapman 1997, 19), and that at Manor Farm was 20.5m across (Thomas 2009, 119), whilst Watts (2002, 106) cites diameters of 11.5m to 24m for the mounds themselves.

- 8.58 At Quedgeley East, the ring-ditch described a full circuit, enclosing an area 31m in diameter, although any mound would have been at least a few metres smaller. The ditch itself at 5m wide and 2m deep is not unusually substantial, and the ditch size was presumably at least in part dictated by the size of the mound required, the mound being formed by material upcast from the ditch. The lack of a surviving mound at Quedgeley East can perhaps be explained by the upper ditch fills, which may include material that was formerly quarried from the ditch and then thrown up to create the tump, but was subsequently ploughed out when the windmill went out of use. If this was the case, then it must be assumed that any cross trees were laid at or above ground level, being buried within the tump, and have left no archaeological trace: as substantial timbers, any that remained in good condition were sought for re-use, a practice indicated both by documentary references (Watts 2002, 108) and by robbed out beam slots found during excavations, for example at Bridgewater Without, Somerset (Webster and Cherry 1972, 211). Millstones too may have been re-used, either for their original purpose or, broken up, as hardcore or as whetstones. The variation seen at Quedgeley on what seems, albeit on the basis of very limited archaeological evidence, to be a wider norm of penannular ditches, is not necessarily surprising: Watts (2002, 107) notes that post-mill construction was probably not standardised and may at times have been experimental or subject to local tradition.
- 8.59 Taken together then, the archaeological evidence is consistent with the cartographic sources that this was a windmill site, most probably of a post-mill. As such, it may have been built to provide milling facilities for a population that was increasing nationally during the 12th and 13th centuries, supplementing a water mill whose presence is implied in the village by documentary sources (Appendix T). The only specific medieval documentary reference so far discovered to a mill at Haresfield dates to 1275, but this does not specify whether a water mill or windmill is meant (see Appendix T), and so it is not knowable whether this can be equated with the windmill at the current site, although this is a possibility. The abandonment of the Period 3 farmstead may have been at the command of the lord of the manor, who

was thereby able to invest in an open field and a mill at that location, thus increasing the revenues from the manor. This possibility serves as a reminder that settlement desertion need not always reflect decline and disaster, but can be an indicator of good times, although the fortunes of the last farmers at the earlier farmstead are lost to time.

- 8.60 If the site was of a windmill, then there remains the question of why it was furnished with a full ditch circuit, which would have necessitated access via a footbridge, this most likely being a wooden structure located along the eastern part of the ditch circuit, away from the prevailing winds into which the sails would have faced. The most probable explanation is that the windmill was located within an open field. This was not uncommon, with examples being recorded within open fields with ridge and furrow cultivation (Rynne 2018, 506), and was the case for the excavated examples at Manor Farm, Humberstone (Thomas 2009, fig. 3) and Tansor Crossroads (Chapman 1997, 35). The open field within which the site formerly lay may have originated at or around the time of the demise of the Period 3 farmstead c. 1150-1200 (Appendix T), and so the windmill here should be envisaged as occupying part of this (with boundary Ditch A37 not then extant) which would have been ploughed and manured by livestock. This is consistent with the pollen record from the later ditch fills which shows a dramatic reduction in the amount of tree cover seen in Period 3, to be replaced by grassland and arable, but still with some grazing indicators. A more open landscape, although still with trees, perhaps in copses or along hedgerows, seems to have been encouraged. It is the presence of livestock which provides a pragmatic explanation for the provision of a full ditch circuit, in effect a moat, which would have protected the livestock and the mill structure from one another. It may also have provided a measure of security; Chaucer's brawny and vulgar pilgrim miller, fond of cheating his customers, may have been a figment of the poet's social snobbery, but milling terminology abounds with phrases reflecting the opportunities of millers to fleece their customers, and mills and their operators, with their direct and obvious link to food supply, could be targeted during times of disquiet (Langdon 2004, 242-3).
- 8.61 Although practical considerations may have stimulated the creation of a moat around the windmill, other factors may have been at work. Medieval moat studies have long been embroiled in debate over whether moats were intended primarily for defence or were symbols of power, a debate usefully summarised recently by Johnson (2015) and paralleled by the debate over the purpose of castles. The two are not mutually

exclusive and need not have been a conceptual dichotomy in the minds of those who commissioned the moats. In a time before police forces, even a small moat such as the Quedgeley example could have acted as a deterrent to thieves and to casual vandalism, whilst at the same time making the windmill a more impressive structure. Although there were independently operated mills (including hand mills operated by peasants), the majority of windmills at this time (and until the mid 14th century when lessees, rather than tenants, increasingly began to operate the lords' mills) were likely owned and leased by the lord in whose manor they stood and who, at least theoretically, if not in practice, would have expected the tenants to mill their grain at that mill (Langdon 2004, 178–9, 257–8). The example at Quedgeley stood on land which, from the mid 12th century, belonged to one or other of three separate landholdings within Haresfield (see Appendix T), and it is perhaps unsurprising that one of these lords sought to aggrandise this material asset to the estate. Although costing only half as much as a watermill to build (Langdon 2004, 179), windmills still represented a substantial investment, one with ongoing maintenance costs, and were part of a considerable medieval interest in technology (Gimpel 1988).

- Along with the church at Haresfield, located by the manorial centre at The Mount, the windmill would have been the tallest structure in the village, these two buildings, 650m apart within the otherwise flat vale and both closely associated with moats (the church was located close to the moated manorial site of The Mount), being ever present reminders of what the Anglo-Norman elites hoped would the enduring and natural order of society: those who ruled, those who prayed and those who laboured. Despite, or perhaps because of, this, windmills were sometimes viewed as a counterpoint to the church, a place where illicit activities such as prostitution or informal meetings took place (Langdon 2004, 288), taking advantage of the remote locations of the mills, as opposed to the setting of the church within the village centre where interpersonal transactions were subject to scrutiny.
- 8.63 In light of this, it is useful to place the moated windmill within the wider context of village life and the world beyond. A park laid out in the western part of Haresfield is first mentioned *c*. 1160 and is recorded as having deer in 1251 (Morgan and Smith 1972b, 188, 190; Appendix T). The extant church at Haresfield, and possibly the adjacent moated site for the manor (The Mount), were built at around this time (ibid., 188), and perhaps the whole can be seen as a formalisation of this landscape, effectively including its peasants, during the mid 12th and 13th centuries, a formalisation which included the moated mill, both a symbol of lordly power and a

direct manifestation of this through its links to food production and distribution, something long associated in the medieval mind with lordly roles. This was a landscape of Norman colonial power, expressing at village level what was also being stated at a grander level with the building of castles and their surrounding constructed landscapes (cf Johnson 2002), and the replacement of Saxon religious buildings with those built in the Romanesque style, elements both seen at Gloucester where the castle and cathedral are larger scale demonstrations of the power being expressed at Haresfield. The moated windmill and the open field within which it stood thus contrast with Anglo-Saxon wood-pasture landscape of the preceding farmstead, and this may well have been a conscious decision on behalf of the lord. In this way, although the Period 3 farmstead may well have been a Late Saxon farm which survived the Norman Conquest, the effects of that political change eventually overtook it, and can be seen in this small Gloucestershire village.

8.64 Although the moat is likely to have been at least partially intended to make a statement about power, ownership and prestige, and was perhaps part of a wider formalisation of the local landscape (itself an expression of Norman control), the palaeoenvironmental remains suggest that the moat itself was rapidly colonised, this time by nature. Clustered dock, welted thistle, marsh thistle, spiked sedge and glaucous sedge grew along the moat sides, whilst common water-crowfoot and stonewort grew within its wetter levels. Brambles, docks and bristly oxtongue indicate that the immediate environs were open but fairly scrubby, and there was at least one tree, a downy birch, shedding foliage into the water. Although this example was presumably kept short when the mill was in use, these trees can reach up to 30m in height and provide habitats for woodpeckers and other hole-nesting birds, whilst other species are attracted to the seeds (Woodland Trust 2021); like the mill itself, this tree may have been a familiar landmark within an area otherwise extensively cleared of woodland. Some mythology attaches to birch trees, amongst which they have been taken to symbolise renewal and purification, with birch twig bundles used to drive out the spirits of the old year (ibid.); whether this belief was recognised by the Haresfield villagers is not known, but it would have sat comfortably within the cyclical farming year and the importance of folk religion during this period, in other words, the daily practice of Christian and other beliefs as opposed to beliefs sanctioned in liturgy, has received increasing recognition (for example, Gilchrist 2018).

#### The abandonment of the windmill

As to the end date of the mill, the latest radiocarbon date cited above extends into the late 15th century, and there are no pottery sherds from the moat dating to after c. 1500, and so disuse by that time seems likely, although the moat itself persisted as an earthwork into the mid 20th century (see Fig. 5), prone to being water filled in wetter months. Its relationship with furrows visible on aerial photographs is ambiguous, and although it is not depicted on 19th-century mapping, it did produce a few post-medieval finds from its upper fills. The causes of its abandonment are not apparent; conceivably it was a victim of the population decline of the 14th century, when mill numbers across England also declined, followed by a slight resurgence, or it may have survived until the mid 15th century when further crises, political, economic and climatological, saw mill numbers decline again (Langdon 2004, 63).

# Post-medieval and modern (1500 to present)

8.66 Ridge and furrow earthworks can be seen across the site on aerial photographs, and others were recorded during excavation. Some probably relate to late steam ploughing, evidenced by their straight lines, whilst others have the characteristically sinuous shape created by medieval ploughing using oxen, the latter reflecting the site's location within an open field from *c*. 1150 until enclosure in the early 19th century. Whilst ridge and furrow cultivation is typically associated with arable farming, it was also used to improve pasture (Bowden 2006, 170), although arable cultivation seems most likely in the current case, supplemented by manuring through grazing.

## **Conclusions**

- 8.67 There were a few prehistoric and Roman remains, and evidence for post-medieval land use, but the site's significance arises from its medieval history, between the late 10th/11th to late 15th centuries, with a floruit between the later Anglo-Saxon period and the High Middle Ages. The site highlights the importance of looking beyond traditional period boundaries, which are no more than an artificial imposition by modern scholars and which limit the extent to which change can be understood across the *longue durée*, a research aim recently suggested by McClain and Sykes (2019, 85).
- 8.68 The Period 3 farmstead would have been just one of many similar establishments scattered through the vale, and across other parts of the country where dispersed settlements prevailed. In that sense, it is entirely unextraordinary. Its significance lies both in its early date very few farmsteads of that date have been excavated

nationally – and by the discovery that this was the location of at least one of the Haresfield potters and his or her descendants. The pottery produced there was a staple of medieval sites of the mid 11th to early 13th centuries in Gloucestershire, as well as having been traded to neighbouring counties, and the precise site of the kilns mentioned in Domesday Book has long been sought; one of them has now been found.

- 8.69 It is worth noting that the morphology of the farmstead, in particular the rectilinear domestic enclosure (A), is very similar that of some Iron Age and Roman farmsteads, including sites in the Severn vale such as Wheatpieces, Tewkesbury (Hart and McSloy 2008). There was no evidence at Quedgeley for continuity from the Roman period, and the resemblance seems to be coincidental, but it does sound a note of caution when assigning dates to such farmsteads recognised from cropmarks or recorded during geophysical surveys. Unless confirmed by fieldwork, Roman or Iron Age dates for these cannot be assumed.
- 8.70 It is rare to be able to tie archaeological evidence, which typically deals in broad date ranges, to specific historical events. At Quedgeley, the farmstead probably had Late Saxon origins and survived the Norman Conquest, and whilst their Anglo-Saxon lords lost out, the peasants adapted to take advantage of new market opportunities presented by the growth of Gloucester and its market, trends that pre-dated the Conquest but continued beyond it. The pollen sequence from the moat spans this period, providing a nationally rare (Creighton and Rippon 2017, 61) example of data indicating landscape change (in this instance) following the Conquest, whilst the pottery from the farmstead suggests that potters adapted to Norman tastes, this presumably being just one of the cultural changes that followed the Conquest and is elsewhere more readily visible in urban contexts (ibid., 62). As the discussion above implies, the Conquest should not be seen as the events of a single year, 1066, and instead Le Patourel (1976, 28) suggests that it should be seen as comprising a military phase followed by a phase of colonisation. In this respect, the site demonstrates archaeology's potential to inform our understanding of what could be termed 'the long Norman conquest', a period traditionally dominated by historians and beginning in the decades prior to the Conquest itself whilst extending across the following decades and centuries. Taking this longer view, the archaeology shows that the effects of the Conquest eventually overtook the farmstead's inhabitants when in the 12th century it was cleared to make way for an open field and a moated windmill. Along with the church, manors and park, the open fields and moated mill

can be seen as elements in a wider landscape of power, one created at both local and national level. Although some of these changes reflect developments that were occurring in the last few decades prior to the Conquest (McClain and Sykes 2019, 92–7; Creighton and Rippon 2017, 59), this was undoubtedly a landscape that expressed the power of the colonisers over the colonised. What became of the last occupants of the farm is unknown: they may have been forcibly uprooted, or provided with land elsewhere in the manor, or they may have died with no heirs. Either way, their farm lay forgotten for almost eight hundred years until its rediscovery when the site was again redeveloped by new landowners.

## 9. PROJECT TEAM

- 9.1 Fieldwork was directed by Mark Brett with the assistance of Dani Adams, Sharon Amann, Ella Appleyard, Gary Baddeley, Sam Bateman, Anthony Beechey, Majbritt Bengston, Noel Boothroyd, Sara-Jayne Boughton, Chris Brown, Megan Cameron-Heffer, Marino Cardelli, Katy Castle, Nathan Chinchen, Matt Coman, Mark Davies, Christian Day, Jon Dobbie, Antzela Efthymiadou, Neus Esparza, Amy Evans, Harriet Farr, Scott Gordon, Jack Harrison, Katherine Hebbard, Pawel Jablonski, Annabel Johns, Georgina Johnston, Alice Jones, Steffan Klemenic, Rosie Maguiness, Breana McCulloch, Stephanie McCulloch, Chloe Merrett, Rosalind Mocroft, Megan Reid, Richard Scurr, Tim Sperring, Alex Stephens, Jess Stevens, Tim Street, Susan Walker, Kinga Werner and Holly Young. Initial stratigraphic analysis was undertaken by Mark Brett, and subsequent stratigraphic analysis was undertaken by Jess Cook.
- 9.2 The prehistoric and Roman pottery reports were written by Ed McSloy and the medieval and later pottery report by Stephanie Rátkai. The worked flint and fired clay reports are by Jacky Sommerville, the metalwork and worked bone reports by Katie Marsden, the ceramic building material report by Ioannis Smyrnaios, and the worked stone report by Ruth Shaffrey, with a note by Peter Davenport. David Dungworth wrote the report on the metallurgical residues. The human bone was reported on by Sharon Clough, and the animal bone by Matilda Holmes. Agata Kowalska wrote the geoarchaeological assessment of the monolith samples. palaeoenvironmental evidence was reported on by Sarah Wyles and Sheila Boardman, with a report on the pollen by Michael Grant. Radiocarbon dating was undertaken by the Scottish Universities Environmental Research Centre (SUERC) and the Bristol Radiocarbon Accelerator Mass Spectrometry (BRAMS) Facility, University of Bristol and the results summarised for CA by Emma Aitken. Simon

Draper undertook documentary and landscape research for the project. The illustrations were prepared by Rosanna Price. The archive has been compiled and prepared for deposition by Hazel O'Neill. The fieldwork was managed for CA by Cliff Bateman and the post-excavation analysis and reporting was managed for CA by Jonathan Hart.

9.3 Jonathan Hart would like to thank Professor Christopher Dyer, Professor Christopher Gerrard and Professor Matthew Johnson (Northwestern University, Illinois) for their advice and guidance during the post-excavation research.

# 10. STORAGE AND CURATION

10.1 The archive is currently held at CAs offices in Kemble. Upon completion of the project, and with the agreement of the legal landowners, the site archive and artefactual collection will be deposited with The Museum in the Park, Stroud, which has agreed in principle to accept the complete archive upon completion of the project. A summary of information from this project, set out within Appendix U, will be entered onto the OASIS online database of archaeological projects in Britain.

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## Cartographic sources

## **GRO = Gloucestershire Records Office)**

1813 Estate Map of Properties Belonging to Daniel John Niblett (GRO)

1831 Haresfield Inclosure map (Know Your Place:

https://maps.bristol.gov.uk/kyp/?edition=glos)

1884 First Edition Ordnance Survey map, 1:2,500 scale (GRO)

1903 Second Edition Ordnance Survey map, 1:2,500 scale (GRO)

1903 Second Edition Ordnance Survey map, 1: 10,560 scale (GRO)

1923 Ordnance Survey map, 1:2,500 scale (GRO)

1924 Ordnance Survey map, 1:10,560 scale (GRO)

## **APPENDIX A: CONTEXT DESCRIPTIONS**

Area	Context	type	Fill	Description	Feature label	Period	Spot date
Area A	3001	layer		Topsoil. Dark brown grey clay silt.		5	
Area A	3002	layer		Subsoil. Mid yellow brown sandy clay.		5	MC16-C18
Area A	3003	layer		Natural substrate. Light-mid brown orange sand and clay and blue lias clay.		5	
Area A	3004	fill		Uppermost fill of ring-ditch B. Assigned for metal detector finds recovery.	A63	4	C13-MC16
Area A	3005	cut		Cut of pit. Oval. Vertical sides, flat base. 0.6m long, 0.69m wide, 0.25m deep.		3	
Area A	3006	fill	3005	Single fill of pit. Light brown grey sand clay. Occasional charcoal flecks		3	
Area A	3007	cut		Cut of ditch terminus. U-shaped profile. NW-SE orientation. 0.51m wide, 0.6m deep		3	
Area A	3008	fill	3007	Single fill of ditch. Light brown grey with grey blue mottling. Sand clay. Occasional charcoal		3	
Area A	3009	cut		Cut of ditch. U-shaped profile	A13	3.2	
Area A	3010	fill	3009	Single fill of ditch. Mid grey brown. Silty clay. Occasional charcoal flecks	A13	3.2	C11-C13
Area A	3011	cut		Cut of ditch. Steep sides. N-S orientation. 1.11m wide >0.1m deep	A50	3.1	
Area A	3012	fill	3011	Single fill of ditch. Mid grey brown silt clay. Occasional charcoal	A50	3.1	C11-C13
Area A	3013	cut		Cut of ditch. Steep sides, NW-SE orientation. 0.17m deep.	A41	3.2	
Area A	3014	fill	3013	Single fill of ditch. Mid grey brown silt clay. Moderate inclusions of charcoal.	A41	3.2	C11-C13
Area A	3015	cut		Cut of ditch. W side steep concave, E side convex. Flat base11m wide, 0.52m deep.	A50	3.1	
Area A	3016	fill	3015	1st fill of ditch. Blue grey Silt clay. Occasional charcoal	A50	3.1	C11-C13
Area A	3017	fill	3015	2nd fill of ditch. grey brown with yellow brown and blue grey Silt/clay. Moderate charcoal and stone	A50	3.1	C11-C13
Area A	3018	cut		Cut of ditch. SE concave moderately sloping side. NW side convex steep side. Flat base. N-S orientation turning NE. 1.7m wide, 0.4m deep	A50	3.1	
Area A	3019	fill	3018	1st fill of ditch. Mid yellow brown, silt/clay. Occasional charcoal flecks	A50	3.1	C11-C13
Area A	3020	fill		2nd fill of ditch. Mid grey brown with yellow brown and blue grey patches. Silt/clay. charcoal flecks.	A50	3.1	C11-C13
Area A	3021	fill	3018	3rd fill of ditch. Mid grey brown with yellow brown patches. Silt/clay. Moderate charcoal flecks	A50	3.1	C11-C13
Area A	3022	cut		Cut of ditch. U-shaped profile. 0.99m wide, 0.38m deep	A40	3.2	
Area A	3023	fill	3022	Single fill of ditch. grey brown with mottled blue clay. Silty clay.	A40	3.2	C11-C13
Area A	3024	cut		Cut of ditch. Gradually sloping, concave sides and flat base. 0.98m wide, 0.32m deep.		3	
Area A	3025	fill	-	Single fill of ditch. Mid greyish brown, silty clay. 0.34m long, 0.98m wide, 0.32m deep.		3	C11-C13
Area A	3026	cut		Cut of pit. U-shaped profile. 0.6m wide, 0.16m deep.		3	
Area A	3027	fill	-	Single fill of pit. Light greyish brown silty clay.		3	C11-C13
Area A	3028	cut		Cut of ditch. Sloping concave sides, flat base. NW-SE orientation. 1.35m wide, 0.41m deep	A40	3.2	

Area	Context	type	Fill	Description	Feature label	Period	Spot date
Area A	3029	fill	3028	Single fill of ditch. Mid greyish brown silty clay.	A40	3.2	C11-C13
Area A	3030			Void			
Area A	3031			Void			
Area A	3032			Void			
Area A	3033	_		Void			
Area A	3034	cut		Cut of pit. Sloping concave sides, flat base. N-S orientation. 0.71m long, 0.67m wide, 0.13m deep.		3	
Area A	3035	fill	3034	Single fill of pit. Light yellowish grey silty clay.		3	C11-C13
Area A	3036			Cut of pit. Sloping, concave sides. Flat base. 1.01m wide, 0.25m deep.		3	
Area A	3037			1st fill of pit. Light greyish brown silty clay.		3	
Area A	3038		3036	2nd fill of pit. Light yellowish grey, silty clay.		3	C11-C13
Area A	3039	cut		Cut of pit. Steeply sloped, concave sides. Concave base. N-S orientation. 0.72m wide, 0.15m deep.		3	
Area A	3040	fill	3039	Single fill of pit. Light yellowish brown, silty clay.		3	
Area A	3041	cut		Cut of ditch. Concave shallow sides, flat base. NE-SW orientation. 0.66m wide, 0.19m deep	A57	3.1	
Area A	3042	fill	3041	Single fill of ditch. Light brown grey silty clay. charcoal flecks	A57	3.1	C11-C13
Area A	3043	cut		Cut of ditch. NW-SE orientation. 0.26m wide, 0.04m deep.	A58	3.1	
Area A	3044	fill	3043	Single fill of ditch. Light greyish brown silty clay. Moderate inclusions of charcoal flecks.	A58	3.1	
Area A	3045	cut		Cut of ditch. NE-SW orientation. 0.47m wide, 0.15m deep.	A57	3.1	
Area A	3046	fill	3045	Single fill of ditch. Light brown grey silty clay.  Moderate charcoal flecks	A57	3.1	
Area A	3047	cut		Cut of ditch. Concave sides, NE-SW orientation. 0.28m wide 0.08m deep.	A57	3.1	
Area A	3048	fill	3047	Single fill of ditch. Light brown grey silty clay.  Moderate charcoal flecks	A57	3.1	C11-C13
Area A	3049	cut		Cut of ditch. U-shaped profile NW-SE orientation. 0.27m wide, 0.09m deep.	A58	3.1	
Area A	3050	fill	3049	Single fill. Of ditch. Light greyish brown silty clay. Moderate inclusions of charcoal flecks.	A58	3.1	
Area A	3051	cut		Cut of ditch. Gentle concave slope, flat base. SE-NW orientation.	A54	3.2	
Area A	3052	fill	3051	Single fill of ditch. Pale brownish yellow, silty clay.	A54	3.2	
Area A	3053	_		Cut of ditch. Gentle, concave sides. N-S orientation. >0.14m wide, 0.08m deep.	A56		
Area A	3054	fill	3053	Single fill of ditch. Mid yellowish brown silty clay. Rare inclusions of manganese flecks.	A56	3.2	
Area A	3055	cut		Cut of ditch. Gentle sloped sides, flat-concave base. >0.27m wide, 0.04m deep.	A54	3.2	1
Area A	3056	fill	3055	Single fill of ditch. brownish yellow, silty clay	A54	3.2	
Area A	3057	_		Cut of ditch. Concave, symmetrical sides. Flat base. 0.55m wide, 0.07m deep.	A55	_	
Area A	3058	fill	3057	Single fill of ditch. yellowish grey clay silt.	A55	3.2	C11-C13
Area A	3059			Cut of possible posthole/pit. Moderate, straight sloped sides. Base tapers to point. 0.8m wide, 0.3m deep.		3	
Area A	3060	fill	3059	Single fill of possible posthole/pit. Light greyish yellow clayey silt.		3	
Area A	3061	cut		Cut of ditch. U-shaped profile. N-S orientation. 0.27m wide, 0.14m deep.	A55	3.2	

Area	Context	type	Fill of	Description	Feature label	Period	Spot date
Area A	3062	fill	3061	Single fill of ditch. Medium greyish yellow clay silt.	A55	3.2	C11-C13
Area A	3063	cut		Cut of ditch. U-shaped profile NWN-SES orientation. 0.41m wide, 0.17m deep.	A56	3.2	
Area A	3064	fill	3063	Single fill of ditch. Light yellowish grey, clayey silt.	A56		C11-C13
Area A	3065	cut		Cut of ditch. Gentle sides, flat base. NW-SE orientation. 0.43m wide, 0.05m deep.	A53	3	
Area A	3066	fill	3065	Single fill of ditch. Mid grey brown silty clay	A53	3	
Area A	3067	cut		Cut of ditch. U-shaped profile. NW-SE orientation. 0.49m wide, 0.06m deep.	A53	3	
Area A	3068	fill	3067	Single fill of ditch. Mid grey brown silty clay.	A53	3	
Area A	3069	cut		Cut of ditch. Gentle sides, flat base. NW-SE orientation. 0.36m wide, 0.07m deep.	A53	3	
Area A	3070	fill	3069	Single fill of ditch. Mid grey brown silty clay.	A53	3	
Area A	3071	cut		Cut of ditch. U-shaped profile, N-S orientation. >0.33m wide, 0.11m deep.	A55	3.2	
Area A	3072	fill	3071	Single fill of ditch. Dark grey brown silty clay.	A55	3.2	
Area A	3073	cut		Cut of ditch. U-shaped profile. N-S orientation. 0.72m wide, 0.23m deep.	A56	3.2	
Area A	3074	fill	3073	Single fill of ditch. Mid yellowish brown silty clay.	A56	3.2	C11-C13
Area A	3075	cut		Cut of ditch. U-shaped profile. N-S orientation. >0.3m wide, 0.09m deep	A55	3.2	
Area A	3076	fill	3075	Single fill of ditch. grey brown silty clay. Rare charcoal flecks.	A55	3.2	
Area A	3077	cut		Cut of ditch. U-shaped profile. 0.61m wide, 0.11m deep.	A54	3.2	
Area A	3078	fill	3077	Single fill of ditch. brown yellow, silty clay	A54	3.2	
Area A	3079	cut		Cut of ditch. Gentle sloped concave sides. Flat base. SW-NE orientation.	A54	3.2	
Area A	3080	fill	3079	Single fill of ditch. Light brownish yellow, silty clay.	A54	3.2	
Area A	3081	fill	3082	Single fill of pit. Mid brown grey clay silt		3	
Area A	3082	cut		Cut of pit. Straight sides, flat base. 0.88m long, 0.85m wide, 0.24m deep.		3	
Area A	3083	cut		Cut of ditch. Convex, steep sided sides. Flat base. NE-SW orientation. 0.58m wide, 0.21m deep.	A64	3.1	
Area A	3084	fill	3083	Single fill of ditch. Light greyish brown silty clay.	A64	3.1	
Area A	3085	cut		Cut of ditch. U-shaped profile. NE-SW orientation. 1.11m wide, 0.28m deep.	A13	3.2	
Area A	3086	fill	3085	Single fill of ditch. Light, mid greyish brown. Silty clay.	A13	3.2	C11-C13
Area A	3087	cut		Cut of ditch. U-shaped profile. E-W orientation. 1.35m wide, 0.34m deep.	A50	3.1	
Area A	3088	fill	3087	Single fill of ditch. grey brown with some orange. Silty clay	A50	3.1	C11-C13
Area A	3089	cut		Cut of ditch. U-shaped profile. E-W orientation. >0.52m wide, 0.28m deep.	A50	3.1	
Area A	3090		3089	1st fill of ditch. Mid greyish blue silty clay.	A50		
Area A	3091	1	3089	2nd fill of ditch. Mid greyish brown silty clay.	A50	3.1	
Area A	3092			Cut of pit. Sloping concave sides, flat base. 0.62m wide, 0.31m deep.		3	
Area A	3093		3092	Single fill of pit. Light greyish orange silty clay.		3	C11-C13
Area A	3094	cut		Cut of pit. Sloping, concave sides. Rounded concave base. 2.63m long, 1.29m wide, 0.38m deep.		3	
Area A	3095	fill	3094	1st fill of pit. Light greyish orange silty clay.		3	C11-C13
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Area	Context	type	Fill	Description	Feature label	Period	Spot date
Area A	3096	fill	3094	2nd fill of pit. Light greyish brown silty clay.		3	
Area A	3097	cut		Cut of ditch. U-shaped profile NW-SE orientation. 0.88m wide, 0.15m deep.	A13	3.2	
Area A	3098	fill	3097	Single fill of ditch. Mid brown clay.	A13	3.2	C11-C13
Area A	3099	cut		Cut of ditch. S side vertical straight, N side moderately steep straight. Flat base. E-W orientation. 0.93m wide, 0.46m deep.	A18	3.2	
Area A	3100	1	3099	1st fill of ditch. Mid brownish grey, silty clay.	A18		C11-C13
Area A	3101	fill	3099	2nd fill of ditch. Mid greyish brown silty clay.	A18	3.2	C11-C13
Area A	3102	cut		Cut of ditch. U-shaped profile. SE-NW orientation. 0.56m wide, 0.14m deep.	A56		
Area A	3103	fill	3102	Single fill of ditch. Light yellowish grey silty clay.	A56	3.2	
Area A	3104	cut		Cut of ditch terminus. steep sides. Flat base. NW-SE orientation. 0.2m wide, 0.11m deep.	A56	2	
Area A	3105	fill	3104	Single fill of ditch. Light greyish yellow, clayey silt.	A56	2	
Area A	3106	cut		Cut of ditch. U-shaped profile. E-W orientation. >0.31m wide, 0.08m deep.	A50	3.1	
Area A	3107	fill	3106	Single fill of ditch. greyish orange, silty clay.	A50	3.1	
Area A	3108	cut		Cut of ditch. U-shaped profile. E-W orientation. 0.42m wide, 0.15m deep.	A50	3.1	
Area A	3109	fill	3108	Single fill of ditch. Light greyish orange silty clay.	A50	3.1	C11-C13
Area A	3110	fill	3111	Single fill of ditch. Light orange grey silty clay.	A54	3.2	MC1-C2
Area A	3111	cut		Cut of ditch. U-shaped profile. NNW-SSE orientation. 0.85m wide, 0.15m deep.	A54	3.2	
Area A	3112	fill	3113	Single fill of ditch. orange/yellow brown. Silty clay	A56	3.2	
Area A	3113	cut		Cut of ditch. U-shaped profile. NW-SE orientation. 0.32m wide, 0.08m deep.	A56	3.2	
Area A	3114	fill	3115	Single fill of ditch. Light orange/yellow-brown. Silty sandy clay.	A55	3.2	
Area A	3115	cut		Cut of ditch. Moderate sides. Flat base. N-S orientation. 0.9m long, 0.3m wide, 0.03m deep.	A55	3.2	
Area A	3116	fill	3117	Single fill of ditch. Light orange brown, sandy clay	A54	3.2	C11-C13
Area A	3117	cut		U-shaped profile. SSE-NNW orientation. 0.5m wide, 0.1m deep.	A54	3.2	
Area A	3118	cut		Cut of ditch terminus. Gentle sides, flat base. E-W orientation. 0.4m wide, 0.08m deep.	A67	3.2	
Area A	3119	fill	3118	Single fill of ditch. yellowish grey, sandy clay	A67	3.2	RB
Area A	3120	cut		Cut of ditch. U-shaped profile. NW-SE orientation. 0.59m wide, 0.17m deep.	A67	3.2	
Area A	3121	fill	3120	Single fill of ditch. yellow grey sandy clay.	A67	3.2	RB
Area A	3122	cut		Cut of ditch. U-shaped profile. NW-SE orientation. 0.62m wide. 0.1m deep.	A67	3.2	
Area A	3123	fill	3122	Single fill of ditch. Pale yellowish grey, sandy clay.	A67	3.2	C11-C13
Area A	3124			Cut of pit. Gentle, irregular sloped sides. Flat irregular base. 2.82m long 1.02m wide. 0.21m deep.		3	
Area A	3125	fill	3124	1st f fill of pit. Light yellowish brown silty clay.		3	
Area A	3126	fill	3124	Dark brownish black. Silty clay.		3	
Area A	3127	cut		Cut of pit. Gentle sides, irregular base. N-S orientation. 1.42m long, 1.08m wide, 0.15m deep.		3	
Area A	3128	fill	3127	Single fill of pit. Mid Sandy clay.		3	C11-C13
Area A	3129	cut		Cut of ditch. Steep sloping, slight convex sides. Flat base. NE-SW orientation.	A50	3.1	
Area A	3130	fill	3129	Single fill of ditch. Mid light yellow brown. Silty clay.	A50	3.1	

Area	Context	type	Fill of	Description	Feature label	Period	Spot date
Area A	3131	cut		Cut of ditch. U-shaped profile. NE-SW orientation. 1.06m wide, 0.57m deep.	A50	3.1	
Area A	3132	fill	3131	1st fill of ditch. Light yellow blue clay.	A50	3.1	
Area A	3133	fill	3131	2nd fill of ditch. Mid grey brown silt clay, occasional charcoal	A50	3.1	
Area A	3134	cut		Cut of ditch terminus. moderate sides. Flat base. N-S orientation. 0.64m wide 0.08m deep.	A55		
Area A	3135	fill	3134	Single fill of ditch. Light yellowish grey clayey silt.	A55	3.2	
Area A	3136	cut		Cut of ditch. Moderate, straight sides. Flat, narrow base. N-S orientation.	A50	3.1	
Area A	3137	fill	3136	Single fill of ditch. Mid greyish brown silty clay.	A50		C11-C13
Area A	3138			Cut of ditch. Moderate convex steep sides. Flat base. N-S orientation. 1.16m wide, 0.43m deep.	A59	3.1	
Area A	3139	fill	3138	Single fill of ditch. Light greyish brown clayey silt.	A59		
Area A	3140			Cut of ditch. Moderately steep, concave sides. Flat base. N-S orientation. 1.25m wide, 0.29m deep.	A51		
Area A	3141		3140	Single fill of ditch. Light brown clay sand.	A51		C11-C13
Area A	3142			Cut of ditch U-shaped profile. E-W orientation. 0.36m wide, 0.11m deep.	A50		
Area A	3143	_	3142	Single fill of ditch. Mid greyish orange silty clay.	A50		C11-C13
Area A	3144			Cut of ditch U-shaped profile. E-W orientation. 0.38m wide, 0.13m deep.	A50		
Area A	3145		3144	Single fill of ditch. Mid greyish orange silty clay.	A50	3.1	C1
Area A	3146	cut		Cut of pit. Gentle sloped sides, flat base. E-W orientation. 0.4m wide, 0.07m deep.		3	
Area A	3147	fill	3146	Single fill of pit. Light yellowish grey clayey silt. manganese flecks.		3	
Area A	3148	cut		Cut of ditch U-shaped profile. SE-NW orientation. 1.11m wide, 0.22m deep.	A66	3.2	
Area A	3149	fill	3148	Single fill of ditch. yellowish brown sandy clay. Inclusions of manganese and charcoal flecks.	A66	3.2	C11-C13
Area A	3150	fill	3148	Single fill of ditch. Greyish brown silty clay. Rich inclusions of charcoal	A66	3.2	C11-C13
Area A	3151	fill	3153	2nd fill of ditch. Light brown grey silty clay.	A66	3.2	C11-C13
Area A	3152	fill	3153	1st fill of ditch. Light yellow brown to brown grey. Silty clay. manganese flecks.	A66		
Area A	3153	cut		cut of ditch U-shaped profile. W-E orientation. 0.45m wide, 0.27m deep.	A66	3.2	
Area A	3154		3155	Single fill of possible tree throw pit. Light brown grey silty clay.		3	C11-C13
Area A	3155	cut		Cut of possible tree throw pit. Concave sloping sides. Flat base. W-E orientation. 1.8m long, 1.4m wide, 0.06m deep.		3	
Area A	3156	fill	3157	Single fill of ditch. Light brown grey silty clay.	A66	3.2	C11-C13
Area A	3157	cut		Cut of ditch U-shaped profile. NW-SE orientation. 0.52m wide, 0.1m deep.	A66	3.2	
Area A	3158	cut		Cut of ditch U-shaped profile S-NW orientation. 0.46m wide, 0.23m deep.	A52	3.1	
Area A	3159	fill	3158	Single fill of ditch. Mid grey brown sand clay. Occasional inclusions of mid sub angular stone.	A52	3.1	C11-C13
Area A	3160	cut		Cut of ditch. Steep to moderate sides, flat base. S-NW orientation. 0.41m wide, 0.19m deep.	A50	3.1	
Area A	3161	fill	3160	Single fill of ditch. Light brown grey, silt clay.	A50	3.1	C11-C13
Area A	3162	cut		Cut of ditch. Steep-moderate sides, flat base. SE-NW orientation. 0.55m wide, 0.14m deep.	A59	3.1	

Area	Context	type	Fill of	Description	Feature label	Period	Spot date
Area A	3163	fill	3162	Single fill of ditch. Mid brown grey sand clay. Occasional inclusions of sub angular stone.	A59	3.1	C11-C13
Area A	3164	cut		Cut of ditch. Steep-shallow sides, flat base. S-NW orientation. 1m wide, 0.19m deep	A51	3.1	
Area A	3165	fill	3164	Single fill of ditch. Mid brown grey sand clay. Occasional inclusions of small stone.	A51		C11-C13
Area A	3166	cut		Cut of ditch terminus. Gradual sides, flat-concave base. S-NW orientation. 0.51m wide, 0.21m deep.	A52	3.1	
Area A	3167	fill	3166	Single fill of ditch. Mid grey brown sand clay. Occasional inclusions of large stones.	A52	3.1	
Area A	3168	cut		Cut of ditch terminus. Gentle sloped sides, flat base. SE-NW orientation. 0.3m wide, 0.06m deep.	A66	3.2	
Area A	3169	fill	3168	Single fill of ditch. yellowish brown, sandy clay.	A66	3.2	C11-C13
Area A	3170	cut		Cut of ditch U-shaped profile. E-W orientation. 1.18m wide 0.37m deep.	A30	3.1	
Area A	3171	fill	3170	Single fill of ditch. brown orange. Silty clay	A30	3.1	
Area A	3172	cut		Cut of ditch U-shaped profile. S-N orientation. 2.03m wide 0.44m deep.	A22	3.1	
Area A	3173	fill	3172	Single fill of ditch. Mid brownish orange. purple and blue tints. Silty clay and sand.	A22	3.1	
Area A	3174	cut		Cut of ditch. Gently sloped sides. flat base. N-S orientation. 0.78m wide, 0.13m deep.	A54	3.2	
Area A	3175	fill	3174	Single fill of ditch. Mid greyish orange clay sand.	A54	3.2	RB
Area A	3176	cut		Cut of pit. Gentle sloped sides, flat base. 0.7m wide, 0.09m deep.		3	
Area A	3177	fill	3176	Single fill of pit. Dark greyish brown silty clay. charcoal flecks.		3	C11-C13
Area A	3178	cut		Cut of pit. Moderate rounded symmetrical sloped sides, flat base. E-W orientation. 2.1m long, 1.21m wide, 0.1m deep.		3	
Area A	3179	fill	3178	Single fill of pit. Medium yellowish grey, clayey silt.		3	C11-C13
Area A	3180	cut		Cut of ditch terminus. Moderately steep, slightly concave sides. Flat base. NW-SE orientation. 0.53m wide, 0.32m deep.	A51	3.1	
Area A	3181	fill	3180	Single fill of ditch. Mid greyish brown sandy clay	A51	3.1	C11-C13
Area A	3182	deposit		Deposit in natural hollow. Yellow brown clay sand.		3	C11-C13
Area A	3183			2nd fill of ditch. Mid greyish brown sandy clay.		3.2	LIA-C1
Area A	3184	_	3185	1st fill of ditch. orang brown/blue grey sandy clay.	A22		
Area A	3185			Cut of ditch U-shaped profile. N-S orientation. 1.98m wide, 0.73m deep.	A22		
Area A	3186			Cut of ditch U-shaped profile. E-W orientation. 1.24m wide, 0.5m deep.	A49		
Area A	3187	fill	-	1st fill of ditch. Mid orange brown clay.	A49	<del>.</del>	C11-C13
Area A	3188	fill	3186	2nd fill of ditch. Mid grey with some orange and blue/grey mottling. Clay.	A49	3.2	
Area A	3189			3rd fill of ditch. Mid brown with blue and orange mottling. Clay.	A49		C11-C13
Area A	3190	1	3186	4th fill of ditch. Mid grey brown clay.	A49		
Area A	3191	cut		Cut of ditch U-shaped profile. E-W orientation. 1.07m wide, 0.45m deep.	A40	3.2	
Area A	3192	fill	3191	1st fill of ditch. Mid grey brown clay.	A40	3.2	C11-C13
Area A	3193		3191	2nd fill of ditch. Mid brown with mottling clay.	A40		C11-C13
Area A	3194			Cut of ditch U-shaped profile. E-W orientation. 1.44m wide, 0.5m deep.	A41		
Area A	3195	fill	3194	1st fill of ditch. Mid orange brown clay.	A41	3.2	C11-C13

Area	Context	type	Fill of	Description	Feature label	Period	Spot date
Area A	3196	fill	3194	2nd fill of ditch. Mid blue brown clay.	A41	3.2	C11-C13
Area A	3197	fill	3194	3rd fill of ditch. Mid grey brown with blue and orange mottling. Clay.	A41	3.2	C11-C13; C18-C19
Area A	3198			Cut of ditch. Moderate sloped sides, flat base. NW-SE orientation. 1.85m wide, 0.86m deep.	A22	3.1	
Area A	3199	fill	3198	1st fill of ditch. Mid orangey grey sandy clay. 1% inclusions of charcoal	A22	3.1	
Area A	3200	fill	3198	2nd fill of ditch. Mid greenish brown clay. 1% inclusions of charcoal	A22	3.1	
Area A	3201	cut		Cut of ditch. Gentle slightly concave sides. Flat base. N-S orientation. 0.26m wide, 0.05m deep.	A59	3.1	
Area A	3202	fill	3201	Single fill of ditch. Mid greyish brown, clayey silt.	A59	3.1	C11-C13
Area A	3203			Cut of ditch. Steep sides, flat base. S-NW orientation. 0.31m wide, 0.07m deep.	A50		
Area A	3204	fill	3203	Single fill of ditch. Light brown grey silt clay.	A50	3.1	
Area A	3205	cut		Cut of pit. Gentle straight sloped sides. Flat base. NE-SW orientation. 1.25m long, 0.36m wide, 0.1m deep.		3	
Area A	3206	fill	3205	Single fill of pit. Light yellowish grey clayey silt. 5% inclusions of manganese flecks.		3	C11-C13
Area A	3207	cut		Cut of ditch terminus. S side concave gently sloping. Slightly concave base. E-W orientation. 1.03m wide, 0.18m deep.	A49	3.2	
Area A	3208	fill	3207	Single fill of ditch. grey brown with blue grey. Silt clay. Rare inclusions of charcoal flecks.	A49	3.2	C11-C13
Area A	3209	cut		Cut of ditch U-shaped profile. S-NW orientation. 0.7m wide, 0.23m deep	A52	3.1	
Area A	3210	fill	3209	Single fill of ditch. Mid grey brown clay silt.	A52	3.1	
Area A	3211	cut		Cut of ditch U-shaped profile. SE-NW orientation. 0.31m wide, 0.17m deep.	A31	0	
Area A	3212	fill	3211	Single fill of ditch terminus. Mid greenish brown with orange flecks. Sandy clay.	A31	0	
Area A	3213	cut		Cut of ditch U-shaped profile. E-W orientation. 1.04m wide, 0.3m deep.	A39	3.2	
Area A	3214	fill	3213	Single fill of ditch. Light yellowish brown sandy clay. Rare inclusions of charcoal flecks.	A39	3.2	
Area A	3215	cut		Cut of ditch U-shaped profile. W-E orientation. 0.45m wide, 0.21m deep.	A39		
Area A	3216	fill	3215	Single fill of ditch. Light yellowish brown sandy clay. Rare inclusions of charcoal flecks.	A39		
Area A	3217	cut		Cut of ditch. Stepped sides, irregular base. 3m wide, 0.72m deep.	A22		
Area A	3218		3217	1st fill of ditch. Mid greyish brown silty clay.	A22	<del>.</del>	
Area A	3219			2nd fill of ditch. Mid greyish purple silty clay	A22		
Area A	3220			3rd fill of ditch. Mid orangey brown. Blue and bright orange inclusions. Silty clay.	A22	3.1	
Area A	3221	<del>-</del>	3217	4th fill of ditch. Mid orangey brown silty clay.	A22		C11-C13
Area A	3222			Cut of ditch. Steeply sloping concave sides. Flat base. E-W orientation. 0.91m wide, 0.31m deep.	A41		
Area A	3223		_	1st fill of ditch mid orangey blue, silty clay	A41		
Area A	3224		3222	2nd fill of ditch. Mid orangey blue, silty clay. 20% inclusions of redeposited bright orange natural.	A41		C11-C13
Area A	3225			Cut of ditch. U-shaped profile. NW-SE orientation. 0.5m wide, 0.07m deep.	A28		
Area A	3226	fill	3225	Single fill of ditch. Mid orange brown silty clay	A28	3.3	

Area	Context	type	Fill	Description	Feature label	Period	Spot date
Area A	3227	cut		Cut of ditch. U-shaped profile. 1.6m wide, 0.62m deep.	A30	3.1	
Area A	3228	fill	3227	1st fill of ditch. Mid green grey clay	A30	3.1	
Area A	3229	fill	3227	2nd fill of ditch. Mid orange brown silty clay.	A30	3.1	
Area A	3230	fill	3227	3rd fill of ditch. Dark purple grey clay.	A30	3.1	MIA
Area A	3231	fill	3227	4th fill of ditch. Mid green grey clay. 3% inclusions of charcoal	A30	3.1	
Area A	3232	fill	3227	5th fill of ditch. Mid orange brown silty clay.	A30	3.1	
Area A	3233	cut		Cut. Gradually sloping sides, flat base. 1.5m long, 0.142m wide, 0.17m deep.		3.1	
Area A	3234	fill	3233	Single fill. Mid orangey brown silty clay and sand.		3.1	C11-C13
Area A	3235	cut		Cut of ditch. Flat base. NW-SE orientation. 0.5m wide. 0.1m deep.	A31	0	
Area A	3236	fill	3235	Single fill of ditch. Mid greenish brown sandy clay.	A31	0	
Area A	3237			Cut of ditch. SE side moderate slope. NE-SW orientation. 1.6m wide 0.18m deep.	A30		
Area A	3238	fill	3237	Single fill of ditch. Mid greenish brown with orange flecks. Sandy clay.	A30	3.1	
Area A	3239	cut		Cut of pit. S side steep straight slope. N side gentle straight slope. Flat base. N-S orientation. 0.6m long, 0.49m wide, 0.14m deep.		3	
Area A	3240	fill	3239	Single fill of pit. Dark yellowish grey clayey silt. 5% manganese flecks.		3	C11-C13
Area A	3241	cut		Cut of pit or possible posthole. SW side straight gentle slope. NE side concave gentle slope. Flat base. NE-SW orientation.		2	
Area A	3242	fill	3241	Single fill of pit or posthole. yellow grey clay silt.		2	C11-C13
Area A	3243	fill	3244	Single fill of ditch. Light brown grey. Silty clay.	A35	3.2	
Area A	3244	cut		Cut of ditch. U-shaped profile. W-E orientation. 2m wide, 0.18m deep.	A35		
Area A	3245			Cut of ditch. U-shaped profile. NW-SE orientation. 023m wide, 0.18m deep.	A28		
Area A	3246		3245	Single fill of ditch. Mid brown sandy clay.	A28		
Area A	3247			Cut of ditch. U-shaped profile. N-S orientation. 1.53m wide, 0.75m deep.	A30		
Area A	3248			1st fill of ditch. Light greyish brown silty clay.	A30		
Area A	3249			2nd fill of ditch. Mid greyish brown sandy clay.	A30		LIA-C1
Area A	3250	_		3rd fill of ditch. Mid brownish grey, silty clay.	A30		
Area A	3251		3247	4th fill of ditch. Light greyish brown, silty clay.	A30		
Area A	3252			Cut of ditch. U-shaped profile. NW-SE orientation. 0.67m wide, 0.18m deep.	A29		
Area A	3253		3252	Brown grey silty clay	A29		
Area A	3254	_		Cut of ditch. U-shaped profile	A31		
Area A	3255		-	Brown-grey silty clay	A31		
Area A	3256	_	_	4th fill of ditch. Light orange bluish grey sandy clay.	A30	_	
Area A	3257		<del>-</del>	3rd fill of ditch. Dark brownish grey sandy clay.	A30	_	<u> </u>
Area A	3258		-	2nd fill of ditch. Mid orangey grey, sandy clay.	A30		LIA-C1
Area A	3259	-	3260	1st fill of ditch. Mid orange blue grey. Sandy clay.	A30		LIA-C1
Area A	3260			Cut of ditch terminus. U-shaped profile. N-S orientation. 1.12m wide, 0.58m deep.	A30		
Area A	3261			Cut of ditch. Gentle sides, flat base. NW-SE orientation. 0.41m wide, 0.05m deep.	A28		
Area A	3262	fill	3261	Single fill of ditch. Mid orange brown sandy clay.	A28	3.3	

Area	Context	type	Fill	Description	Feature label	Period	Spot date
Area A	3263	cut		Cut of ditch. U-shaped profile. NW-SE orientation. 0.36m wide, 0.09m deep.	A29	0	
Area A	3264	fill	3263	Single fill of ditch. brown grey with dark orange and black mottles. Silty sandy clay	A29	0	
Area A	3265	cut		Cut of ditch. NW side moderate. SE side moderate/steep. Flat base. N-S turning SW-NE orientation. 1.69m wide, 0.55m deep.	A30	3.1	
Area A	3266	fill	3265	1st fill of ditch. Mid yellow brown silt clay. rare charcoal flecks.	A30	3.1	
Area A	3267	fill	3265	2nd fill of ditch. Mid orange brown silt sand.	A30	3.1	
Area A	3268	fill	3265	3rd fill of ditch. Mid grey brown. Patches of blue grey. Silt clay. Occasional charcoal	A30	3.1	
Area A	3269		3265	4th fill of ditch. Dark yellow brown flecks. Sand silt. Frequent manganese	A30		LMIA-C1
Area A	3270	fill	3265	5th fill of ditch. Mid grey brown sand silt. Occasional manganese flecks.	A30	3.1	
Area A	3271	cut		Cut of small ditch. Flat base. N-S orientation. 0.65m wide total, 0.14m deep.	A29	0	
Area A	3272	fill	3271	Single fill of ditch. Mid orangey brown sandy clay.	A29	0	
Area A	3273	cut		Cut of ditch. N side steep, flat base. 0.4m wide, 0.17m deep.	A22	3.1	
Area A	3274	fill	3273	Single fill of ditch. green brown with orange	A22	3.1	
Area A	3275	cut		Cut of ditch. U-shaped profile. N-S orientation. 0.75m wide, 0.29m deep.	A34	3.2	
Area A	3276	fill	3275	1st fill of ditch. Light brown grey sandy clay Occasional charcoal.	A34	3.2	
Area A	3277	fill	3275	2nd fill of ditch. Light greyish brown, orange tinge throughout. Sandy clay. Occasional charcoal.	A34	3.2	
Area A	3278	cut		Cut of ditch. Convex shallow sided, flat base. N-S orientation. 1.45m wide, 0.35m deep.	A34	3.2	
Area A	3279	fill	3278	1st fill of ditch. Light orangey brown silty sand with occasional charcoal.	A34	3.2	
Area A	3280	fill	3278	2nd fill of ditch. Light grey brown sandy clay. Occasional inclusions of charcoal.	A34	3.2	C11-C13
Area A	3281	fill	3278	3rd fill of ditch. Mid orangey grey, clayey sand. Occasional charcoal.	A34	3.2	
Area A	3282	cut		Cut of ditch. NE side convex, moderately sloped sides. Flat base. NW-SE orientation. 1.4m wide, 0.36m deep.	A34	3.2	
Area A	3283	fill	3282	1st fill of ditch. Mid orangey grey clayey sand. Occasional inclusions of charcoal.	A34	3.2	
Area A	3284	fill	3282	2nd fill of ditch. Light greyish brown sandy clay. Occasional inclusions of charcoal.	A34	3.2	
Area A	3285	cut		Cut of ditch. U-shaped profile. 2.41m wide. 0.21m deep.	A35	3.2	
Area A	3286	fill	3285	Single fill of ditch. Mid brown grey sandy silty clay. Occasional inclusions of charcoal.	A35	3.2	
Area A	3287	cut		Cut of ditch. U-shaped profile. N-S orientation. 2.47m wide 0.21m deep.	A34	3.2	
Area A	3288	fill	3287	Single fill of ditch. Mid orangey grey clayey sand. Occasional inclusions of charcoal.	A34	3.2	C11-C13
Area A	3289	cut		Cut of ditch. U-shaped profile. NW-SE orientation 0.54m wide, 0.12m deep.	A28	3.3	
Area A	3290	fill	3289	Single fill of ditch. Mid orangey brown, sandy clay.	A28	3.3	
Area A	3291	cut		Cut of ditch. Gentle, straight sides. N-S orientation. 0.43m wide, 0.2m deep.	A18	3.2	

Area	Context	type	Fill	Description	Feature label	Period	Spot date
Area A	3292	fill	3291	Single fill of ditch. yellowish brown, clay sand.	A18	3.2	C11-C13
Area A	3293	cut		Cut of ditch. U-shaped profile. NW-SE orientation. 0.75m wide, 0.28m deep.	A18	3.2	
Area A	3294	fill	3293	Single fill of ditch. Light greyish brown, sandy clay.	A18		C11-C13
Area A	3295	cut		Cut of ditch. U-shaped profile. E-W orientation. 0.8m wide, 0.3m deep.	A7	3.3	
Area A	3296	fill	3295	Single fill of ditch. Mid greyish brown. Silty clay.		3.3	
Area A	3297			Cut of ditch. U-shaped profile. E-W orientation. 0.9m wide, 0.32m deep.	A7	3.3	
Area A	3298	fill	3297	Single fill of ditch. Mid grey brown, silty clay.		3.3	
Area A	3299			Cut of ditch. U-shaped profile. E-W orientation. 0.73m wide, 0.5m deep.	A22		
Area A	3300	fill	3299	1st fill of ditch. Mid greyish brown, silty clay. Large boulders.	A22	3.1	
Area A	3301	fill	3299	2nd fill of ditch. Mid orange brown, orange clay inclusions. Silty clay. manganese flecks.	A22	3.1	
Area A	3302	cut		Cut of ditch. Straight sides, rounded base. NW-SE 0.67m wide, 0.18m deep	A18	3.2	
Area A	3303	fill	3302	Single fill of ditch. Light greyish brown sandy clay.	A18	3.2	C11-C13
Area A	3304	cut		Cut of furrow. NW-SE orientation		4	
Area A	3305	fill	3304	Single fill of furrow. Mid green grey clay.		4	C11-C13
Area A	3306	cut		Cut of ditch terminus. Moderate sides. Concave base. NE-SW orientation. 0.9m wide, 0.12m deep.	A19	3.3	
Area A	3307	fill	3306	Single fill of ditch terminus. Dark brown grey with black and dark orange mottles. Silty sandy clay.	A19	3.3	C11-C13
Area A	3308	cut		Cut of ditch. NE side gently sloping shallow, flat base. NW-SE orientation. 0.55m wide, 0.1m deep.	A28	3.3	
Area A	3309	fill	3308	Single fill of ditch. Mid grey brown with patches of blue and yellow clay. Silt clay.	A28	3.3	
Area A	3310	cut		Cut of ditch. moderately sides. Flat base. N-S turning SW-NE orientation.	A30	3.1	
Area A	3311	fill	3310	Single fill of ditch. Mid grey brown with flecks of yellow. Silt/clay.	A30	3.1	
Area A	3312	cut		Cut of ditch. Concave gentle sloped sides. Concave base. 1.9m wide, 0.79m deep.	A22	3.1	
Area A	3313	fill	3312	1st fill of ditch. yellow orange clay sand	A22	3.1	
Area A	3314	fill	3312	2nd fill of ditch. orange yellow sandy clay	A22	3.1	
Area A	3315	fill	3312	3rd fill of ditch. Pale orange yellow, clay sand.	A22	3.1	C11-C13
Area A	3316	fill	3312	4th fill of ditch. Yellow sandy silt.	A22	3.1	
Area A	3317	cut		Cut of ditch. Concave sides. Rounded concave base. NE/SW orientation. 1.1m wide, 0.41m deep.	A22	3.1	
Area A	3318	fill	3317	1st fill of ditch. Mid-light orangey blue silty clay	A22	3.1	
Area A	3319		3317	2nd fill of ditch. Mid bluish orange silty clay	A22		RB
Area A	3320			cut of ditch. U-shaped profile. NE-SW orientation. >0.57m wide, 0.17m deep.	A21		
Area A	3321	fill	3320	Single fill of ditch. Mid bluish orange silty clay.	A21	3.1	
Area A	3322			Cut of ditch. U-shaped profile. NE-SW orientation. 1.59m wide, 0.35m deep.		3.3	
Area A	3323	<del></del>		Single fill of ditch. Mid bluish orange silty clay	A7	3.3	C11-C13
Area A	3324	fill	3325	Single fill of pit or natural hollow. brown with yellow orange hue and flecks of blue grey. Silty clay.		0	
Area A	3325	cut		Cut of pit or natural hollow. Moderately sloping sides and flat base. 2.4m wide, 0.25m deep.		0	

Area	Context	type	Fill of	Description	Feature label	Period	Spot date
Area A	3326	cut		Cut of ditch. U-shaped profile. NE-SW orientation. 0.8m wide, 0.23m deep.	A23	3.3	
Area A	3327	fill	3326	Single fill of ditch. Mid greyish brown Silty clay.	A23	3.3	
Area A	3328	fill	3329	Single fill of ditch. Mid orange brown sandy clay	A18	3.2	C11-C13
Area A	3329	cut		Cut of ditch. U-shaped profile. N-S orientation. >1m long excavated, 0.7m wide, 0.35m deep.	A18	3.2	
Area A	3330	cut		Cut of ditch. U-shaped profile. NE-SW orientation. 0.57m wide, 0.21m deep.	A23	3.3	
Area A	3331	fill		1st fill of ditch. grey yellow Silty clay. 25% inclusions of blue grey clay.	A23	3.3	
Area A	3332	fill	3330	2nd fill of ditch. Dark greyish yellow Silty clay.	A23	3.3	
Area A	3333	cut		Cut of ditch terminus. U-shaped profile. NE-SW orientation. 2m wide, 0.73m deep.	A22	3.1	
Area A	3334	fill	3333	1st fill of ditch. Light greyish yellow Silty clay.	A22	3.1	
Area A	3335	fill	3333	2nd fill of ditch. Mid greyish yellow clayey silt.	A22	3.1	ĺ
Area A	3336	fill	3333	3rd fill of ditch. Dark yellowish grey with orange flecks and grey blue flecks.	A22	3.1	
Area A	3337	cut		Cut of pit. Convex shallow sided, flat base. 0.92m wide, 0.36m deep.		3	
Area A	3338	fill	3337	Single fill of pit. Light orange grey sandy clay. Moderate inclusions of charcoal.		3	
Area A	3339	cut		Cut of pit. Moderately sloped convex sides, flat base. 1.28m wide, 0.25m deep.		3	
Area A	3340	fill	3339	Single fill of ditch. Light grey brown grey clay. Moderate inclusions of charcoal		3	
Area A	3341	cut		Cut of ditch terminus. Gentle sides, flat concave base. E-W orientation. 0.9m wide, 0.07m deep.	A35	3.2	
Area A	3342	fill	3341	Single fill of ditch terminus. orange yellow, clay sand.	A35	3.2	
Area A	3343	cut		Cut of ditch. U-shaped profile. W-E orientation. 0.8m wide, 0.17m deep.	A19	3.3	
Area A	3344	fill	3343	Single fill of ditch. Mid to light yellow grey, silty clay. Rare inclusions of charcoal	A19	3.3	C11-C13
Area A	3345	cut		Cut of ditch. U-shaped profile. E-W orientation. 0.89m wide, 0.16m deep.	A19	3.3	
Area A	3346	fill	3345	Single fill of ditch. Mid to light yellow grey. Silt clay. Rare flecks of charcoal.	A19	3.3	C11-C13
Area A	3347	cut		Cut of ditch. NE edge gentle side, SW edge steeped. Flat base. 0.92m wide, 0.25m deep	A18	3.2	
Area A	3348	fill	3347	Single fill of ditch. Mid orangey brown sandy clay.	A18	3.2	C11-C13
Area A	3349	cut		Cut of ditch. U-shaped profile. 0.82m wide, 0.23m deep.	A19	3.3	
Area A	3350	fill	3349	Single fill of ditch. Mid orange grey clay.	A19	3.3	Ī
Area A	3351	cut		Cut of ditch. U-shaped profile. E-W orientation. 0.67m wide, 0.22m deep.	A19	3.3	
Area A	3352	fill	3351	Single fill of ditch. Mid greenish grey clay.	A19	3.3	
Area A	3353			Cut of ditch. Steep sides, flat base. NE-SW orientation. 1.93m wide, 0.9m deep.	A22	_	
Area A	3354	fill	3353	1st fill of ditch. Dark blue grey clay.	A22	3.1	
Area A	3355	fill	-	2nd fill of ditch. Mid orange brown sandy clay.	A22		
Area A	3356	fill	3353	3rd fill of ditch. Light grey brown sandy clay.	A22	3.1	
Area A	3357	fill	3353	4th fill of ditch. Mid orange brown sandy clay.	A22		
Area A	3358	fill	3353	5th fill of ditch. Mid grey brown sandy clay.	A22	3.1	
Area A	3359	fill	3360	Single fill of ditch. Light yellow brown silty clay.	A35	3.2	

Area	Context	type	Fill of	Description	Feature label	Period	Spot date
Area A	3360	cut		Cut of ditch. U-shaped profile. W-E orientation. 1.05m wide, 0.09m deep.	A35	3.2	
Area A	3361	deposit		Deposit of mid brown grey clay silt, covering the fills of ditches [3365],[3367],[3370]		3	
Area A	3362	fill	3365	3rd fill of ditch. Light yellow brown sandy silty clay.	A36	3.2	
Area A	3363	fill	3365	2nd fill of ditch. Light yellow grey sandy silt	A36	3.2	
Area A	3364	fill	3365	1st fill of ditch. Light grey yellow clay silt.	A36	3.2	C11-C13
Area A	3365	cut		Cut of ditch. U-shaped profile. N-S orientation. 1.5m wide, 0.3m deep.	A36	3.2	
Area A	3366	fill	3367	Single fill of ditch. Mid orange grey sandy clay silt.	A36	3.2	
Area A	3367	cut		Cut of ditch. U-shaped profile. N-S orientation. 1.05m wide, 0.15m deep.	A36	3.2	
Area A	3368	fill	3370	2nd fill of ditch. Light yellow grey, clay sandy silt.	A36	3.2	
Area A	3369	fill	3370	1st fill of ditch. Light grey silty clay.	A36	3.2	
Area A	3370			Cut of ditch. U-shaped profile. N-S orientation. 1.2m wide, 0.24m deep.	A36	3.2	
Area A	3371	fill	3372	Single fill of ditch. Mid orange brown clay silt.	A36		C11-C13
Area A	3372	cut		Cut of ditch concave sides. Flat base. NW-SE orientation. 2.2m wide, 0.22m deep.	A36	3.2	
Area A	3373			2nd fill of ditch. Mid orange brown clay silt.	A36	<u> </u>	
Area A	3374		3375	1st fill of ditch. Mid brown grey silty clay.	A36		
Area A	3375	cut		Cut of ditch. U-shaped profile. NW-SE orientation. 1.2m wide, 0.26m deep.	A36		
Area A	3376		3378	2nd fill of ditch. Mid orange grey sandy silt.	A36		
Area A	3377	_	3378	1st fill of ditch. Light brown grey sandy clay silt.	A36		
Area A	3378	cut		Cut of ditch. U-shaped profile. NW-SE orientation. 0.88m wide, 0.17m deep.	A36	3.2	
Area A	3379		-	2nd fill of ditch. Light brown grey, silty clay.	A36	<u> </u>	
Area A	3380	fill	3381	1st fill of ditch. Light yellow grey sandy silty clay.	A36		
Area A	3381	cut		Cut of ditch terminus. U-shaped profile, 0.85m wide, 0.34m deep.	A36		
Area A	3382	fill	3383	Single fill of ditch. orange brown, sandy clay. 5- 10% inclusions of manganese	A18		
Area A	3383	cut		Cut of ditch. Moderate to gentle sloped sides. Flat base. N/S orientation. 0.7m wide, 0.1m deep.	A18	3.2	
Area A	3384	cut		Cut of ditch. Concave shallow sides, flat base. E-W orientation. 1.32m wide, 0.16m deep.	A36	3.2	
Area A	3385	fill	3384	Single fill of ditch. Mid orangey brown sandy clay. Occasional inclusions of charcoal.	A36	3.2	
Area A	3386	cut		Cut of ditch. Shallow, concave sides. Flat base. E-W orientation.	A36	3.2	
Area A	3387	fill	3386	Single fill of ditch. Light greyish brown sandy clay. Occasional charcoal.	A36	3.2	
Area A	3388	fill	3389	Single fill of ditch. Light to mid yellow brown, sandy clay silt.	A34	3.2	C11-C13
Area A	3389	cut		Cut of ditch. U-shaped profile. 0.9m wide, 0.28m deep.	A34	3.2	
Area A	3390	fill	3392	2nd fill of pit. Mid brown grey silty clay.		3	
Area A	3391	fill	3392	1st fill of pit. yellow grey silty clay. charcoal flecks.		3	
Area A	3392	cut		Cut of pit. Flat base, straight sides. N-S orientation. 0.6m wide, 0.34m deep.		3	
Area A	3393	fill	3394	Single fill of ditch. yellow brown sandy clay silt.	A36	3.2	
Area A	3394	cut		Cut of ditch. U-shaped profile. SW-NE orientation. 0.5m wide, 0.28m deep.	A36	3.2	

Area	Context	type	Fill	Description	Feature label	Period	Spot date
Area A	3395	fill	3396	1st fill of pit. Light yellow grey sandy silty clay. 1% inclusions of charcoal flecks.		3	
Area A	3396	cut		Cut of pit. Straight sloping sides, flat base. N-S orientation. 0.65m long, 0.5m wide,		3	
Area A	3397	fill	3399	2nd fill of ditch. orange yellow brown clay silt.	A35	3.2	
Area A	3398	fill	3399	1st fill of ditch. Light brown orange silty sand.	A35	3.2	
Area A	3399	cut		Cut of ditch. U-shaped profile. NW-SE orientation.	A35	3.2	
Area A	3400	fill	3401	1st fill of ditch. Light yellow grey, clayey sandy silt.	A36	3.2	
Area A	3401	cut		Cut of ditch. Straight sloping side, flat base. SW- NE orientation. 0.42m wide, 0.15m deep.	A36	3.2	
Area A	3402	cut		Cut of pit. Moderately sloping straight sides. Flat base. 0.83m wide, 0.23m deep.		3	
Area A	3403	fill	3402	Single fill of pit. yellow brown, silt clay.		3	
Area A	3404	cut		Cut of ditch. U-shaped profile. NE-SW orientation turning SE-NW. 1.62m wide, 0.51m deep	A26	3.3	
Area A	3405	fill	3404	1st fill of ditch. orange brown silt clay with manganese.	A26	3.3	
Area A	3406	fill	3404	2nd fill of ditch. Mid grey brown with flecks of manganese	A26	3.3	
Area A	3407	fill		3rd fill of ditch. Dark grey brown clay silt. Moderate inclusions of charcoal flecks.	A26	3.3	C11-C13
Area A	3408	cut		Cut of ditch. U-shaped profile. NE-SW orientation. 0.97m wide, 0.47m deep.	A18	3.2	
Area A	3409	fill	3408	Single fill of ditch. Mid greyish brown silty clay.	A18	3.2	C11-C13
Area A	3410	İ		Void	İ	İ	ĺ
Area A	3411	İ		Void		İ	
Area A	3412			Void		İ	
Area A	3413	ĺ		Void		İ	
Area A	3414	fill	3416	2nd fill of ditch. Mid orange brown with a yellow hue. Silty clay.		3.3	
Area A	3415	fill	3416	1st fill of ditch. Md orangey brown with blue grey mottling. Silty clay.	A23	3.3	
Area A	3416	cut		Cut of ditch. U-shaped profile. NE-SW orientation. 10m+ long, 0.7m wide, 0.35m deep.	A23	3.3	
Area A	3417	fill	3418	Single fill of furrow. Mid brown clay.		4	
Area A	3418	cut		Cut of furrow. 0.56m wide, 0.18m deep.		4	
Area A	3419	cut		Cut of ditch. Gentle straight sides, NW-SE orientation. 0.4m wide, 0.12m deep.	A18	3.2	
Area A	3420	fill	3419	Single fill of ditch. Light brown clayey sand.	A18	3.2	
Area A	3421	cut		Cut of ditch. Moderate sides, flat base. SW-NE orientation. 0.65m wide, 0.23m deep.	A20	3.2	
Area A	3422	fill	3421	Single fill of ditch. Light greyish brown sandy clay.	A20	3.2	C11-C13
Area A	3423	cut		Cut of ditch. U-shaped profile. NW-SE orientation. 0.22m deep., 2.2m wide	A13	3.2	
Area A	3424	fill	3423	Single fill of ditch. Mid greenish grey clay.	A13	3.2	C11-C13
Area A	3425	cut		Cut of ditch. U-shaped profile. E-W orientation. 0.4m deep.	A18	3.2	
Area A	3426	fill	3425	Single fill of ditch. Mid greenish grey brown clay.	A18	3.2	C11-C13
Area A	3427		İ	Void			
Area A	3428		İ	Void			
Area A	3429	cut		Cut of ditch. U-shaped profile. E-W orientation 0.52m wide, 0.17m deep.	A70	3.2	
Area A	3430	fill	3429	Single fill of ditch. Mid orange brown grey silty clay.	A70	3.2	C11-C13

Area	Context	type	Fill	Description	Feature label	Period	Spot date
Area A	3431	cut		Cut of ditch. U-shaped profile. E-W orientation. 1.64m wide, 0.4m deep.	A18	3.2	
Area A	3432	fill	3431	1st fill of ditch. Mid-light orange brown grey. Silty clay. charcoal and manganese flecks.	A18	3.2	C11-C13
Area A	3433	fill	3431	2nd fill of ditch. Mid orange brown grey. Silty clay.	A18	3.2	C11-C13
Area A	3434			Void			
Area A	3435	ĺ		Void		İ	Ī
Area A	3436	cut		Cut of ditch terminus. U-shaped profile. E-W orientation. 0.57m wide, 0.12m deep.	A17	3	
Area A	3437	fill	3436	Single fill of ditch. brown grey Silt clay. Rare inclusions of charcoal and manganese flecks.	A17	3	
Area A	3438	cut		Cut of ditch. U-shaped profile. E-W orientation. 0.51m wide, 0.14m deep.	A17	3	
Area A	3439	fill	3438	Single fill of ditch. Mid brownish grey with occasional yellow lens. Silt clay. Very rare inclusions of flecks of charcoal and manganese.	A17	3	
Area A	3440	cut		Cut of ditch. U-shaped profile. E-W orientation. 0.42m wide, 0.12m deep.	A17	3	
Area A	3441	fill	3440	Single fill of ditch. brow grey Silt clay. flecks of charcoal and manganese.	A17	3	C11-C13
Area A	3442	fill	3443	Single fill of pit. Light grey yellow, clayey sandy silt.		3	
Area A	3443	cut		Cut of pit. Straight to slight concave. Flat base. 0.37m wide, 0.25m deep.		3	
Area A	3444	fill	3445	Single fill of ditch. yellow brown, sandy clay silt.	A34	3.2	
Area A	3445	cut		Cut of ditch. Straight sloping sides. 0.25m wide, 0.1m deep.	A34	3.2	
Area A	3446	cut		Cut of ditch. Moderately slightly concave, flat base. SW-NE orientation. 0.25m wide, 0.25m deep.	A20	3.2	
Area A	3447	fill	3446	Single fill of ditch. Light greyish brown, sandy clay.	A20	3.2	
Area A	3448			Void			
Area A	3449			Void			
Area A	3450	fill	3451	Single fill of ditch. Mid-light orangey brown, sandy clay. 1-5% inclusions of manganese.	A18	3.2	C11-C13
Area A	3451	cut		Cut of ditch. Moderate sides, flat base. N-S orientation. 0.65m wide, 0.15m deep.	A18	3.2	
Area A	3452	fill	3453	Single fill of ditch. Mid yellowy brown sandy clay. 1-5% inclusions of manganese.	A18	3.2	C11-C13
Area A	3453	cut		Cut of ditch. U-shaped profile. N-S orientation. 0.63m wide, 0.24m deep	A18	3.2	
Area A	3454	cut		Cut of ditch. U-shaped profile. E-W orientation. 0.87m wide, 0.21m deep	A14	3.3	
Area A	3455	fill	3454	Single fill of ditch. Light greyish brown clay	A14	3.3	C11-C13
Area A	3456	cut		Cut of ditch. U-shaped profile. E-W orientation. 0.75m wide, 0.2m deep.	A14	3.3	
Area A	3457	fill	3456	Single fill of ditch. Light brownish grey clay	A14	3.3	C11-C13
Area A	3458	cut		Cut of ditch. Gentle sloped sides. Flat base. E-W orientation. 0.2m deep	A14	3.3	
Area A	3459	fill	3458	Single fill of ditch. Light greyish brown clay	A14	3.3	
Area A	3460			Void			
Area A	3461			Void			
Area A	3462			Void			
Area A	3463			Void			
Area A	3464			Void			
Area A	3465			Void			

Area	Context	type	Fill	Description	Feature label	Period	Spot date
Area A	3466			Void			
Area A	3467			Void			
Area A	3468	fill	3469	Single fill of ditch terminus. brown grey, silty clay	A64		C11-C13
Area A	3469	cut		Cut of ditch. U-shaped profile. N-S orientation. 0.22m wide, 0.12m deep.	A64	3.1	
Area A	3470	fill	3471	Single fill of ditch. Mid greyish brown silty clay.	A18		
Area A	3471	cut		Cut of ditch terminus. gentle sloped sides. Flat base. E-W orientation. 0.1m deep.	A18	3.2	
Area A	3472	fill	3396	2nd fill of pit. Mid brown grey, silty clay.		3	
Area A	3473		3401	2nd fill of ditch. Mid brown grey clay silt	A36	3.2	
Area A	3474			Cut of furrow. 0.63m wide, 0.16m deep		4	
Area A	3475	fill	3474	Single fill of furrow. Dark greyish brown clayey silt.		4	
Area A	3476	cut		Cut of ditch. U-shaped profile. E-W orientation. 0.69m wide, 0.22m deep.	A70	3.2	
Area A	3477	fill	3476	Single fill of ditch. Mid yellowish brown, silt clay. Rare inclusions of charcoal flecks.	A70	3.2	C11-C13
Area A	3478	cut		Cut of pit. SW side convex, NE side concave. Uneven base. NE-SW orientation. 1.05m wide, 0.27m deep.		3	
Area A	3479	fill	3478	Single fill of ditch. brown yellow		3	
Area A	3480	cut		Cut of pit. Moderate concave NE side, straight SW side. Uneven base. NE-SW orientation. 1.05m wide, 0.18m deep.		3	
Area A	3481	fill	3480	Single fill of pit. brown with orange silty clay		3	C13-C14
Area A	3482	fill	3484	2nd fill of ditch. Light-mid brown with a yellow orange hue. Fine silty clay.		3.3	
Area A	3483	fill	3484	1st fill of ditch. Orange brown with a yellow hue and blue grey mottling. Silty clay.	A23	3.3	
Area A	3484	cut		Cut of ditch terminus. Steeply sloping sides and flat base. 1.18m wide, 0.25m deep.	A23	3.3	
Area A	3485	cut		Cut of ditch. U-shaped profile. NW-SE orientation. 1.1m wide 0.16m deep	A13	3.2	
Area A	3486	fill	3485	Single fill of ditch. Mid greenish grey brown clay.	A13	3.2	C11-C13
Area A	3487	cut		Cut of ditch. Concave sloping sides, irregular base. SE-NW orientation	A64	3.1	
Area A	3488	fill	3487	1st fill of ditch. Mid greenish grey brown clay.	A64	3.1	
Area A	3489	fill	3487	2nd fill of ditch. blackish brown clay and charcoal.	A64	3.1	MC12-C13
Area A	3490	cut		Cut of furrow. 0.47m+ wide, 0.11m deep.		4	
Area A	3491	fill	3490	Single fill of furrow greyish yellow clayey silt.		4	
Area A	3492	cut		Cut of ditch. U-shaped profile. NE-SW orientation. 1.2m wide, 0.43m deep.	A23		
Area A	3493	fill	3492	1st fill of ditch. Mid orange brown with blue mottling. Clay.	A23	3.3	
Area A	3494	fill	3492	2nd fill of ditch. Mid orange brown, silty clay.	A23	3.3	
Area A	3495	cut		Cut of ditch. U-shaped profile. NE-SW orientation. 1.3m wide, 0.63m deep.	A26	3.3	
Area A	3496	fill	3495	Single fill of ditch. greyish brown clay. inclusions of blue grey clay	A26	3.3	
Area A	3497	fill	3498	Single fill of ditch. Mid greyish brown silty clay.	A64	3.1	C11-C13
Area A	3498	cut		Cut of ditch. U-shaped profile. N-S orientation. 0.49m wide, 0.1m deep.	A64	3.1	
Area A	3499	fill	3500	Single fill of ditch. Mid brownish grey. Silty clay.		3.1	C11-C13
Area A	3500	cut		Cut of ditch. U-shaped profile. N-S orientation. 0.13m deep.		3.1	

Area	Context	type	Fill	Description	Feature label	Period	Spot date
Area A	3501	fill	3502	Single fill of ditch. orange brown sandy clay.	A18	3.2	C11-C13
Area A	3502	cut		Cut of ditch. Moderate sides, flat base, W-E orientation.	A18	3.2	
Area A	3503	fill	3504	Single fill of ditch. orangey brown sandy clay. 1-5% manganese inclusions.	A18	3.2	C11-C13
Area A	3504	cut		Cut of ditch. U-shaped profile. W-E orientation. 0.47m wide, 0.33m deep.	A18	3.2	
Area A	3505	cut		Cut of ditch terminus. truncated on S edge. Flat base. E-W orientation. 0.64m wide, 0.11m deep.	A70	3.2	
Area A	3506	fill	3505	Single fill of ditch. yellow brown, silt clay. Rare charcoal.	A70	3.2	C11-C13
Area A	3507	cut		Cut of ditch. Sharp sides, flat base. E-W orientation. 1m wide, 0.29m deep.	A18	3.2	
Area A	3508	fill	3507	Single fill of ditch. Mid greyish brown, silt clay. Rare inclusions of flecks of charcoal.	A18	3.2	C11-C13
Area A	3509	cut		Cut of ditch. U-shaped profile. E-W orientation. 0.72m wide, 0.18m deep.	A18	3.2	
Area A	3510	fill	3509	Single fill of ditch. Mid yellowish brown Silt clay. flecks of charcoal and manganese.	A18	3.2	C11-C13
Area A	3511	cut		furrow. 0.98m wide, 0.1m deep.		4	
Area A	3512	fill	3511	Single fill of furrow yellowish grey, sandy clay		4	
Area A	3513	cut		Cut of ditch. U-shaped profile. E-W orientation. 0.66m wide, 0.27m deep.	A21	3.1	
Area A	3514	fill	3513	Single fill of ditch. brown grey Sandy clay.	A21	3.1	
Area A	3515	cut		Cut of ditch. U-shaped profile. E-W orientation. 1.56m wide, 0.51m deep.	A22	3.1	
Area A	3516	fill	3515	1st fill of ditch. Light brown grey Sandy clay. Occasional charcoal	A22	3.1	
Area A	3517	fill	3515	2nd fill of ditch. Light grey brown Sandy clay. Occasional inclusions of charcoal	A22	3.1	
Area A	3518	fill	3515	3rd fill of ditch. Mid grey brown Sandy clay. Occasional inclusions of charcoal	A22	3.1	
Area A	3519	fill	3520	Single fill of ditch. Light brown with yellowy orange hue and speckles or blue grey. Silty clay	A61	3	
Area A	3520	cut		Cut of ditch. U-shaped profile. NE-SW orientation.	A61	3	
Area A	3521	fill	3522	Single fill of pit. Light brown Silty clay. Frequent inclusions of small gravel.		3	
Area A	3522	cut		Cut of pit. Sub circular. moderate sides. Base is broadly flat. 0.88m long, 1.48m wide, 0.18m deep.		3	
Area A	3523	cut		Cut of pit. Sub oval. Moderate sides, rounded base. 0.46m long, 1.2m wide, 0.34m deep.		3.3	
Area A	3524	fill	3523	Single fill of pit. Mid orangey brown clay		3.3	
Area A	3525	cut		Cut of ditch terminus. U-shaped profile. NW-SE orientation. 0.64m wide excavated, 0.4m deep.	A26	3.3	
Area A	3526	fill	3525	Single fill of ditch terminus. yellow brown clay	A26	3.3	
Area A	3527	cut		Cut of ditch. U-shaped profile. NW-SE orientation. 1.22m wide, 0.51m deep.	A26	3.3	
Area A	3528	fill	3527	Single fill of ditch. Mid yellowish brown clay	A26	3.3	
Area A	3529	cut		Cut of ditch. U-shaped profile. SE-NW orientation. 0.77m wide, 0.14m deep.	A13	3.2	
Area A	3530	fill	3529	Single fill of ditch. Mid greenish grey brown clay.	A13	3.2	
Area A	3531	cut		Cut of ditch terminus. U-shaped profile. SE-NW orientation. 0.43m wide. 0.16m deep	A79	3.1	
Area A	3532	fill	3531	Single fill of ditch. Mid greenish grey brown clay.	A79	3.1	C11-C13
Area A	3533	fill	3534	Single fill of ditch. Yellow brown silty clay.	A18	3.2	C11-C13

Area	Context	type	Fill	Description	Feature label	Period	Spot date
Area A	3534	cut		Cut of ditch. U-shaped profile. E-W orientation. 0.67m wide, 0.24m deep.	A18	3.2	
Area A	3535	cut		Cut of ditch terminus. U-shaped profile. NE-SW orientation. 0.17m deep.	A27	3.3	
Area A	3536	fill	3535	Single fill of ditch. Mid greenish brown clay	A27	3.3	
Area A	3537	cut		Cut of pit. Sub oval. Moderate to steep sides. flat base. 0.8m long, 0.6m wide, 0.18m deep.		3.3	
Area A	3538	fill	3537	Single fill of pit. Mid orangey brown clay		3.3	Prehistoric
Area A	3539	cut		Cut of ditch. U-shaped profile. NW-SE orientation. 0.68m wide, 0.22m deep	A27	3.3	
Area A	3540	fill	3539	Single fill of ditch. Mid orangey brown clay	A27	3.3	
Area A	3541	cut		Cut of ditch terminus. U-shaped profile. NW-SE orientation. 0.33m deep.	A26		
Area A	3542	fill	3541	Single fill of ditch. greenish brown clay	A26	3.3	
Area A	3543	cut		Cut of ditch. Concave, relatively steep sides, flat base. SE-NW orientation. 0.22m wide, 0.13m deep	A79	3.1	
Area A	3544	fill	3543	Single fill of ditch. Mid greenish grey brown clay.	A79	3.1	C11-C13
Area A	3545			Cut of ditch. Gentle concave sides, flat concave base. E-W orientation. 0.5m wide, 0.15m deep.	A15		
Area A	3546	fill	3545	Single fill of ditch. Mid brown clay. Inclusions of small sand pebbles.	A15		
Area A	3547			Cut of ditch terminus. Gentle sloped sides, flat base. N-S orientation. >0.5m wide, 0.2m deep.	A79		
Area A	3548	fill	3547	Single fill of ditch. Mid greyish brown clay.	A79	3.1	
Area A	3549	cut		Cut of ditch. Gentle sloped sides, flat base. N-S orientation. 1.08m wide, 0.21m deep.	A13	3.2	
Area A	3550	fill	3549	Single fill of ditch. Mid brown clay. Rare inclusions of small sand pebbles.	A13		
Area A	3551		3554	2nd fill of ditch. Mid brown with reddish orange hue and reddish orange mottling. Silty clay.		3.2	
Area A	3552			Recut of ditch [3554]. U-shaped profile. 0.96m wide, 0.29m deep		3.3	
Area A	3553		3554	1st fill of ditch. Light brown with red hue.	A78		C11-C13
Area A	3554		<u> </u>	Cut of ditch. U-shaped profile. E-W orientation.	A78		
Area A	3555			Cut of ditch. U-shaped profile. NW-S orientation. 0.2m wide, 0.13m deep.	A27		
Area A	3556		3555	Single fill of ditch. Mid grey brown silt clay. Occasional small stones. 0.2m wide, 0.13m deep.	A27		
Area A	3557			Cut of ditch. U-shaped profile. SW-NE orientation, curving to NW-SE. 1.24m wide, 0.56m deep	A26		
Area A	3558		3557	Single fill of ditch. Mid blueish brown silt clay.	A26		
Area A	3559			Cut of ditch. U-shaped profile. NE-SW orientation. 0.79m wide, 0.26m deep.	A25		
Area A	3560			Single fill of ditch. Mid orange brown silty clay.	A25		
Area A	3561		3552	Single fill of ditch. Mid brown with a reddish orange hue. Silty clay.		3.3	
Area A	3562	_		Cut of ditch. U-shaped profile. E-W orientation.	A16		
Area A	3563		3562	Single fill of ditch. Mid greyish brown silt clay. flecks of charcoal and manganese.	A16		
Area A	3564			Cut of ditch. U-shaped profile. E-W orientation. 0.66m wide, 0.19m deep.	A16		
Area A	3565		3564	Single fill of ditch. Mid greyish brown silt clay with rare inclusions of flecks of charcoal.	A16		C11-C13
Area A	3566	cut		Cut of ditch. U-shaped profile. E-W orientation. 0.64m wide, 0.16m deep.	A16	3.1	

Area	Context	type	Fill	Description	Feature label	Period	Spot date
Area A	3567	fill	3566	Single fill of ditch. Mid greyish brown silt clay. Rare inclusions of charcoal.	A16	3.1	C11-C13
Area A	3568	cut		Cut of ditch. U-shaped profile. SW-NE orientation. 0.72m wide, 0.24m deep	A25	3.3	
Area A	3569	fill	3568	Single fill of ditch. Mid orangey brown silty clay.	A25	3.3	
Area A	3570	cut		Cut of ditch terminus. Concave, gradually sloping sides, flat base. SW-NE orientation. 0.4m wide, 0.14m deep	A13	3.2	
Area A	3571	fill	3570	Single fill of ditch. Mid orangey brown clay	A13	3.2	
Area A	3572	cut		Cut of ditch U-shaped profile. SW-NE orientation. 1.2m wide, 0.22m deep.	A13		
Area A	3573	fill	3572	Single fill of ditch. Mid greenish brown clay	A13	-	
Area A	3574	cut		Cut of ditch. U-shaped profile. E-W orientation. 0.45m wide, 0.16m deep	A77	3.1	
Area A	3575	fill	3574	Single fill of ditch. Mid grey brown, silty clay. Occasional inclusions of charcoal	A77	3.1	C11-C13
Area A	3576	cut		Cut of ditch. U-shaped profile. E-W orientation. 1.23m wide, 0.43m deep.	A78	3.2	
Area A	3577	fill	3576	Single fill of ditch. Mid grey brown silty clay. Occasional inclusions of charcoal.	A78	3.2	C11-C13
Area A	3578	cut		Cut of ditch. U-shaped profile. E-W orientation. 0.96m wide, 0.52m deep.	A7	3.3	
Area A	3579	fill	3578	Single fill of ditch. Mid grey brown silty clay. Occasional inclusions of charcoal flecks	A7	3.3	C11-C13
Area A	3580	cut		Cut of ditch. N side concave, shallow sided. Flat base. E-W orientation. 0.57m wide, 0.12m deep.	A15	3.3	
Area A	3581	fill	3580	Single fill of ditch. Mid grey brown silty clay. Occasional charcoal	A15	3.3	C11-C13
Area A	3582	fill	3583	Single fill of ditch. Mid grey brown silty clay.	A7	3.1	C11-C13
Area A	3583	cut		Cut of ditch. U-shaped profile. W-E orientation. 0.8m wide, 0.15m deep.	A77	3.1	
Area A	3584	fill	3585	Single fill of ditch. Mid grey brown silty clay	A77	3.3	C11-C13
Area A	3585	cut		Ditch, U-shaped profile. W-E orientation. 1.3m wide, 0.14m deep.	A15	3.3	
Area A	3586	fill	3587	Single fill of ditch. Light brown with a reddish orange hue and blue grey mottling. Silty clay.	A25	3.3	
Area A	3587	cut		Cut of ditch. U-shaped profile. 0.62m wide, 0.26m deep.	A25	3.3	
Area A	3588	cut		Cut of ditch. Flat base. SW-NE orientation. 0.3m wide, 0.16m deep.	A62	3.3	
Area A	3589	fill	3588	Single fill. Light yellow brown with light grey brown mottling. Sand clay.	A62	3.3	
Area A	3590			Void			
Area A	3591			Void			
Area A	3592	cut		Cut of ditch. U-shaped profile. N-S orientation. 0.33m wide, 0.24m deep.	A25	3.3	
Area A	3593	fill	3592	Single fill of ditch. Mid brown grey with dark grey brown mottling. Silt clay.	A25	3.3	
Area A	3594			Cut of ditch. U-shaped profile. NE-SW orientation. 1.36m wide, 0.49m deep.	A7	3.3	
Area A	3595		3594	Single fill of ditch. Mid orange brown silty clay.		3.3	C11-C13
Area A	3596			Cut of ditch. U-shaped profile. NE/SW orientation. 0.96m wide, 0.19m deep.	A78		
Area A	3597	fill		Single fill of ditch. Mid grey brown silty clay.	A78		C11-C13
Area A	3598	fill	3599	Single fill of ditch. Mid brownish grey, silty clay.	A15	3.3	

Area	Context	type	Fill	Description	Feature label	Period	Spot date
Area A	3599	cut		Cut of ditch. Rounded, concave, gentle moderate sloped sides. Flat base. E-W orientation. 0.68m wide, 0.1m deep.	A15	3.3	
Area A	3600	fill	3601	Single fill of ditch. Mid brownish grey silty clay.	A78	3.2	
Area A	3601	cut		Cut of ditch. Rounded, straight, moderate sloped side. Flat base. E-W orientation. 1.05m wide, 0.22m deep.	A78		
Area A	3602	fill	3603	Single fill of ditch. Mid greyish brown, silty clay.	A77		
Area A	3603	cut		Cut of ditch. U-shaped profile. E-W orientation. 0.71m wide, 0.21m deep.	A77	3.1	
Area A	3604	fill	3605	Single fill of ditch. Mid greyish brown silty clay.	A7	3.3	
Area A	3605	cut		Cut of ditch. U-shaped profile. E-W orientation. 1.02m wide, 0.42m deep.	A7	3.3	
Area A	3606	_		Void			
Area A	3607	cut		Cut of pit. Oval. SE side concave, steep. NW side, concave, gradually sloping. 1.8m long, 0.25m deep.		3	
Area A	3608		3607	2nd fill of pit. Mid orange brown clay.		3	
Area A	3609		3607	1st fill of pit. Mid orangey brown clay.		3	
Area A	3610			Cut of ditch. U-shaped profile. NW-SE orientation. 0.5m wide, 0.11m deep.	A24		
Area A	3611		3610	Single fill of ditch. Mid greyish yellow silty clay.	A24		RB
Area A	3612			Cut of ditch. U-shaped profile. E-W orientation. 1.16m wide, 0.38m deep.	A21	3.1	
Area A	3613	fill	3612	Single fill of ditch. Mid grey brown silty clay. 8	A21		
Area A	3614	cut		Cut of ditch. Steep sides, flat base. E-W orientation. 0.7m wide, 0.18m deep.	A12	3.3	C11-C13
Area A	3615	fill	3614	Single fill of ditch. Light brown clay	A12	3.3	
Area A	3616	fill	3617	Single fill of ditch. Light brown with reddish orange hue and blue grey streaks . Silty clay	A25	3.3	
Area A	3617			Cut of ditch terminus. U-shaped profile. E-W orientation. 0.57m wide, 0.16m deep	A25		
Area A	3618			Cut of ditch. U-shaped profile. 0.82m wide, 0.15m deep.	A24		
Area A	3619	fill	3618	Single fill of ditch. grey brown Silt clay.	A24	3.3	
Area A	3620			Cut of ditch. moderate sides. Flat base.NE-SW orientation58m wide, 0.09m deep.	A62	3	
Area A	3621	_		1st fill of ditch. Mid grey yellowish grey, clayey silt.	A62		
Area A	3622		3620	2nd fill of ditch. Mid yellowish grey, clayey silt.	A62		
Area A	3623			Cut of ditch. U-shaped profile. E-W orientation. 1.33m wide, 0.61m deep.		3.3	
Area A	3624	<del> </del>	3623	Single fill of ditch. Mid greenish brown clay.		3.3	C11-C13
Area A	3625			Cut of ditch. Moderate slope sides. Flat base. EW orientation. 1.1m wide, 0.25m deep.	A78		
Area A	3626	_	3625	Single fill of ditch. Mid greenish brown clay	A78		
Area A	3627			Cut of ditch. Moderate sloping sides, flat base. N-S orientation. 0.59m wide, 0.19m deep.	A25		
Area A	3628		3627	Single fill of ditch. Mid grey brown clay	A25		
Area A	3629			Cut of ditch. U-shaped profile E-W orientation. 0.46m wide, 0.11m deep.	A69	3.1	
Area A	3630	fill	3629	Single fill of ditch. Mid brown grey Silty clay.	A69		
Area A	3631	cut		Cut of ditch. U-shaped profile. E-W orientation. 0.94m wide, 0.17m deep.	A8	3.2	
Area A	3632	fill	3631	Single fill of ditch. Mid brown grey with dark blue grey mottles. Silty clay.	A8	3.2	

Area	Context	type	Fill	Description	Feature label	Period	Spot date
Area A	3633	cut		Cut of ditch. U-shaped profile. NW-SE orientation. 0.6m wide, 0.1m deep.	A12	3.3	
Area A	3634	fill	3633	Single fill of ditch. Mid orange brown, silty clay.	A12	3.3	
Area A	3635	cut		Cut of ditch. U-shaped profile. E-W orientation. 0.76m wide, 0.2m deep.	A12	3.3	
Area A	3636		-	1st fill of ditch. Mid orangey blue, silty clay	A12		
Area A	3637			2nd fill of ditch. Mid brownish orange silty clay.	A12		
Area A	3638		3639	Single fill of ditch. Mid greyish brown sandy clay.	A68		
Area A	3639	cut		Cut of ditch. U-shaped profile. NW-SE orientation. 0.61m wide, 0.09m deep.	A68		
Area A	3640	cut		Cut of ditch. U-shaped profile. E-W orientation. 0.58m wide, 0.17m deep.	A68	3.3	
Area A	3641	fill	3640	Single fill of ditch. Mid grey brown silty clay. Occasional inclusions of patches of blue/grey clay.	A68	3.3	
Area A	3642	cut		Cut of ditch. U-shaped profile. SE-NW orientation. 0.55m wide, 0.12m deep.	A12	3.3	
Area A	3643	fill	3642	Single fill of ditch. greyish brown clay.	A12	3.3	
Area A	3644	cut		Cut of ditch terminus. U-shaped profile. SE-NW orientation. 0.4m wide, 0.08m deep.	A12	3.3	
Area A	3645	fill	3644	Single fill of ditch. Light brown clay	A12	3.3	
Area A	3646	cut		Cut of ditch. U-shaped profile. E-W orientation. 0.38m wide, 0.15m deep.	A78	3.2	
Area A	3647	fill	3646	Single fill of ditch. Mid greenish brown, blue tints. Clay	A78	3.2	
Area A	3648	cut		Cut of ditch. U-shaped profile. E-W orientation. 1.72m wide, 0.5m deep.	A7	3.3	
Area A	3649	fill	3648	Single fill of ditch. Mid orangey crown clay. 1.72m wide, 0.5m deep.	A7	3.3	C11-C13
Area A	3650	cut		Cut of ditch. U-shaped profile. E-W orientation. 0.91m wide, 0.14m deep.	A9	3.1	
Area A	3651	fill	3650	Single fill of ditch. greyish brown silty clay. Rare charcoal.	A9	3.1	C11-C13
Area A	3652	cut		Cut of ditch. U-shaped profile. E-W orientation. 0.74m wide, 0.11m deep.	A9	3.1	
Area A	3653	fill	3652	Single fill of ditch. Mid greyish brown silt clay. Rare flecks of charcoal and manganese.	A9	3.1	
Area A	3654	cut		Cut of ditch. U-shaped profile. E-W orientation. 0.72m wide, 0.15m deep.	A9	3.1	
Area A	3655	fill		Single fill of ditch. Mid greyish brown silt clay. Rare inclusions of flecks of charcoal and manganese.	A9	3.1	C11-C13
Area A	3656	fill	3657	Single fill of ditch. Light brown with a reddish orange hue and blue grey mottling. Silty clay.	A78	3.2	
Area A	3657	cut		Cut of ditch. Moderately sloped sides and flat base. E-W orientation. 0.46m wide, 0.55m deep	A78	3.2	
Area A	3658	fill	3659	Single fill of ditch. Mid greenish grey brown with a yellowish hue. Silty clay.	A7	3.3	C11-C13
Area A	3659	cut		Cut of ditch. U-shaped profile . E-W orientation. 1.93m wide, 0.54m deep	A7	3.3	
Area A	3660	fill	3661	Single fill of pit. Mid brown with reddish orange hue Silty clay.		3	
Area A	3661	cut		Cut of pit or tree throw pit. Irregular but broadly circular. 2.2m long, 1.4m wide, 0.36m deep.		3	
Area A	3662	cut		Cut of ditch. U-shaped profile. E-W orientation. 0.73m wide, 0.29m deep.	A8	3.2	
Area A	3663	fill	3662	Single fill of ditch. Mid grey brown sand clay.	A8	3.2	

Area	Context	type	Fill of	Description	Feature label	Period	Spot date
Area A	3664	cut		Cut of ditch. U-shaped profile se. E-W orientation. 1.18m wide, 0.42m deep.	A7	3.3	
Area A	3665	fill	3664	1st fill of ditch. Light orange brown silty clay. Occasional inclusions of charcoal	A7	3.3	
Area A	3666	fill	3664	2nd fill of ditch. Mid orange brown silty clay. Occasional inclusions of charcoal	A7	3.3	
Area A	3667	cut		Cut of ditch. Concave shallow sides, flat base. E-W orientation. 1.28m wide, 0.2m deep.	A78		
Area A	3668	fill	3667	Single fill of ditch. Mid grey brown silty clay. Occasional inclusions of charcoal	A78		
Area A	3669			Cut of ditch. Gently stepped concave sides, flat base. S-W orientation. 0.66m wide, 0.15m deep.	A61		
Area A	3670		3669	Single fill of ditch. Mid greyish brown with orange and blue patches. Silty clay	A61		
Area A	3671			Cut of ditch. U-shaped profile. S-N orientation. 0.92m wide, 0.22m deep.	A25		
Area A	3672		3671	Single fill of ditch. Mid grey brown with orange and blue patches. Silty clay	A25		
Area A	3673			Cut of ditch terminus. Moderate S side and gentle E terminal sides. Flat base. E-W orientation. 0.6m wide, 0.08m deep		3.2	
Area A	3674	fill	3673	Single fill of ditch. brown grey and dark blue grey with yellow mottles. Silty clay.	A8	3.2	
Area A	3675	cut		Cut of ditch. Moderately sloping sides, concave base. N-S orientation. 0.66m wide, 0.17m deep.	A42	3	
Area A	3676	fill	3675	1st fill of ditch. Light brown grey silty clay.	A42	3	
Area A	3677	fill	3675	2nd fill of ditch. Light grey orange silt clay.	A42	3	C11-C13
Area A	3678			Void			
Area A	3679			Void			
Area A	3680	cut		Cut of ditch. Steep sides, flat base. NW-SE orientation. 0.6m wide, 0.08m deep	A24	3.3	
Area A	3681	fill	3680	Single fill of ditch. grey reddish brown, sand clay.	A24	3.3	
Area A	3682	fill	3683	Single fill of ditch. Mid orange brown with a yellow hue and blue grey mottling. Silty clay.	A14		C11-C13
Area A	3683			Cut of ditch. U-shaped profile. NE-SW orientation. 0.48m wide, 0.26m deep	A14		
Area A	3684			Cut of ditch. U-shaped profile. 0.58m wide, 0.08m deep.	A61		
Area A	3685		3684	Single fill of ditch. Mid greyish brown with orange and blue patches. Silty clay.	A61		
Area A	3686			Cut of ditch. U-shaped profile. 2.7m wide, 0.85m deep.	A22		
Area A	3687			1st fill of ditch. Light blue grey with orange flecks. Silt clay. Moderate inclusions of manganese flecks.	A22		
Area A	3688			2nd fill of ditch. Mid blue grey with orange patches throughout. Silt clay.	A22		
Area A	3689			3rd fill of ditch. Light grey brown silt clay. manganese flecks and occasional charcoal.	A22		
Area A	3690			4th fill of ditch. Mid blue grey with orange patches of sand. Silt clay.	A22		
Area A	3691			5th fill of ditch. Mid grey brown Silt clay. Moderate inclusions of manganese.	A22		
Area A	3692			6th fill of ditch. Dark grey brown clay silt. Frequent inclusions of charcoal.	A22		
Area A	3693	fill 	3686	7th fill of ditch. grey brown clay silt. Frequent charcoal	A22	3.1	

Area	Context	type	Fill	Description	Feature label	Period	Spot date
Area A	3694	fill	3686	8th fill of ditch. grey brown with yellow and orange patches. Silt clay.	A22	3.1	
Area A	3695	fill	3686	8th fill of ditch. blue grey with yellow patches. Silt clay.	A22	3.1	
Area A	3696	fill	3686	9th fill of ditch. grey brown with yellow brown patches. Silt clay.	A22	3.1	
Area A	3697	cut		Cut of ditch. NW side gently slopes. Concave base. 2.57m wide, 0.39m deep.	A21	3.1	
Area A	3698	fill	3697	1st fill of ditch. Blue grey mid. Silt clay.	A21	3.1	
Area A	3699	fill	3697	2nd fill of ditch. Mid orange brown. Silt clay.	A21	3.1	C11-C13
Area A	3700	cut		Cut of ditch. Moderately sloping sides and concave base. N-S orientation. 0.23m wide, 0.09m deep.	A42	3	
Area A	3701	fill	3700	Single fill of ditch. Light grey brown silt clay.	A42	3	
Area A	3702	cut		Cut of ditch. U-shaped profile. E-W orientation. 0.37m wide, 0.29m deep.	A40	3.2	
Area A	3703	fill	3702	Single fill of ditch. Light yellow brown silt clay.	A40	3.2	
Area A	3704	cut		Cut of ditch. Moderate and shallow sides, flat base. NW-SE orientation. 1.36m wide, 0.19m deep.	A7	3.3	
Area A	3705	fill	3704	Single fill of ditch. Mid red grey brown. Sand clay.	A7	3.3	C11-C13
Area A	3706	cut		Cut of ditch. U-shaped profile. W-E orientation. 0.14m deep.	A21	3.1	
Area A	3707	fill	3706	Single fill of ditch. Dark grey brown silty clay. 10% Blue clay inclusions.	A21	3.1	
Area A	3708	cut		Cu tof ditch. Gentle sloped sides, flat baseW orientation. 1m wide, 0.11m deep.	A12	3.3	
Area A	3709	fill	3708	Single fill of ditch. Mid greenish brown clay. 1% inclusions of charcoal.	A12	3.3	C11-C13
Area A	3710	fill	3711	Single fill of ditch. Light brown with yellow hue and blue grey and orange/red mottling. Silty clay.	A8	3.2	
Area A	3711	cut		Cut of ditch. U-shaped profile. E-W orientation. 0.95m wide, 0.19m deep.	A8	3.2	
Area A	3712	cut		Cut of ditch. N side slightly convex, moderately sloped. Base not survived. E-W orientation. 0.4m wide, 0.25m deep	A21	3.1	
Area A	3713	fill	3712	Single fill of ditch. Mid orange brown silty clay. Occasional inclusions of charcoal.	A21	3.1	
Area A	3714	cut		Cut of ditch. S side slightly irregular concave. N side concave steep sided. Flat base. E-W orientation. 1.67m wide, 0.54m deep.	A22	3.1	
Area A	3715	fill	3714	1st fill of ditch. Mid yellow grey sandy clay. Occasional charcoal	A22	3.1	
Area A	3716	fill	3714	2nd fill of ditch. Mid grey brown silty clay. Occasional inclusions of charcoal	A22	3.1	
Area A	3717	fill	3714	3rd fill of ditch. Mid brown grey, darker lens at base. Silty clay. Occasional charcoal	A22	3.1	
Area A	3718	cut		Cut of ditch. Moderate, straight sides. Flat base. 1.1m wide 0.31m deep.	A7	3.3	
Area A	3719	fill	3718	Single fill of ditch. Mid orange brown with redeposited mid grey blue clay mottled. Silty clay.	A7	3.3	C11-C13
Area A	3720	fill	3721	Single fill of ditch. Light grey brown, silty clay.	A15	3.3	C11-C13
Area A	3721	cut		Cut of ditch. U-shaped profile. SW-NE orientation. 1.2m wide, 0.18m deep.	A15	3.3	
Area A	3722		3724	2nd fill of ditch. Light brown grey silty clay.		3.3	C11-C13
Area A	3723	fill	3724	1st fill of ditch. Light brown grey silty clay.	A7	3.3	C11-C13

Area	Context	type	Fill	Description	Feature label	Period	Spot date
Area A	3724	cut		Cut of ditch. Straight to slight concave sides, flat base. SW-NE orientation. 2.05m wide, 0.44m deep.	A7	3.3	
Area A	3725	fill	3727	2nd fill of ditch. Light grey brown silty clay. 10% inclusions of patches of blue grey clay	A78	3.2	C11-C13
Area A	3726	fill	3727	1st fill of ditch. Light brown silty clay.	A78	3.2	
Area A	3727	cut		Cut of ditch. Concave sides, flat NE base, concave SW base. SW-NE orientation. 1.7m wide, 0.48m deep.	A78	3.2	
Area A	3728	fill	3729	Single fill of ditch. Light brown grey silty clay.	A7	3.1	
Area A	3729	cut		Cut of ditch. NW side broken slope. SE side straight sloping side. Flat base. SW-NE orientation. 1m wide, 0.56m deep.	A7	3.1	
Area A	3730	cut		Cut of ditch. Straight sloping side, slight concave base. SW-NE orientation. 1m wide, 0.4m deep.	A7	3	
Area A	3731	fill	3732	Single fill of tree throw. Light brown grey silty clay.		0	
Area A	3732	cut		Cut of tree throw pit. Irregular concave sides, irregular flat base. 2.3m long. 1.3m wide, 0.08m deep.		0	
Area A	3733	cut		Cut of ditch. S side gently sloping concave. Flat base. E-W orientation. 0.7m wide, 0.15m deep.	A8	3.2	
Area A	3734	fill	3733	Single fill of ditch. Mid orange brown silt clay. Moderate inclusions of manganese flecks.	A8	3.2	
Area A	3735	fill	3730	2nd fill of ditch. Light grey brown silty clay.	A7	3	
Area A	3736	fill	3730	1st fill of ditch. Light yellow brown silty clay.	A7	3	C11-C13
Area A	3737	cut		Cut of ditch. U-shaped profile. NW-SE orientation. 1.2m wide in section, 0.22m deep.	A7	3.3	
Area A	3738	fill	3737	Single fill of ditch. Mid red grey brown sand clay.	A7	3.3	C11-C13
Area A	3739	cut		Cut of ditch. Asymmetrical, moderate, straight sides. Flat base. E-W orientation. 0.85m wide, 0.24m deep.	A33	3	
Area A	3740	fill	3739	Single fill of ditch. Mid brownish grey silty clay.	A33	3	
Area A	3741	fill	3742	Single fill of posthole/pit. Mid brown with orange grey hue and blueish grey mottling. Silty clay.		0	
Area A	3742	cut		Cut of posthole/pit. Sub circular. Moderate sides, Flat base. 0.62m long, 0.2m wide, 0.1m deep.		0	
Area A	3743			Void			
Area A	3744			Void			
Area A	3745			Void			
Area A	3746			Void			
Area A	3747	fill	3748	Single fill of ditch. Mid orangey brown clay. 5% inclusions of charcoal	A6	3	RB?
Area A	3748	cut		Cut of ditch. Steep sides, flat base. E-W orientation. 0.86m wide, 0.34m deep.	A6	3	
Area A	3749	cut		Cut of ditch. U-shaped profile. W-E orientation. 1.72m wide, 0.31m deep.	A21	3.1	
Area A	3750	fill	3749	Single fill of ditch. Mid grey brown clay.	A21	3.1	
Area A	3751	cut		Cut of ditch. U-shaped profile. NE-SW orientation. 1.02m wide, 0.27m deep.	A40	3.2	
Area A	3752	fill	3751	Single fill of ditch. Mid brown sandy clay.	A40	3.2	C11-C13
Area A	3753	cut		Cut of pit. Steep concave sides, flat base. 1.8m wide, 0.75m deep.		3.3	
Area A	3754	fill	3753	1st fill of pit. Light yellowish brown clay. Inclusions of blue clay and charcoal.		3.3	C11-C13
Area A	3755	fill	3753	2nd fill of pit. Dark greyish brown sandy clay.		3.3	C11-C13

Area	Context	type	Fill	Description	Feature label	Period	Spot date
Area A	3756	fill	3753	3rd fill of pit. Mid yellowish brown sandy clay.		3.3	C11-C13
Area A	3757	fill		4th fill of pit. Dark grey clayey sand. Frequent inclusions of charcoal flecks.		3.3	C11-C13
Area A	3758	cut		Cut of ditch. U-shaped profile. NW-SE orientation. 0.8m wide, 0.2m deep.	A8	3.2	
Area A	3759	fill		Single fill of ditch. Mid yellowish brown with orange patches. Clayey silt.	A8	3.2	
Area A	3760	cut		Cut of ditch. U-shaped profile. NE-SW orientation. 0.46m wide, 0.07m deep.	A68	3.3	
Area A	3761	fill	3760	Single fill of ditch. Mid greyish brown clayey silt.	A68	3.3	
Area A	3762	cut		Cut of ditch. Sloping concave sides, flat base. N-S orientation. 0.92m wide, 0.16m deep.	A32	3	
Area A	3763	fill		Single fill of ditch. Mid greyish brown with blue and orange patches. Silty clay.	A32	3	
Area A	3764	cut		Cut of ditch. U-shaped profile. N-S orientation. 0.22m wide, 0.25m deep.	A32	3	
Area A	3765	fill	3764	Single fill of ditch. Mid greyish brown with orange and blue patches. Silty clay.	A32	3	
Area A	3766	cut		Cut of ditch. U-shaped profile. E-W orientation. 0.45m wide, 0.28m deep.		3.3	
Area A	3767	fill	3766	Single fill of ditch. Mid grey brown clay.		3.3	
Area A	3768	cut		Cut of ditch. Concave irregular sides, Irregular base. E-W orientation. 0.47m wide, 0.4m deep.	A71	3.3	
Area A	3769	fill	3768	Single fill of ditch. Mid orangey brown	A71	3.3	C11-C13
Area A	3770	cut		Cut of ditch. Concave sides, relatively flat base. 1.6m wide, 0.62m deep.	A39	3.3	
Area A	3771	fill	3770	1st fill of ditch. Mid greenish grey Silty clay.	A39	3.3	
Area A	3772	fill	3770	2nd fill of ditch. Mid greyish brown Clay.	A39	3.3	C11-C13
Area A	3773	fill	3770	Single fill of ditch. Mixture of blue clay, orange silty sand and dark humic silt.	A39	3.3	
Area A	3774	cut		Cut of pit. Circular. Gently sloping sides, concave base. 0.7m long, 0.76m wide, 0.09m deep.		3	
Area A	3775	fill	3774	Single fill of pit. Mid brown blackish grey. Silty clay.		3	
Area A	3776			Void			
Area A	3777			Void			
Area A	3778	cut		Cut of ditch. Asymmetrical moderate sides. S side convex, N side concave. Flat base. E-W orientation. 0.77m wide, 0.25m deep.	A33	3	
Area A	3779	fill		Single fill of ditch. Mid brown grey with occasional redeposited grey blue natural. Silty clay. Frequent inclusion of fire affected stones.	A33	3	
Area A	3780			Void			
Area A	3781			Void			
Area A	3782	cut		Cut of ditch. Moderate sloped sides, flat base. E-W orientation.	A6	3	
Area A	3783	fill		Single fill of ditch. Light orange brown clay. 1% inclusions of charcoal	A6	3	
Area A	3784	cut		Cut of ditch. Concave irregular sides. Irregular base. E-W orientation. 1.1m wide, 0.41m deep.	A38	3.3	
Area A	3785	fill	3784	1st fill of ditch. Mid grey brown clay.	A38	3.3	
Area A	3786	fill	3784	2nd fill of ditch. Dark grey brown Clay.	A38	3.3	
Area A	3787			Void			
Area A	3788			Void			
Area A	3789	cut		Cut of ditch. U-shaped profile. E-W orientation. 12.4m wide, 0.51m deep.	A7	3.3	

Area	Context	type	Fill	Description	Feature label	Period	Spot date
Area A	3790	fill	3789	Light greyish brown with blue. Silty clay.	A7	3.3	
Area A	3791	cut		Cut of ditch. Flat base. E-W orientation. 0.17m deep.	A8	3.2	
Area A	3792	fill		Single fill of ditch. Dark brown grey with dark blue grey and dark orange mottles. Silty clay.	A8	3.2	
Area A	3793	cut		Cut of ditch. Steeply sloped sides, flat base. 0.5m wide, 0.19m deep.	A68	3.3	
Area A	3794	fill		Single fil lof ditch. Dark brown grey with dark blue grey and dark orange mottles. Silty clay.	A68	3.3	
Area A	3795	cut		Cut of ditch. U-shaped profile. 0.61m wide, 0.17m deep	A68	3.3	
Area A	3796	fill	3795	Single fill of ditch. brown grey and dark bluey grey with orange mottles. Silt clay	A68	3.3	
Area A	3797	cut		Cut of pit. Sub circular. Sloped sides, concave base. 0.32m wide, 0.14m deep.		3.3	
Area A	3798	fill	3797	Single fill of pit. Dark brown orange. Silty clay.		3.3	
Area A	3799			Void			
Area A	3800			Void			
Area A	3801			Void			
Area A	3802			Void			
Area A	3803	fill	3804	Single fill of ditch. Mid brown with a yellow orange hue and blue grey mottling. Silty clay.	A9	3.1	
Area A	3804	cut		Cut of ditch. U-shaped profile. NE-SW orientation. 0.43m wide, 0.13m deep.	A9	3.1	
Area A	3805	cut		Cut of ditch. Moderate slope. Flat base. NE-SW orientation. 0.38m wide, 0.66m deep.	A5	3.3	
Area A	3806	fill	3805	Single fill of ditch. Light greyish yellow silty clay.	A5	3.3	
Area A	3807	cut		Cut of ditch. Asymmetrical sides, SE side moderate, NW side steep. NE-SW orientation. 0.42m wide, 0.1m deep.	A5	3.3	
Area A	3808	fill	3807	Single fill of ditch. Light greyish yellow, clayey silt.	A5	3.3	C11-C13
Area A	3809	cut		Cut of ditch. Moderate straight sides, SE side steeper. Concave irregular base. NE-SW orientation. 0.39m wide, 0.14m deep.	A5	3.3	
Area A	3810	fill	3809	Single fill of ditch. Light yellowish grey clayey silt.	A5	3.3	
Area A	3811	cut		Cut of ditch. Shallow sides, undulating base. NW-SE orientation. 0.17m deep	A78	3.2	
Area A	3812	fill	3811	Single fill of ditch. Mid reddish greyish brown clay.	A78	3.2	
Area A	3813	cut		Cut of ditch. U-shaped profile. NW-SE orientation. 0.48m wide, 0.5m deep.	A7	3.3	
Area A	3814	fill	3813	1st fill of ditch. red brown with lenses of grey blue. Clay.	A7	3.3	
Area A	3815	fill	3813	2nd fill of ditch. Dark grey brown, silt sand clay.	A7	3.3	
Area A	3816	cut		Cut of ditch. Gently sloping concave sides, flat base. N-S orientation. 1.23m wide, 0.25m deep.	A32	3	
Area A	3817	fill	3816	Single fill of ditch. Mid greyish brown with orange and blue patches. Silty clay.	A32	3	
Area A	3818			Void			
Area A	3819			Void			
Area A	3820			Cut of ditch. Moderate to shallow sides. Concave base. N-S orientation. 1.28m wide, 0.23m deep	A38	3.3	
Area A	3821	fill	3820	1st fill of ditch. Light bluish grey silt clay.	A38	3.3	
Area A	3822	fill	3820	2nd fil lof ditch. Light orange brown silt clay.	A38	3.3	C11-C13
Area A	3823	cut		Cut of ditch. Steep sloped sides. Concave base. E-W orientation. 0.58m wide, 0.29m deep.	A8	3.2	

Area	Context	type	Fill	Description	Feature label	Period	Spot date
Area A	3824	fill	3823	Single fill of ditch. Mix mid brown grey and dark blue grey with patches of dark orange. Silty clay.	A8	3.2	
Area A	3825	cut		Cut of ditch. Steeply sloped sides. Concave base. E-W orientation. 0.57m wide, 0.21m deep.	A68	3.3	
Area A	3826	fill	3825	Single fill of ditch. Mixed mid brown grey and dark blue grey. Silty clay.	A68	3.3	
Area A	3827	cut		Cut of ditch. South side gentle, N side Concave. Flat base. N-S orientation. 0.53m wide, 0.2m deep.	A32		
Area A	3828	fill	3827	Single fill of ditch. Mid greenish brown with orange and blue patches. Silty clay.	A32	3	
Area A	3829	cut		Cut of ditch. concave sides, flat base. N-S. 0.68m wide, 0.2m deep.	A32	3	
Area A	3830	fill	3829	Single fill of ditch. Mid greyish brown with orange and blue patches. Silty clay.	A32	3	
Area A	3831	cut		Cut of ditch. Gentle slope, concave sides. Flat base. N-S orientation. 0.5m wide, 0.06m deep.	A11	3.1	
Area A	3832	fill	3831	Single fill of ditch terminus. Light greyish brown sandy clay.	A11	3.1	C11-C13
Area A	3833	cut		Cut of ditch. Gentle slope sides, flat to concave base. N-S orientation. 0.92m wide, 0.07m deep.	A11	3.1	
Area A	3834	fill	3833	Single fill of ditch. Light greyish brown sandy clay.	A11	3.1	
Area A	3835	cut		Cut of ditch terminus. U-shaped profile. N-S orientation. 0.37m wide, 0.04m deep	A9	3.1	
Area A	3836	fill	3835	Single fill of ditch. Light greyish brown sandy clay.	A9	3.1	
Area A	3837	fill	3838	Single fill of ditch. Mid yellowish brown silty clay.	A10	3.1	
Area A	3838	cut		Cut of ditch terminus. U-shaped profile. NW-SE orientation. 0.54m wide, 0.09m deep.	A10	3.1	
Area A	3839	fill	3840	Single fill of ditch. Mid yellowish brown silty clay.	A10	3.1	
Area A	3840	cut		Cut of ditch. U-shaped profile. NW-SE orientation. 0.48m wide, 0.11m deep.	A10	3.1	
Area A	3841	fill	3842	Single fill of ditch. Mid yellowish brown silty clay.	A10	3.1	
Area A	3842	cut		Cut of ditch terminus. U-shaped profile. NW-SE orientation. 0.32m wide, 0.05m deep.	A10	3.1	
Area A	3843	cut		Cut of ditch. Asymmetrical. Moderate straight sloped sides. Irregular base. NE-SW orientation. 0.98m wide, 0.25m deep.	A6	3	
Area A	3844	fill	3843	Single fill of ditch. Mid greyish yellow sandy clay.	A6	3	
Area A	3845	cut		Cut of ditch. Asymmetrical. W side steep E side moderate. Concave base. NE-SW orientation. 1.21m wide, 0.33m deep.	A6	3	
Area A	3846	fill	3845	1st fill of ditch. Mid yellowish grey sandy clay.	A6	3	
Area A	3847	fill	3845	2nd fill of ditch. Mid bluish grey clay.	A6	3	
Area A	3848	fill	3845	3rd fill of ditch. Mid greyish yellow sandy clay.	A6	3	
Area A	3849	cut		Cut of ditch. Steeply sloped sides, concave base. E-W orientation. 0.25m wide, 0.35m deep.	A33	3	
Area A	3850			1st fill of ditch. Dark brown grey with dark red orange and black mottles. Silty clay.	A33		
Area A	3851	fill	3849	2nd fill of ditch. Dark brown grey with dark brown red mottles. Silty clay.	A33	3	
Area A	3852	fill	3854	2nd fill of ditch. Mid brown-orange. Silty clay.	A33	3	
Area A	3853	fill	3854	1st fill of ditch. Mid brown grey	A33	3	
Area A	3854	cut		Cut of ditch terminus. U-shaped profile. 1.24m wide, 0.21m deep.	A33	3	

Area	Context	type	Fill	Description	Feature label	Period	Spot date
Area A	3855	cut		Cut of ditch terminus. Moderately sloped sides. Irregular base. NE-SW orientation. 1.05m wide, 0.17m deep.	A33	3	
Area A	3856	fill	3855	Single fill of ditch. Mixed, dark brown grey and dark blue grey with dark yellow mottles. Silty clay.	A33	3	
Area A	3857	cut		Cut of ditch. Sloping gently concave sides, flat base. N-S orientation. 0.51m wide, 0.13m deep.	A32	3	
Area A	3858	fill	3857	Single fill of ditch. Mid greyish brown with orange and blue patches. Silty clay.	A32	3	
Area A	3859	cut		Cut of ditch. Gently concave sides, rounded base. N-S orientation. 0.71m wide, 0.18m deep.	A32	3	
Area A	3860	fill	3859	Single fill of ditch. Mid greyish brown with orange and blue patches. Silty clay.	A32	3	
Area A	3861	cut		Cut of ditch. Moderate sides, concave. SE side visible. Flat base. NE-SW orientation. 1.77m wide, 0.34m deep.	A72	3.2	
Area A	3862	fill	3861	1st fill of ditch. Mid orange brown clay with 10% inclusions of charcoal.	A72	3.2	C11-C13
Area A	3863	fill	3861	2nd fill of ditch. Mid grey brown, mottled orange and blue. Silty clay.	A72	3.2	C11-C13
Area A	3864	fill	3941	Single fill of ditch. Mid brown with significant orange and blue mottling. Clay.	A41	3.2	C11-C13
Area A	3865	cut		Cut of ditch. U-shaped profile. NE-SW orientation. 0.93m wide, 0.28m deep.	A71	3.3	
Area A	3866	fill	3865	Single fill of ditch. Mid grey brown silty clay.	A71	3.3	C11-C13
Area A	3867	cut		Cut of ditch. U-shaped profile. NE-SW orientation. 1.16m wide, 0.33m deep.	A39	3.3	
Area A	3868	fill	3867	1st fill of ditch. Mid grey brown silty clay. Silting fill	A39	3.3	C11-C13
Area A	3869	fill	3867	2nd fill of ditch. Mid orange brown with blue mottling. Clay with sand inclusions.	A39	3.3	C11-C13
Area A	3870	cut		Cut of ditch. U-shaped profile. NE-SW orientation. 2m long slot, 1.4m wide, 0.31m deep.	A38	3.3	
Area A	3871	fill	3870	1st fill of ditch. Mid grey brown, silty clay.	A38	3.3	C11-C13
Area A	3872	fill	3870	2nd fill of ditch. Mid brown with orange and blue mottling. Clay with sand.	A38	3.3	
Area A	3873	cut		Cut of ditch. Gentle sloped concave sides, flat base. E-W orientation. >0.6m wide, >0.32m deep.	A40	3.2	
Area A	3874	fill	3873	Single fill of ditch. Light brown sandy clay	A40		
Area A	3875			Cut of ditch. U-shaped profile. E-W orientation. >0.38m wide, >0.14m deep.	A72		
Area A	3876	fill	3875	Single fill of ditch. Light greyish brown sandy clay	A72	3.2	
Area A	3877	cut		Cut of ditch. U-shaped profile. E-W orientation. 1.4m wide, 0.25m deep	A41		
Area A	3878		3877	Single fill of ditch. Light greyish yellow sandy clay.	A41		C11-C13
Area A	3879			Cut of ditch. U-shaped profile. E-W orientation. 1.03m wide, 0.38m deep.	A39		
Area A	3880	fill	3879	Single fill of ditch. Mid red brown silt clay.	A39	3.3	C11-C13
Area A	3881	cut		Cut of ditch. U-shaped profile. E-W orientation. 1.77m wide, 0.69m deep.	A38	3.3	
Area A	3882	fill	3881	1st fill of ditch. Mid grey red brown with brown red mottling. Silt clay. Occasional charcoal	A38	3.3	C11-C13
Area A	3883	fill	3881	2nd fill of ditch. Mixed mid to dark grey brown with red brown and brown grey mottling. Silt sand clay.	A38	3.3	C11-C13
Area A	3884			Void			
Area A	3885	cut		Cut of ditch. U-shaped profile. E-W orientation. 0.86m wide, 0.35m deep.	A39	3.3	

Area	Context	type	Fill	Description	Feature label	Period	Spot date
Area A	3886	fill	3885	Single fill of ditch. Mid greyish brown silty clay.	A39	3.3	C11-C13
Area A	3887	cut		Cut of ditch. N side stepped, S side concave. Uneven base. E-W orientation. 1.65m wide, 0.51m deep.	A38	3.3	
Area A	3888	fill	3887	1st fill of ditch. Mid greyish brown with orange patches. Silty clay.	A38	3.3	C11-C13
Area A	3889	fill	3887	2nd fill of ditch. grey brown with orange and blue patches. Silty clay.	A38	3.3	C11-C13
Area A	3890	cut		Cut of enclosure ditch. U-shaped profile. E-W orientation. 0.84m wide, 0.25m deep.	A43	3.2	
Area A	3891	fill	3890	Single fill of ditch. Mid brown sandy clay	A43	3.2	C11-C13
Area A	3892	cut		Cut of ditch. Gentle sides, flat-concave base. E-W orientation. 0.69m wide, 0.16m deep.	A44	3.2	
Area A	3893	fill	3892	Single fill of ditch. Mid brown, silt clay.	A44	3.2	MC1-C2
Area A	3894	cut		Cut of enclosure ditch. U-shaped profile. E-W orientation. 1.29m wide, 0.23m deep.	A39	3.2	
Area A	3895	fill	3894	Single fill of ditch. Mid brown sandy clay with rare inclusions. 1.5m long, 1.29m wide, 0.23m deep.	A39	3.2	
Area A	3896	cut		Cut of ditch. Moderate concave sides, rounded to flat base. N-S orientation. 2m long at intervention, 0.45m wide, 0.08m deep.	A2	2	
Area A	3897	fill	3896	Single fill of ditch. Mid orangey brown clay.	A2	2	
Area A	3898	cut		Cut of ditch. South side steep, concave and north side gentle sloping. Concave base. E-W orientation. >2m long, 1.16m wide, 0.32m deep.	A40	3.2	
Area A	3899	fill	3898	1st fill of ditch. Mid orange brown clay. Rare inclusions of charcoal and stones.	A40	3.2	C11-C13
Area A	3900	fill	3898	2nd fill of ditch. Mid grey brown silty clay with rare charcoal inclusions.	A40	3.2	C11-C13
Area A	3901	cut		Cut of ditch. Boundary. Moderate, concave sides, concave base. E-W orientation . >2m long, 1.49m wide, 0.29m deep.	A72	3.2	
Area A	3902	fill	3901	1st fill of ditch. Mid orange brown, sandy clay with rare inclusions of charcoal.	A72	3.2	C11-C13
Area A	3903	fill		2nd fill of ditch. Mid grey brown silty clay with rare inclusions of charcoal.	A72	3.2	
Area A	3904	fill	3909	Single fill of ditch .Mid grey brown with orange and blue mottling. Clay. Rare inclusions of charcoal.	A41	3.2	C11-C13
Area A	3905	cut		Cut of ditch. With irregular terminus. Steep concave sides and flat base. N-S orientation. 1.15m long at intervention, 0.48m wide, 0.16m deep.	A2	2	
Area A	3906	fill	3905	Single fill of ditch. Mid orange brown clay.	A2	2	
Area A	3907	cut		Cut of ditch. Concave east side, Vertical west side. S-N orientation. 1.9m long excavated, 1.43m wide, 0.3m deep.	A38	3.3	C11-C13
Area A	3908	fill	3907	Mid greyish brown with orange patches. Silty clay. Rare inclusions of fossils.	A38	3.3	
Area A	3909	cut		Cut of ditch. South side moderate and concave. North side gentle and concave. Concave base. NE- SW orientation. >2m long, 0.92m wide, 0.26m deep.	A41	3.2	
Area A	3910	cut		Cut of ditch. Gentle concave slope, flat-concave base. E-W orientation. 1.6m long, 1.11m wide, 0.28m deep.	A43	3.2	
Area A	3911	fill	3910	Single fill of ditch. Mid brown clay. Rare inclusions.	A43	3.2	C11-C13

Area	Context	type	Fill of	Description	Feature label	Period	Spot date
Area A	3912	cut		Cut of ditch. Gentle sides, concave base. E-W orientation. 1m long slot, 1.4m wide, 0.29m deep.	A41	3.2	
Area A	3913	fill	3912	Single fill of ditch. Light yellowish brown sandy clay.	A41	3.2	C11-C13
Area A	3914	cut		Cut of ditch. Gentle sloped sides and concave base. E-W orientation. 1m long slot, 0.23m wide, 0.31m deep.	A40	3.2	
Area A	3915	fill	3914	Single fill. Mid greyish brown sandy clay. Rare inclusions.	A40	3.2	
Area A	3916	cut		Cut of ditch. Moderate concave sides and flat base. N-S orientation. 1m long at intervention, 0.44m wide, 0.14m deep.	A4	2	
Area A	3917	fill	3916	Single fill of ditch. Mid brown clay.	A4	2	
Area A	3918	cut		Cut of ditch. Moderate concave sides, flat base. N-S orientation. 0.34m wide, 0.1m deep.	A4	2	
Area A	3919	fill	3918	Single fill. Mid brown clay. Naturally accumulated	A4	2	
Area A	3920	cut		Cut of ditch. Moderate straight sides. Flat base. N-S orientation. 0.56m long at intervention. 0.45m wide, 0.16m deep.	A4	2	
Area A	3921	fill	3920	Single fill of ditch. Mid brown clay	A4	2	
Area A	3922	cut		Cut of furrow. Almost imperceptible. Flat base. E-W orientation. 0.71m long at intervention. 0.42m wide, 0.03m deep.		4	
Area A	3923	fill	3922	Single fill of furrow. Mid brown clay		4	
Area A	3924	cut		Cut of furrow. Gentle concave side, flat base. E-W orientation. 1m long intervention, 0.39m wide, 0.06m deep.		4	
Area A	3925	fill		Single fill of furrow. Mid brown clay. Naturally accumulated silting		4	
Area A	3926	cut		Cut of ditch. Concave sides and flat base. E-W orientation. 1.24m long, 1.11m wide, 0.16m deep.	A39	3.2	
Area A	3927	fill	3926	Single fill of ditch. Mid greyish brown with orange patches. Silty clay.	A39		
Area A	3928	cut		Cut of ditch. Concave, steep sides. Concave base. E-W orientation. 1.82m long, 0.63m wide, 0.17m deep.	A44	3.2	
Area A	3929	fill	3928	Single fill of ditch. Mid greyish brown with orange and blue patches. Silty clay.	A44	3.2	
Area A	3930	cut		Cut of ditch terminus. Moderate concave sides, rounded break of slope, flat base. N-S orientation. 0.27m wide, 0.08m deep.	A4	2	
Area A	3931	fill		Single fill. Mid brown clay. 0.91m long at intervention. 0.27m wide,	A4	2	
Area A	3932	cut		Cut of ditch. Moderate slopes with steep break of slope, concave. Concave base. E-W orientation. >2m long, 0.59m wide, 0.22m deep.	A39	3.3	
Area A	3933	fill	3932	Single fill of ditch. Mid orange brown, silty clay.	A39	3.3	C11-C13
Area A	3934	cut		Cut of ditch. Moderate and concave sides, flat to concave base. EW orientation. >2m long, 1.29m wide, 0.48m deep.	A38	3.3	
Area A	3935	fill	3934	1st fill of ditch. Mid orange brown silty clay. 1% charcoal inclusions.	A38	3.3	C11-C13
Area A	3936	fill	3934	2nd fill of ditch. Mid grey brown with orange and blue mottling. Clay. 2% stone inclusions. Redeposited natural	A38	3.3	C11-C13

Area	Context	type	Fill	Description	Feature label	Period	Spot date
Area A	3937	cut		Cut of enclosure ditch. Steep sides, base not fully excavated. E-W orientation. >0.2m wide, >0.2m deep.	A41	3.2	
Area A	3938	fill	3937	Single fill. Mid yellowish brown, sandy clay. Rare inclusions of round med stones. Natural infill	A41	3.2	
Area A	3939	cut		Cut of ditch. Steep sides. N-S orientation. >0.7m wide, ?0.35m deep.	A38	3.3	
Area A	3940	fill	3939	Single fill of ditch. Mid greyish brown, sandy clay. Rare inclusions. Natural infill	A38	3.3	
Area A	3941	cut		Cut of enclosure ditch. Gentle- moderate sides, unknown base. NE-SW orientation. >2m long, 0.87m wide, 0.11m deep. Succession of recuts from original ditch	A41	3.2	
Area A	3942	cut		Cut of ring ditch. Moderate to shallow sides, concave base. >2m long, 1.14m wide, 0.23m deep.	A3	1	
Area A	3943	fill	3942	Single fill. Mid grey brown, silt clay. Natural silting	A3	1	
Area A	3944	cut		Cut of ring ditch. Moderate to shallow sides, concave base. >2m long, 1.27m wide, 0.24m deep.	A3	1	
Area A	3945	fill	3944	Single fill. Mid grey brown, silt clay. Natural silting	A3	1	
Area A	3946	cut		Cut of ring ditch. Moderate to shallow sides, concave base. >2m long, 1.25m wide, 0.32m deep.	A3	1	
Area A	3947	fill	3946	Single fill. Mid grey brown, silt clay. Natural silting	A3	1	
Area A	3948	cut		Cut of ring ditch. Moderate to shallow sides, concave base. >2m long, 1.21m wide, 0.27m deep.	A3	1	
Area A	3949	fill	3948	Single fill. Mid grey brown, silt clay. Natural silting	A3	1	
Area A	3950	cut		Cut of ring ditch. Moderate to shallow sides, concave base. >2m long, 0.91m wide, 0.21m deep.	A3	1	
Area A	3951	fill	3950	Single fill. Mid grey brown, silt clay. Natural silting	A3	1	
Area A	3952	cut		Cut of ring ditch. Moderate to shallow sides, concave base. >2m long, 1.01m wide, 0.12m deep.	A3	1	
Area A	3953	fill	3952	Single fill. Mid grey brown, silt clay. Natural silting	A3	1	
Area A	3954	cut		Cut of ring ditch. Moderate to shallow sides, concave base. >2m long, 0.75m wide, 0.05m deep.	A3	1	
Area A	3955	fill	3954	Single fill. Mid grey brown, silt clay. Natural silting	A3	1	
Area A	3956	cut		Cut of ditch. Gently sloping sides, concave base. N-S orientation. >1m long, 0.37m wide, 0.1m deep.	A4	2	
Area A	3957	fill	3956	Single fill of ditch. Light grey brown, silt clay. Natural silting.	A4	2	
Area A	3958	cut		Cut of ditch. Sharp break of slope at top. Gentle concave sides. Rounded break of slope to flat base. N-S orientation. 2m long at intervention, 0.58m wide, 0.08m deep.	A1	2	
Area A	3959	fill	3958	Single fill of ditch. Mid brown clay. Naturally accumulated silt.	A1	2	
Area A	3960			Cut of ditch. Sharp break of slope at top. Gentle concave sides, rounded break of slope to flat base. N-S orientation. 0.55m wide, 0.1m deep.	A1		
Area A	3961	fill		Single fill of ditch. Mid brown clay. Naturally accumulated silting	A1	2	
Area A	3962			Cut of ditch. Gentle sides, moderate at break of slope, concave. Flat base. E-W orientation. >2m long slot, 0.84m wide, 0.26m deep.	A40		
Area A	3963	fill	3962	Single fill of ditch. Mid grey brown with blue mottling. Silty clay.	A40	3.2	

Area	Context	type	Fill of	Description	Feature label	Period	Spot date
Area A	3964	cut		Cut of ditch. Moderate, concave sides and flat- concave base. E-W orientation. 0.82m wide, 0.24m deep.	A41	3.2	
Area A	3965	fill	3964	1st fill of ditch. Mid blue grey clay.	A41	3.2	C11-C13
Area A	3966	fill	3964	2nd fill of ditch recut. Mid orange brown, silty clay. 1% stone and charcoal inclusions.	A41	3.2	C11-C13
Area A	3967	cut		Cut of ditch. Shallow sides, concave base. N-S orientation. >1m long, 0.44m wide, 0.05m deep.	A2	2	
Area A	3968	fill	3967	Single fill of ditch. Light grey brown, silt clay. Natural silting	A2	2	
Area A	3969	cut		Cut of ditch. Gentle sides, concave base. E-W orientation. >1m long, 1.23m wide, 0.22m deep.	A39	3.2	
Area A	3970	fill	3969	Single fill of ditch. Mid grey brown, silty clay. Silting	A39	3.2	C11-C13
Area A	3971	cut		Cut of ditch. Moderate and concave sides, concave base. E-W orientation. 0.64m wide, 0.22m deep. Water management for large enclosure.	A44	3.2	
Area A	3972	fill	3971	Single fill of ditch. Mid grey brown silty clay. 1% chalk inclusions. Gradual sediment build up.	A44	3.2	
Area A	3973	cut		Cut of ditch. Gentle and concave sides, flat to concave base. E-W orientation. >1m long, 0.86m wide, 0.14m deep.	A43	3.2	
Area A	3974	fill	3973	Single fill of ditch. Mid orange brown silty clay. Silting	A43	3.2	
Area A	3975	İ		Void			
Area A	3976			Void			
Area A	3977	cut		Cut of ditch terminus. Sloped, concave fairly symmetrical sides. Rounded, concave base, rises up towards E end of terminus. E-W orientation. 1m long slot, >5m long total. 0.97m wide, 0.18m deep.	A73	3	
Area A	3978	fill	3977	Single fill of ditch. Mid brownish grey silty clay. 5% gravel inclusions. Natural silting	A73	3	C11-C13
Area A	3979	deposit		Dump of limestone/rubble/poorly fired bricks. Lies on top of (3980) in centre of area enclosed by ring-ditch B		3	
Area A	3980	deposit		Dump. Mid brown grey clay. Some areas of more orange sandy clay. Underneath deposit (3979)		3	C11-C13
Area A	3981	fill	3982	Single fill of pit. Mid reddish brown silty clay. Inclusions of limestones and bricks. Limestones at base were flat		3	
Area A	3982	cut		Cut of pit. Concave S side, vertical north side. Uneven base. S-N orientation. 0.98m long, 0.7m wide, 0.27m deep.		3	
Area A	3983	fill	3984	Single fill of ditch. Mid reddish brown silty clay. Limestone inclusions.	A45	3	
Area A	3984	cut		Cut of ditch. North side concave, South side vertical. Uneven base. S-N orientation. 0.7m long, 0.53m wide, 0.37m deep.	A45	3	
Area A	3985	cut		Cut of ditch. Sharp break of slope at top, with moderate concave sides. Rounded break of slope to concave base. N-S orientation. 1m long at intervention, 0.49m wide, 0.13m deep.	A46	3	
Area A	3986	fill	3985	Single fill of ditch. Mid orangey brow clay. Naturally accumulated silting.	A46	3	C11-C13
Area A	3987	cut		Cut of pit. Sub ovular. Asymmetrical sides. SE side sharp BOS at top, with steep concave sides. NW side, rounded BOW at top with gently uneven side. Rounded BOS to uneven base. NW-SE orientation.		5	

Area	Context	type	Fill	Description	Feature label	Period	Spot date
				2.45m long, 2.05m wide (1.07m wide excavated), 0.,23m deep.			
Area A	3988	fill	3987	Single fill of pit. Mid orangey brown clay. 1% sub angular rocks.		5	
Area A	3989	cut		Cut of ditch. Convex side, broadly flat base. NW-SE orientation. 5.4m long slot, 3.84m wide, 1.37m deep.	A63	4	
Area A	3990	fill	3989	1st fill of moat. Bands of mid grey orange and mid blue. Occasional inclusions of flecks of orange. Probable silting	A63	4	
Area A	3991	fill	3989	2nd fill of moat. Light grey orang, occasional darker orange mottling. Silty clay. 1.7m long, 2.59m wide, 0.32m deep. Localised silting or slumping from SW.	A63	4	
Area A	3992	fill	3989	3rd fill of moat. Light grey brown, bans of blue grey, orange mottling throughout. Silty clay.	A63	4	C14-C16
Area A	3994	fill	3989	5th fill of moat. Dark grey brown, almost purple in places. Silty clay. Silting.	A63	4	
Area A	3995	cut		Cut of ditch. Asymmetrical, gently sloping sides. Rounded concave irregular base. 3m long slot, 4.8m wide in slot. 1.66m deep.	A63	4	
Area A	3996	fill	3995	1st fill of moat. Mid yellowish blue clay.	A63	4	
Area A	3997	fill	3995	2nd fill of moat. Light yellowish blue clay.	A63	4	
Area A	3998	fill	3995	3rd fill of ditch. Mid blueish yellow silty clay. 5% sand/gravel patches.	A63	4	
Area A	3999	fill	3995	4th fill of moat. Mid greyish yellow silty clay. 10% sand/gravel patches	A63	4	C11-C13
Area A	4000	fill	3995	5th fill of moat. Light brownish red silty clay. Natural	A63		
Area A	4001	cut		Cut of ring ditch. Curvilinear. Se side vertical, undercuts itself. NW side stepped. Slightly concave to flat base. NE-SW orientation. 4.3m long excavated, 4.64m wide, 1.61m deep.	A63	4	
Area A	4002	fill	4001	1st fill of ditch. Dark orangey blue clay.	A63	4	
Area A	4003	I .		2nd fill of ditch. Mid orangey blue clay.	A63	4	
Area A	4004	fill	4001	3rd fill of ditch. Mid blueish orange clay.	A63	4	
Area A	4005	fill	4001	4th fill of ditch. Mid orange clay.	A63	4	
Area A	4006	fill	4001	5th fill of ditch. Mid orangey grey brown, silty clay.	A63	4	
Area A	4007	fill	4001	6th fill of ditch. Mid pinkish brown, silty clay.	A63	4	
Area A	4008	cut		Cut of moat, slot D. Curvilinear. S side broadly convex, undercut slightly. N side, broadly convex, moderately sloped. Base not excavated. E-W orientation. 2m long slot, 4.26m wide, >1m deep.	A63	4	
Area A	4009	fill	4008	Single fill of ditch. Poorly preserved horses head recovered.	A63	4	C14-C16
Area A	4010	cut		Cut of ring ditch. Curvilinear. S side undercutting itself, N side stepped. E-W orientation. 7m long excavated, 4.36m wide, 0.98m deep excavated.	A63	4	
Area A	4011	fill	4010	1st fill of ditch. Mid orangey brown silty clay. Silting	A63	4	
Area A	4012	fill	4010	2nd fill of ditch. Mid orangey greyish brown, silty clay.	A63	4	C14-C16
Area A	4013	fill	4010	3rd fill of ditch. Mid purplish silty clay.	A63	4	
Area A	4014	cut		Cut of ditch. Curvilinear. Asymmetrical sides- SW side steep and irregular, with some undercutting. NE side, moderate concave/irregular. Rounded break of slope to fairly flat base. NW-SE orientation. 2.2m long, 3.35m wide, >0.97m deep.	A63	4	

Area	Context	type	Fill	Description	Feature label	Period	Spot date
Area A	4015	fill	4014	1st fill of ditch. Mid orange blue clay.	A63	4	C11-C13
Area A	4016	fill	4014	2nd fill of ditch. Blue-orange clay natural infill	A63	4	
Area A	4017	fill	4014	3rd fill of ditch. Mid orange clay. Naturally accumulated silting	A63	4	
Area A	4018	cut		Cut of moat. W side convex, undercuts slightly. E side convex, moderately sloped. 5.55m wide, >1m deep.	A63	4	
Area A	4019	fill	4018	Single fill.	A63	4	C14-C16
Area A	4020	cut		Cut of moat. Curvilinear. SE side concave, moderately sloped. NW side convex, moderately sloped. Rounded, slightly irregular base. 4.93m wide, 1.69m deep.	A63	4	
Area A	4021		4020	1st fill of moat. Band of light grey, light blue grey and light grey yellow. Silty clay. Very occasional inclusions of limestone fragments.	A63	4	
Area A	4022		4020	2nd fill of moat. Light grey orange, bands of light blue grey mottling. Silty clay.	A63	4	
Area A	4023	fill	4020	3rd fill of moat. Light grey brown, orange mottling band of blue grey. Silty clay.	A63	4	
Area A	4024	fill	4020	4th fill of moat. Light brown grey, orange mottling. Silty clay.	A63	4	
Area A	4025	fill	4020	5th fill of moat. Light grey brown, orange mottling. Occasional light blue grey banding. Silty clay.	A63	4	C11-C13
Area A	4026	fill	4020	6th fill of moat. Dark grey brown, purple in places especially near top of fill in plan. Silty clay.	A63	4	
Area A	4027	cut		Cut of moat. Curvilinear. Asymmetrical sides. Gentle 45 degrees slope. Almost vertical NW side. Concave, rounded, fairly regular base. 4.16m wide, 1.5m deep.	A63	4	
Area A	4028	fill	4027	1st fill of moat. Mid yellow blue silty clay.	A63	4	
Area A	4029	fill	4027	2nd fill of moat. Mid blueish yellow, silty clay. 5% gravel/ sand inclusions.	A63	4	C11-C13
Area A	4030	fill	4027	3rd fill of moat. Mid greyish yellow mottled with blue silty clay.	A63		
Area A	4031	fill	4027	4th fill of moat. Mid greyish yellow, silty clay. 5-10% gravel/sand inclusions.	A63	4	
Area A	4032		4027	5th fill of moat. Light blueish yellow, silty clay. 5% gravel/sand inclusions.	A63	4	
Area A	4033	fill	4027	6th fill of moat. Mid greyish yellow, silty clay. 5-10% gravel inclusions.	A63	4	C11-C13
Area A	4034	fill	4027	7th fill of moat. Mid reddish brown silty clay.	A63	4	
Area A	4035	cut		Cut of ditch. Gently stepped, concave side. Base not visible. NE-SW orientation. >0.68m wide, 0.44m deep.	A76	3	
Area A	4036	fill	4035	Single fill of ditch. Mid greyish yellow, silty clay.	A76	3	C11-C13
Area A	4037	cut		Cut of ditch. Symmetrical, concave sides. Flat base. N-S orientation. 1.16m wide, 0.28m deep.	A76	3	
Area A	4038	fill	4037	Single fill of ditch. Mid grey yellow, silty clay.	A76	3	
Area A	4039	cut		Cut of ditch. U-shaped profile. E-W orientation. 0.8m wide, 0.17m deep.	A39	3.2	
Area A	4040	fill	4039	Single fill of ditch. Mid orangey brown silty clay.	A39	3.2	
Area A	4041	cut		Cut of ditch. U-shaped profile. E-W orientation. 2.08m wide, 0.36m deep.	A65	3	
Area A	4042	fill	4041	Single fill of ditch. Mid orangey brown silty clay.	A65	3	C11-C13
Area A	4043	cut		Cut of ditch. U-shaped profile. NE-SW orientation.	A45	3	
Area A	4044	fill	4043	Single fill of ditch. Mid brownish grey, silty clay	A45	3	C11-C13

Area	Context	type	Fill	Description	Feature label	Period	Spot date
Area A	4045	cut		Cut of ditch. U-shaped profile. N-S orientation. 0.96m wide, 0.21m deep.	A48	3	
Area A	4046	fill	4045	Single fill of ditch. Mid yellowy brown, silty clay.	A48	3	
Area A	4047	cut		Cut of small ditch. One visible side, sloping convex. Base not visible. NE-SW orientation. >0.22m wide, 0.22m deep	A48	3	
Area A	4048	fill	4047	Single fill of ditch. Mid brownish grey silty clay.	A48	3	
Area A	4049	cut		Cut of ditch. Gentle sloping, concave sides. Flat base. NW-SE orientation. >0.2m wide, 0.14m deep.	A41	3.2	
Area A	4050	fill	4049	1st fill of ditch. Mid brownish grey, silty clay.	A41	3.2	
Area A	4051	fill	4049	2nd fill of ditch. Mid brownish yellow silty clay.	A41	3.2	
Area A	4052			Cut of small ditch. Asymmetrical. NE-SW orientation. 0.5m wide, 0.16m deep.	A48	3	
Area A	4053	fill	4052	1st fill of ditch. Mid yellowish brown, silty clay.	A48	3	
Area A	4054	fill	4052	2nd fill of ditch. Mid brownish grey, silty clay.	A48		C11-C13
Area A	4055			Cut of ditch. Linear. Sloped, concave mostly symmetrical sides. Fairly flat base. NE-SW orientation. 0.93m wide, 0.29m deep.	A48		
Area A	4056	fill	4055	Single fill of ditch. Mid greyish brown, silty clay	A48	3	C11-C13
Area A	4057	cut		Cut of ditch. moderate to steep concave sides. flat base. E-W orientation. 0.78m wide, 0.22m deep.	A39	3.2	
Area A	4058	fill	4057	Single fill of ditch. Mid orangey brown clay	A39	3.2	C11-C13
Area A	4059	cut		Cut of ditch. Steep concave side. Base not visible. SE-NW orientation. >0.23m wide, 0.14m deep.	A47	3	
Area A	4060	fill	4059	Single fill of ditch. Mid blueish grey, silty clay	A47	3	
Area A	4061	cut		Cut of ditch. Sloping, concave side. Flat base. NE-SW orientation. >0.18m wide, 0.23m deep.	A48	3	
Area A	4062	fill	4061	Single fill of ditch. Mid brownish yellow silty clay.	A48	3	C11-C13
Area A	4063	cut		Cut of ditch. Steep sides. Relatively flat and regular base. SE-NW orientation. >0.29m wide, 0.11m deep.	A47	3	
Area A	4064	fill	4063	Single fill of ditch. Mid brownish grey silty clay	A47	3	
Area A	4065	cut		Cut of ditch. U-shaped profile. NE-SW orientation. 1.64m wide, 0.31m deep.	A40	3.2	
Area A	4066	fill	4065	Single fill of ditch. Dark brownish grey, silty clay. Frequent charcoal	A40	3.2	C11-C13
Area A	4067			Cut of ditch. Moderate/ steep sides. Flat base. NE-SW orientation. 2.22m wide, 0.53m deep.	A41		
Area A	4068	fill	4067	1st fill of ditch. Mid yellowish brown silty clay	A41	3.2	C11-C13
Area A	4069		4067	2nd fill of ditch. yellowish/greyish brown, silty clay	A41		
Area A	4070			Cut of ditch. Steep concave sides. Flat base. SE- NW orientation. >0.55m wide, 0.35m deep.	A47		
Area A	4071			1st fill of ditch. Mid brownish grey silty clay	A47		C11-C13
Area A	4072			2nd fill of ditch. Mid yellowish brown silty clay.	A47		
Area A	4073		4070	3rd fill of ditch. Mid greyish brown silty clay	A47	<del>.</del>	C11-C13
Area A	4074			Cut of ditch. concave side. Base not visible. NW-SE orientation. >0.2m wide, 0.2m deep.	A47		
Area A	4075		4074	Single fill of ditch. Mid brownish grey silty clay. N	A47		
Area A	4076			Cut of moat. Curvilinear. Steep convex sides. Base unexcavated. 6m wide, >0.45m deep.	A63		
Area A	4077	_	4076	Single fill of moat. Mid yellowish brown. Silty clay.	A63		C12-C14
Area A	4078	cut		Cut of ditch. U-shaped profile. NE-SW orientation. 0.49m wide, 0.12m deep.	A40	3.2	

Area	Context	type	Fill	Description	Feature label	Period	Spot date
Area A	4079	fill	4078	Single fill of ditch. brown grey silty clay with charcoal	A40	3.2	C11-C13
Area A	4080	cut		Cut of ditch. U-shaped profile. NE-SW orientation. 0.5m wide, 0.08m deep.	A74	3	
Area A	4081	fill	4080	Single fill of ditch. Mid yellowish brown, silty clay.	A74	3	C11-C13
Area A	4082	cut		Cut of ditch. U-shaped profile. NE-SW orientation. 0.78m wide, 0.18m deep.	A41	3.2	
Area A	4083	fill	4082	Single fill of ditch. Mid greyish brown silty clay.	A41	3.2	C11-C13
Area A	4084	cut		Cut of ditch. U-shaped profile. NE-SW orientation. 0.27m deep.	A39	3.2	
Area A	4085	fill	4084	Single fill of ditch. Mid brown clay	A39	3.2	C11-C13
Area A	4086	cut		Cut of ditch. U-shaped profile. N-S orientation. 0.29m deep.	A65	3	
Area A	4087	fill	4086	Single fill of ditch. Mid orangey brown clay.	A65	3	C11-C13
Area A	4088	cut		Cut of ditch terminus. U-shaped profile. N-S orientation. 0.57m wide, 0.28m deep.	A46	3	
Area A	4089	fill	4088	1st fill of ditch. Mid yellowish grey silty clay.	A46	3	
Area A	4090	fill	4088	2nd fill of ditch. orangey brownish grey, silty clay	A46	3	C11-C13
Area A	4091	cut		Cut of ditch. Concave side. Fairly flat base. NE-SW orientation. 0.28m wide, 0.2m deep.	A46	3	
Area A	4092	fill	4091	1st fill of ditch. Mid yellowish grey silty clay	A46	3	C11-C13
Area A	4093	fill	4091	2nd fill of ditch. Mid brownish grey silty clay	A46	3	
Area A	4094	cut		Cut of ring ditch. Curvilinear. Sloping convex side. Base not visible. >0.49m wide, 0.33m deep.	A63	4	
Area A	4095	fill	4094	1st fill of moat. yellowish grey silty clay	A63	4	C11-C13
Area A	4096	fill	4094	2nd fill of ditch. Mid brownish grey silty clay.	A63	4	
Area A	4097	cut		Cut of ditch. moderate/steep sides. Flat base. N-S orientation. 0.17m deep.	A45	3	
Area A	4098	fill	4097	Single fill of ditch. Mid orangey brown silty clay.	A45	3	C11-C13
Area A	4099			Cut of ditch. moderate/ steep sloped sides. Flat base. E-W orientation. 1 0.31m deep.	A41	3.2	
Area A	4100	fill	4099	Single fil of ditch. orangey/greyish brown. Silty clay.	A41	3.2	C11-C13
Area A	4101	cut		Cut of ditch. Concave, moderately sloped sides. Base not excavated. E-W orientation. 1.3m wide, 0.16m deep.	A41	3.2	
Area A	4102	fill	4101	Single fill of ditch. Light grey brown silty clay.	A41	3.2	
Area A	4103	cut		Cut of ditch. moderately sloped. Base not excavated. N-S orientation. 0.7m wide, 0.18m deep.	A76	3	
Area A	4104	fill	4103	Single fill of ditch. Light greyish yellow, silty clay.	A76	3	
Area A	4105	cut		Cut of ditch. Steep sides. Base not excavated. NE-SW orientation. >0.33m wide, 0.31m deep.	A45	3	
Area A	4106	fill	4105	Single fill of ditch. Mid brownish grey silty clay	A45	3	
Area A	4107	cut		Cut of ditch. Steep sides. NW-SE orientation. >0.56m wide, 0.4m deep.	A63	4	
Area A	4108		4107	Single fill of ditch. Mid blueish grey, silty clay	A63		
Area A	4109	_	4110	Single fill of ditch terminus. grey brown, silty clay.	A73	_	
Area A	4110			Cut of ditch terminus. U-shaped profile. E-W orientation. 0.45m wide, 0.09m deep.	A73		
Area A	4111			Cut of ditch. moderate sides. Base not excavated. E-W orientation. 0.18m deep. 1.2m wide	A39		
Area A	4112	_	4111	Single fill of ditch. grey brown Silty clay	A39	1	
Area A	4113	cut		Cut of linear. Moderate sides. Base not excavated. NW-SE orientation. 0.5m wide, 0.16m deep.	A63	4	

Area	Context	type	Fill of	Description	Feature label	Period	Spot date
Area A	4114	fill	4113	Single fill of ditch. Mid grey brown, Silty clay	A63	4	
Area A	4115	cut		Cut of ditch. gentle concave sides. flat base. NE-SW orientation. >1.84m wide, 0.37m deep.	A65	3	
Area A	4116	fill	4115	Single fill of ditch. Dark orangey brown clay.	A65	3	C11-C13
Area A	4117	cut		Cut of ditch. U-shaped profile. W-E orientation. >0.95m wide, 0.4m deep.	A75	3	
Area A	4118	fill	4117	Single fill of ditch. Mid to dark orangey brown clay.	A75	3	C11-C13
Area A	4119			Cut of ditch. U-shaped profile. E-W orientation. >1.24m wide, Base not excavated.	A65	3	
Area A	4120	fill	4119	Single fill of ditch. Dark orangey brown clay.	A65	3	
Area A	4121	cut		Cut of ditch. U-shaped profile. E-S orientation. >0.65m wide, 0.28m deep.	A75	3	
Area A	4122	fill	4121	Single fill of ditch. Mid orangey brown clay.	A75	3	C11-C13
Area A	4123	cut		Cut of ditch terminus. Rounded, concave, gentle slope. Flat base. NW-SE orientation. 0.08m deep.		3	
Area A	4124	fill	4123	Single fill of ditch. Mid greyish brown, silty clay.		3	C11-C13
Area A	4125	cut		Cut of moat. Curvilinear. steep sides. Base not excavated.	A63	4	
Area A	4126	fill	4125	Single fill of moat. Mid orange/ grey brown silty clay	A63	4	C11-C13
Area A	4127	cut		Cut of ditch terminus. gentle sides. Flat base. E-W orientation. 0.71m wide, 0.07m deep.	A74	3	
Area A	4128	fill	4127	Single fill of ditch. Mid greyish brown, silty clay.	A74	3	
Area A	4129	cut		Cut of ditch. Sides and base not excavated. E-W orientation. 14.2m long, 0.71m wide.	A74	3	
Area A	4130	fill	4129	Single fill of ditch. Mid yellowish brown, silty clay.	A74	3	
Area A	4131	cut		Cut of moat. not excavated. 4.05m wide.	A63	4	
Area A	4132	fill	4131	Single fill of moat.	A63	4	
Area A	4133			Cut of moat. not excavated. 5.41m wide.	A63		
Area A	4134		4133	Single fill of moat. Mid purplish silty clay	A63		
Area A	4135			Cut of moat. not excavated. 5.52m wide.	A63		
Area A	4136		4135	Single fill of moat. Dark grey brown, Silty clay	A63	-	
Area B	1	layer	1	Topsoil.		5	
Area B	1	layer	1	Subsoil		5	
Area B	1	layer	<u> </u>	Natural substrate.		0	<u> </u>
Area B	6003			Cut of ditch terminus. U-shaped profile. N-S orientation. 0.49m wide, 0.18m deep.	B10		
Area B	6004		6003	Single fill of ditch. Light greenish grey with flecks of orange mottle. Clay.	B10	3.1	C11-C13
Area B	6005		<u> </u>	Cut of furrow. 0.8m wide, 0.13m deep.		4	
Area B	6006		6005	Single fill of furrow. grey-brown Silty clay		4	
Area B	6007		<u> </u>	Cut of furrow. 0.65m wide, 0.19m deep.		4	
Area B	6008		6007	Single fill of furrow. orange brown Silty clay		4	
Area B	6009			Cut of ditch terminus. Moderate sides, flat base. N-S orientation1.09m wide, 0.16m deep		3.1	
Area B	6010	fill	6009	Single fill of ditch. Dark greenish brown with orange mottle. Clay.	B9	3.1	C11-C13
Area B	6011			Cut of ditch terminus. Concave profile, shallow sloped sides. Flat base. N-S orientation. 0.72m wide, 0.15m deep.		3.1	
Area B	6012	fill	6011	Single fill of ditch. Mid grey brown with orange tinge. Silty clay.	В6	3.1	
Area B	6013	cut		Cut of ditch. Asymmetrical, moderate concave sides. Flat base. N-S orientation. 1.29m wide, 0.47m deep.	B7	3.1	

Area	Context	type	Fill	Description	Feature label	Period	Spot date
Area B	6014	fill	6013	Single fill of ditch. Mid grey brown silty clay	B7	3.1	C11-C13
Area B	6015	cut		Cut of ditch terminus. Asymmetrical U-shaped profile. N-S orientation. 1.3m wide, 0.46m deep	B8	3.2	
Area B	6016	fill	6015	Single fill of ditch. Mid brown grey silty clay	B8	3.2	
Area B	6017	cut		Cut of ditch. U-shaped profile. NW-SE orientation. 1.2m wide, 0.23m deep.	В7	3.1	
Area B	6018	fill	6017	Single fill of ditch. Mid greyish brown to orange mottling, silty clay.		3.1	C11-C13
Area B	6019	cut		Cut of ditch terminus. U-shaped profile. SE-NW orientation. >1.1m wide, 0.31m deep	B8	3.2	C11-C13
Area B	6020	fill	6019	Single fill of ditch. Mid grey brown to orange mottling. Silty clay	B8	3.2	C11-C13
Area B	6021			Cut of ditch terminal. Shallow sloped sides and flat base. N-S orientation. 0.95m wide 0.14m deep.		3.1	
Area B	6022	fill	6021	Single fill of ditch. Mid grey brown silty clay.		3.1	
Area B	6023			Cut of ditch. Straight steeply sloping sides, flat base. N-S orientation. 0.8m wide, 0.2m deep	B9	3.1	
Area B	6024		6023	Single fill of ditch. Mid brownish grey with orange mottling. Silty clay.	В9	3.1	
Area B	6025			Cut of pit. Gentle sides, concave rounded base. E-W orientation.0.71m wide, 0.21m deep.		3	
Area B	6026		6025	Single fill of pit. Mid orange grey silty clay		3	
Area B	6027			Cut of ditch. Moderate sides, rounded concave base. N-S orientation.	B10		
Area B	6028		6027	Single fill of ditch. Mid orange grey silty clay.	B10	3.1	
Area B	6029			Cut of furrow. 1.13m wide 0.13m deep.		4	
Area B	6030	1	6029	Single fill of furrow. Mid brown grey clay silt.		4	
Area B	6031			Cut of ditch. W edge moderate concave side. Flat base. NW-SE orientation. 1m wide, 0.16m deep.		3.1	
Area B	6032		6031	Single fill of ditch. Light grey brown clay silt.		3.1	
Area B	6033			Cut of ditch. Moderate sides and flat base. N-S 0.95m wide, 0.18m deep.		3.1	
Area B	6034		6033	Single fill of ditch. Mid grey brown silt clay.	B6	3.1	C11-C13
Area B	6035			Cut of furrow. 1.5m wide, 0.13m deep.		4	
Area B	6036		6035	Single fill of furrow. Mid grey brown silty clay.		4	
Area B	6037			Cut of ditch. Straight steeply sloping side. Flat base. E-SE orientation. 0.93m wide, 0.31m deep.		3.1	
Area B	6038		6037	Single fill of ditch. Mid greyish brown with orange mottling. Silty clay.	B9	3.1	
Area B	6039			Cut of furrow 1m wide, 0.07m deep		4	
Area B	6040	_	6039	Single flil of furrow. Mid grey brown Silty clay.		4	C11-C13
Area B	6041		las	furrow. 1.5m wide, 0.23m deep.	<u> </u>	4	
Area B	6042		6041	Single fill of furrow. Mid orange grey silty clay.	<u> </u>	4	C11-C13
Area B	6043			Cut of ditch. U-shaped profile, 0.9m wide, 0.17m deep.		3.1	
Area B	6044		6043	Single fill of ditch. Mid grey brown silty clay.		3.1	C11-C13
Area B	6045			Cut of ditch. Steep sides, flat base. NW-SE orientation. 0.99m wide, 0.38m deep		3.1	
Area B	6046		6045	Single fill of ditch. Light grey brown silt clay.		3.1	
Area B	6047			Cut of ditch terminus. U-shaped profile. NW-SE orientation. 1m wide, 0.14m deep.		3.1	
Area B	6048	fill	6047	Single fill of ditch. Mid grey brown to orange mottling. Silty clay.	B5	3.1	C11-C13

Area	Context	type	Fill	Description	Feature label	Period	Spot date
Area B	6049	cut		Cut of ditch. U-shaped profile. NW-SE orientation. 1m wide, 0.18m deep.	B5	3.1	
Area B	6050	fill	6049	Single fill of ditch. Mid grey brown to orange mottling. Silty clay	B5	3.1	
Area B	6051	cut		Cut of ditch terminus. U-shaped profile. NW-SE orientation. 0.1m deep.	B5	3.1	
Area B	6052	fill	6051	Single fill of ditch. Mid grey brown to orange mottling. Silty clay.	B5	3.1	
Area B	6053	cut		Cut of ditch terminus. U-shaped profile. NW-SE orientation. 0.4m wide slot, 0.07m deep.	B6	3.1	
Area B	6054	fill	6053	Single fill of ditch terminus. Mid orangey brown with grey mottling. Silty clay sub rounded stones.	B6	3.1	
Area B	6055	cut		Cut of ditch. Straight moderately sloping sides. Flat base sloping down to the W. N-S orientation. 0.71m wide, 0.22m deep	В3	3.1	
Area B	6056	fill	6055	Single fill of ditch. Mid orangish grey silty clay	В3	3.1	C11-C13
Area B	6057	cut		Cut of pit. Oval. Straight gently sloping sides and flat base. E-W orientation. 0.63m wide. 0.11m deep.		3	
Area B	6058	fill	6057	Single fill of pit. Mid brownish grey with orange mottling. Silty clay.		3	C11-C13
Area B	6059	cut		furrow. 0.76m wide, 0.6m deep.		4	
Area B	6060	fill	6059	Single fill of furrow. Mid orange grey silty clay.		4	
Area B	6061	cut		Cut of ditch. Moderate sides, SE-NW orientation. 1.4m wide, 0.16m deep.	B4	3.1	
Area B	6062	fill	6061	Single fill of ditch. Mid orange grey silty clay.	B4	3.1	
Area B	6063	cut		Cut of ditch. moderate sides, Flat base. N-S orientation, 0.84m wide, 0.07m deep.	В3	3.1	
Area B	6064	fill	6063	Single fill of ditch. Dark greyish brown with orange mottling. Silty clay.	В3	3.1	
Area B	6065	cut		Cut of ditch. U-shaped profile. N-S orientation turns to NW-SE. 1.46m wide, 0.14m dee.		3.1	
Area B	6066	fill	6065	Single fill of ditch. Mid orange grey silty clay.		3.1	
Area B	6067	cut		Cut of ditch. Moderate sloped W side, slight step on E side. Slight concave base. N-S orientation. 0.96m wide, 0.39m deep.	B1	3.1	
Area B	6068	fill	6067	Single fill of ditch. Mid orange brown to grey mottling. Silty clay	B1	3.1	C11-C13
Area B	6069	cut		Cut of ditch terminus. Straight gradually sloped sides. Flat base. N-S orientation. 0.86m wide. 0.12m deep.	B2	3.1	
Area B	6070	fill	6069	Single fill of ditch. Mid brownish grey silty clay	B2	3.1	
Area B	6071	cut		Cut of ditch terminus. U-shaped profile. NW-SE orientation. 0.5m wide in clot, 0.23m deep.	B1	3.1	
Area B	6072	fill	6071	Single fill of ditch. grey brown to orange Silty clay. Occasional charcoal	B1	3.1	C11-C13
Area B	6073	cut		Cut of ditch. Concave sides. Steep on N side, gentle on S side. Flat base. E-W orientation. 0.88m wide, 0.44m deep.	В9	3.1	
Area B	6074	fill	6073	single fill of ditch. Mid grey brown silty clay	В9	3.1	C11-C13
Area B	6075	cut		Cut of ditch. Gradual to steep sides, flat base. N-S orientation. 2.28m wide, 0.48m deep.	В9	3.1	
Area B	6076	fill	6075	Single fill of ditch. Mid greyish brown clay	B9	3.1	C11-C13
Area B	6077	cut		Cut of pit. Circular. Steep sides, slightly rounded flat base. 0.6m long, 1.1m wide, 0.38m deep.		3.2	

Area	Context	type	Fill	Description	Feature label	Period	Spot date
Area B	6078	fill	6077	Single fill of pit. Mid greyish brown with orangey brown mottling. Clay.		3.2	
Area B	6079	cut		Cut of ditch. Straight sides, base not excavated. >0.86m wide, >0.32m deep	В9	3.1	
Area B	6080	fill	6079	Single fill of ditch. Mid orange grey clay	В9	3.1	
Area B	6081	cut		Cut of furrow. 1.24m wide, 0.11m deep.		4	
Area B	6082	fill	6081	Single fill of furrow. orange/green grey clay		4	
Area B	6083			Cut of ditch. Concave, gentle sloped sides. Flat base. NW-SE orientation	B38		
Area B	6084	fill	6083	Single fill of ditch. Mid brown orange silty clay	B38	2	
Area B	6085	cut		Cut of ditch. Concave sides, flat base. 0.44m wide, 0.16m deep	B35	3.3	
Area B	6086	fill	6085	Single fill of ditch. Mid red brown silty clay	B35	3.3	C11-C13
Area B	6087	cut		Cut of furrow. 0.6m wide slot, 0.15m deep		4	
Area B	6088	fill	6087	Single fill of furrow. Mid grey brown silty clay.		4	
Area B	6089	cut		Cut of ditch. Straight sides, rounded base. E-W orientation. 1.3m wide, 0.49m deep	В9	3.1	
Area B	6090	fill	6089	Single fill of ditch. Dark orange grey clay	B9	3.1	C11-13
Area B	6091	cut		Cut of ditch. Concave sides, flat base. E-W orientation. >1.8m wide, 0.21m deep.	B4	3.1	
Area B	6092	fill	6091	Single fill of ditch. Medium orange grey clay	B4	3.1	C11-C13
Area B	6093	cut		Cut of ditch. Gradual sides, flat base. N-S orientation. 0.64m wide, 0.32m deep	В9	3.1	
Area B	6094	fill	6093	Single fill of ditch. Mid greyish brown clay	В9	3.1	
Area B	6095	cut		Cut of ditch. Gradual sides, flat base. N-S orientation. 0.87m wide, 0.34m deep.	ВЗ	3.1	
Area B	6096	fill	6095	Single fill of ditch Mid greyish brown clay	В3	3.1	
Area B	6097	cut		Cut of ditch. Very gradual sides, flat base. S-N orientation. 0.38m wide, 0.13m deep.	B2	3.1	
Area B	6098	fill	6097	Single fill of ditch. Mid greyish brown clay	B2	3.1	
Area B	6099	cut		Cut of pit. Sub circular. Rounded, concave gentle sloped sides. Flat base. NW-SE orientation. 0.62m wide, 0.1m deep.		3	
Area B	6100	fill	6099	Single fill of pit. orange greyish brown, silty clay		3	C11-C13
Area B	6101	cut		Cut of ditch. Concave gentle sides, flat base. NW-SE orientation. 0.71m wide, 0.17m deep	B2	3.1	
Area B	6102	fill	6101	Single fill of ditch. Mid grey brown, silty clay	B2	3.1	C11-C13
Area B	6103	cut		Cut of ditch terminus. Concave sides, flat base. N-S. 0.98m wide, 0.45m deep.	B1	3.1	
Area B	6104	fill	6103	Single fill of ditch. Mottled mid grey orange/blue grey. Clay	B1	3.1	C11-C13
Area B	6105	cut		Cut of furrow. 1.24m wide, 0.18m deep.	B14	5	
Area B	6106	fill	6105	Single fill of furrow. Mid greyish brown clay	B14	5	
Area B	6107	cut		Cut of ditch. Moderate straight sides. E-W orientation. 1.61m wide, 0.23m deep.	B27	3.1	
Area B	6108	fill	6107	Single fill of ditch. Dark yellow grey sandy clay.	B27	3.1	C11-C13
Area B	6109	cut		Cut of ditch. U-shaped profile. NE-SW orientation. 2.63m wide, 0.51m deep.	B11	5	
Area B	6110	fill	6109	1st fill of ditch. Mid greyish brown, silty clay	B11	5	C11-C13
Area B	6111	cut		Cut of ditch. N side vertical, S side concave. Flat base. E-W. 0.67m wide, 0.1m deep.	B16	3.1	
Area B	6112	fill	6111	Single fill of ditch. grey brown with orange patches.	B16	3.1	C11-C13
Area B	6113	cut		Cut of ditch. Straight sides, concave base. SE-NW orientation. 0.97m wide, 0.36m deep.	B15	3.1	

Area	Context	type	Fill	Description	Feature label	Period	Spot date
Area B	6114	fill	6113	Single fill of ditch. Dark brownish grey clay silt	B15	3.1	C11-C13
Area B	6115	cut		Cut of ditch. gentle sides, flat base. NW-SE orientation. 0.85m wide, 0.23m deep.	B22	3.2	
Area B	6116	fill	6115	Single fill of ditch. Mid brown grey, silty clay	B22	3.2	C11-C13
Area B	6117			Cut of ditch. Concave, shallow, gentle sloped sides. Flat base. SW-NE orientation. 0.57m wide, 0.14m deep.	B21		
Area B	6118	fill	6117	Single fill of ditch. Mid brown grey silty clay.	B21		RB
Area B	6119	cut		Cut of ditch terminus. gentle sloped sides. Flat base. SW-NE orientation. 0.57m wide, 0.08m deep.	B21	3.1	
Area B	6120	fill	6119	Single fill of ditch. Mid grey brown silty clay	B21	3.1	C14-C16
Area B	6121	cut		Cut of ditch. Steep sides, flat-concave base. E-W orientation. 1.06m wide, 0.32m deep/	B11	5	
Area B	6122	fill	6121	Single fill of ditch. Mid brown sandy clay	B11	5	C11-C13
Area B	6123	cut		Cut of ditch. Symmetrical steep sides, concave. Flat base. E-W orientation. 0.49m wide, 0.1m deep.	B19	3.1	
Area B	6124	fill	6123	Single fill of ditch. Dark yellowish brown, silty clay.	B19	3.1	C11-C13
Area B	6125	cut		Cut of ditch. Flat base. E-W orientation. 0.38m wide, 0.22m deep.	B19	3.1	
Area B	6126	fill	6125	1st fill of ditch. Dark greyish brown, silty clay	B19	3.1	
Area B	6127	fill	6125	2nd fill of ditch. Dark yellowish brown. Silty clay.	B19	3.1	
Area B	6128	cut		Cut of ditch. Steep concave sloped sides, uneven base. SE-NW orientation. 0.96m + wide, 0.36m deep.	B11	5	C11-C13
Area B	6129	fill	6128	Single fill of ditch. Dark greyish brown. Silty clay.	B11	5	
Area B	6130	cut		Cut of ditch. U-shaped profile. NE-SW orientation.	B15	3.1	
Area B	6131	fill	6130	Single fill of ditch. Dark brownish grey, clayey silt.	B15	3.1	C11-C13
Area B	6132	cut		Cut of ditch. Moderate sloping concave sides. Flat base. E-W orientation. 0.29m wide, 0.16m deep.	B17	3.1	
Area B	6133	fill	6132	Single fill of ditch. Light brownish brown, silty clay.	B17	3.1	C11-C13
Area B	6134	cut		Cut of ditch. Moderate sloped sides. Uneven base. E-W orientation. 0.19m deep.	B16	3.1	
Area B	6135	fill	6134	Single fill of ditch. Mid greyish brown with orange and blue patches. Silty clay.	B16	3.1	
Area B	6136	cut		Cut of pit. Gentle sides. Flat base. NE-SW orientation. 1.06m wide, 0.14m deep.		3	
Area B	6137	fill	6136	Single fill of pit. Mid/light red brown silty clay		3	
Area B	6138	cut		Cut of ditch. Concave gentle sides, flat base. NW-SE orientation. 0.85m wide, 0.23m deep.	B22	3.2	
Area B	6139	fill	6138	Single fill of ditch. Mid grey brown silty clay	B22	3.2	
Area B	6140	cut		Cut of ditch. gentle sides. Flat base. SW-NE orientation. 0.57m wide, 0.14m deep.	B21	3.1	
Area B	6141	fill	6140	Single fill of ditch. Mid brown grey silty clay.	B21		
Area B	6142		6109	2nd fill of ditch. Dark grey	B11	_	
Area B	6143	cut		Cut of ditch. U-shaped profile. E-W orientation. 2.95m wide, 0.67m deep.	B9	3.1	
Area B	6144	fill	6143	single fill of ditch. Mid grey orange clay	B9	3.1	C11-C13
Area B	6145	_		Cut of ditch. Gently sloping sides and flat base.	B12	_	
Area B	6146	fill	6145	Single fill of ditch. Light brown sandy clay.	B12	_	
Area B	6147			Cut of ditch. Steep sides, concave-flat base. E-W orientation. 1.2m wide, 0.36m deep	B11		
Area B	6148	fill	6147	Single fil of ditch. Mid brown sandy clay	B11	5	

Area	Context	type	Fill of	Description	Feature label	Period	Spot date
Area B	6149	cut		Cut of ditch. Moderate sides and a step. Base not excavated. W-E orientation, turning NW-SE.	B11	5	
Area B	6150	fill	6149	Single fill of ditch. Mid brown silty clay.	B11	5	C11-C13
Area B	6151	cut		Cut of ditch. Moderate concave sides. Flat base. NE-SW orientation. 0.12m deep.	B15	3.1	
Area B	6152	fill	6151	Single fill of ditch. Mid orangey brown silty clay.	B15	3.1	
Area B	6153	fill	6154	Single fill of ditch. Pale brown clay.	B40	3.3	C11-C13
Area B	6154	cut		Cut of ditch. Concave gentle sides, rounded base. E-W. 0.96m wide, 0.1m deep	B40	3.3	
Area B	6155	cut		Cut of ditch. U-shaped profile. NW-SE orientation. 0.91m wide, 0.27m deep.	B15	3.1	
Area B	6156	fill	6155	Single fill of ditch. Mid brownish clayey silt	B15	3.1	
Area B	6157	cut		Cut of furrow. 0.66m wide, 0.16m deep.	B14	5	
Area B	6158	fill	6157	Single fill of furrow. Mid greyish brown clay.	B14	5	
Area B	6159	cut		Cut of ditch. U-shaped profile. N-S. 0.07m deep.	B30	2	
Area B	6160	fill	6159	Single fill of ditch. Mid greyish brown Silty clay	B30	2	
Area B	6161	cut		Cut of ditch. N side convex, steep. Flat base. W-E orientation.	B40		
Area B	6162	fill	6161	Single fill of ditch. Dark greyish brown. Silty clay.	B40	3.3	
Area B	6163	cut		Cut of ditch. U-shaped profile. N-S orientation. 0.45m wide, 0.15m deep.	B30	2	
Area B	6164	fill	6163	Single fill of ditch. Mid greyish brown Silty clay.	B30	2	
Area B	6165	fill	6166	Single fill of ditch. Pale grey clay.	B40	3.3	
Area B	6166	cut		Cut of ditch. Concave side, flat base. 0.37m wide, 0.17m deep.	B40	3.3	
Area B	6167	fill	6168	Single fill of ditch. Pale grey clay.	B38	2	
Area B	6168	cut		Cut of ditch. Concave sides, flat base. N-S orientation. 0.08m deep.	B38	2	
Area B	6169	cut		Cut of ditch. Steep sides, concave base. SE-NW orientation. 0.42m wide, 0.19m deep.	B35	3.3	
Area B	6170	fill	6169	Single fill of ditch. Mid brown sand clay.	B35	3.3	
Area B	6171			Cut of ditch. Flat base. E-W orientation. >0.54m wide, 0.21m deep.	B33		
Area B	6172	fill	6171	Single fill of ditch. Mid brown sandy clay	B33	3.3	
Area B	6173	cut		Cut of ditch. Steep sides, concave base. SE-NW orientation.	B35	3.3	
Area B	6174	fill	6173	Single fill of ditch. Mid brown sandy clay	B35	3.3	
Area B	6175	cut		Cut of ditch. Concave sides, flat base. E-W orientation. 1.08m wide excavated, 0.6m deep.	B18	5	
Area B	6176	fill	6175	Single fill of ditch. Mid greyish brown with small orange patches. Silty clay.	B18	5	
Area B	6177	cut		Cut of ditch. Stepped sides, flat base. E-W orientation. 0.18m deep.	B16	3.1	
Area B	6178	fill	6177	Single fill of ditch. brown with orange; Silty clay.	B16	3.1	C11-C13
Area B	6179	cut		Cut of ditch. Steep sides, flat base. NW-SE orientation. 0.24m deep	B19	3.1	
Area B	6180	fill	6179	Single fill of ditch. Dark brownish grey silty clay.	B19	3.1	
Area B	6181	cut		Steep sides. Flat base. NE-SW orientation. 1.11m wide, 0.21m deep.	B18	5	
Area B	6182	fill	6181	Single fill of ditch. Dark yellowish grey, clayey silt.	B18	5	C11-C13
Area B	6183		İ	Void		Ì	
Area B	6184		İ	Void		Ì	
Area B	6185	cut		Cut of ditch. Moderate sides, flat base. NE-SW orientation. 0.75m wide. 0.29m deep.		3.3	

Area	Context	type	Fill	Description	Feature label	Period	Spot date
Area B	6186	fill	6185	Single fill of ditch. Dark greyish brown, clayey silt.		3.3	
Area B	6187	cut		Cut of ditch. U-shaped profile. NE-SW orientation. 0.98m wide, 0.29m deep.	B15	3.1	
Area B	6188	fill	6187	Single fill of ditch. Mid greyish brown. Clay	B15	3.1	C11-C13
Area B	6189	cut		Cut of pit. Circular. Very gradual sides, flat base. 0.73m long, 0.54m wide, 0.1m deep.		3	
Area B	6190	fill	6189	Single fill of pit. Mid greyish brown clay		3	
Area B	6191	cut		Cut of pit. Sub circular. Rounded, concave, gentle/moderate slope sides. Concave base. 0.63m long, 0.51m wide, 0.15m deep.	B12	3.2	
Area B	6192	fill	6191	Single fill of pit. Mid brownish grey silty clay.	B12	3.2	C11-C13
Area B	6193	cut		Cut of ditch. Rounded concave/stepped, moderate sloped sides. Concave base. NE-SW orientation.	B11	5	
Area B	6194	fill	6193	1st fill of ditch. Light yellowish grey, silty clay	B11	5	C11-C13
Area B	6195	fill	6193	2nd fill of ditch. Mid greyish brown silty clay	B11	5	C11-C13
Area B	6196	cut		Cut of ditch. steep sides, flat base. NW-SE orientation. 0.99m wide. 0.21m deep.	B33	3.3	
Area B	6197	fill	6196	Single fill of ditch. Mid to dark grey brown, sandy silty clay. Occasional charcoal and small stones	B33	3.3	
Area B	6198	cut		Cut of ditch. Moderate concave sides, flat base. NE-SW orientation. 0.85m wide, 0.12m deep.	B15	3.1	
Area B	6199	fill	6198	Single fill of ditch. Id brown silty clay	B15	3.1	
Area B	6200	cut		Cut of ditch. Moderate concave sides. Flat base. E-W orientation; 0.15m deep.	B18	5	
Area B	6201	fill	6200	Single fill of ditch. Mid greenish grey silty clay.	B18	5	
Area B	6202	cut		Cut of ditch.	B37	2	
Area B	6203	fill	6202	Single fill of ditch.	B37	2	
Area B	6204			Cut of ditch.	B37	2	
Area B	6205		6204	Single fill of ditch.	B37		
Area B	6206			Cut of ditch.	B35	I .	
Area B	6207	-	6206	Single fill of ditch.	B35	_	
Area B	6208			Cut of ditch. U-shaped profile. NW-SE orientation. 0.98m wide. 0.4m deep.	B29		
Area B	6209		6208	1st fill of ditch. Mid yellowish brown with grey patches. Silty clay.	B29		
Area B	6210	<del> </del>	6208	2nd fill of ditch. Mid yellowish brown silty clay	B29	<del>.</del>	C11-C13
Area B	6211		6212	Single fill of ditch. Pale greyish brown clay	B36	_	
Area B	6212			Cut of ditch. Concave sides, rounded base. E-W orientation. 1.2m wide, 0.22m deep.	B36	3.2	
Area B	6213	_	6214	Single fill of pit. Pale brownish grey clay.		3	
Area B	6214	cut		Cut of pit. Steep concave sides rounded base. 0.31m wide, 0.09m deep.		3	
Area B	6215	cut		Cut of ditch. Convex moderate sides, flat base. E-W orientation.	B34	3.2	
Area B	6216	fill	6215	5 Single fill of ditch. grey brown silty clay B34		3.2	
Area B	6217	cut		Cut of ditch. N side steep, convex. Flat base. >0.28m wide, >0.25m deep.	B40	3.3	
Area B	6218	fill	6217	17 Single fill of ditch. Mid greyish brown silty clay B40 3		3.3	
Area B	6219	cut		Cut of ditch. U-shaped profile. S-N orientation. >0.4m wide, 0.16m deep.	B29	2	
Area B	6220	fill	6219	Single fill of ditch. Mid greyish brown, silty clay.	B29	2	
Area B	6221	cut		Cut of ditch. Moderate sides, uneven flattish base. E-W orientation. 0.54m wide, 0.16m deep.	B40	3.3	

Area	Context	Context type   Fill   Description				Period	Spot date
Area B	6222	fill	6221	Single fill of ditch. Mid yellow grey brown. Silty clay. Rare inclusion of charcoal flecks	B40	3.3	C11-C13
Area B	6223	cut		Cut of ditch. Moderate sides. Flat base. SE-NW orientation. 0.7m wide, 0.25m deep.	B25	3.2	
Area B	6224	fill	6223	Single fill of ditch. Mid brownish grey silty clay	B25	3.2	C11-C13
Area B	6225	cut		Cut of ditch. U-shaped profile. NE-NW orientation. 0.76m wide, 0.23m deep.	B31	3.2	
Area B	6226	fill	6225	Single fill of ditch. Mid/dark brownish grey. Silty clay.	B31	3.2	
Area B	6227	cut		Cut of ditch. U-shaped profile, 0.47m wide, 0.1m deep.	B17	3.1	
Area B	6228	fill	6227	Single fill of ditch. Mid brown. Silty clay.	B17	3.1	C11-C13
Area B	6229	cut		Cut of ditch. U-shaped profile. NW-SE orientation. 0.35m wide, 0.09m deep.	B22	3.2	
Area B	6230	fill	6229	Single fill of ditch. Mid brown grey. Silty clay	B22	3.2	C11-C13
Area B	6231			Void			
Area B	6232			Void			C11-C13
Area B	6233	fill	6234	Single fill of ditch. Pale brown grey clay	B36	3.2	C11-C13
Area B	6234	cut		Cut of ditch. Gentle, concave sides. Flat base. E-W orientation. 0.72m wide, 0.15m deep.	B36	3.2	
Area B	6235	fill	6236	Single fill of ditch. Pale brownish grey clay	B38	2	
Area B	6236	cut		Cut of itch. Concave, gentle sides. Flat base. N-S orientation. 0.42m wide, 0.1m deep.	B38	2	
Area B	6237	cut		Cut of ditch. moderate sides. Flat/slightly concave base. NW-SE orientation. 1.2m wide, 0.47m deep.	B29	2	
Area B	6238	fill	6237	1st fill of ditch. Mid yellowish brown with grey patches. Silty clay	B29	2	
Area B	6239	fill	6237	2nd fill of ditch. Mid yellowish brown silty clay	B29	2	
Area B	6240	cut		Cut of ditch. U-shaped profile. NW-SE orientation. 0.63m wide, 0.22m deep.	B30	2	
Area B	6241	fill	6240	Single fill of ditch. Mid yellowish brown silty clay.	B30		
Area B	6242			Cut of ditch. U-shaped profile. SW-NE orientation. 1.32m+ wide, 0.16m deep.	B23		
Area B	6243		6242	Single fill of ditch. Mid grey brown sandy clay. 10% inclusions of dark blue	B23		
Area B	6244			Cut of ditch. U-shaped profile. SW-NE orientation. 2.09m wide, 0.43m deep.	B25		
Area B	6245		6244	Single fill of ditch. Mid grey brown sandy clay. 5% limestone fragments.	B25		RB
Area B	6246			Cut of boundary ditch. Shallow concave sides, flat base. E-W orientation. 1.11m wide, 0.39m deep.	B23		
Area B	6247	fill	6246	Single fill of ditch. Mottled mid blue grey/grey orange clay. 2 limestone	B23	3.2	C11-C13
Area B	6248			Void			
Area B	6249	cut		Cut of possible pit or tree throw pit. Steep on SE side, gentle on NW side. Flat base. 0.72m long, 0.21m deep.		0	
Area B	6250	fill	6249	Single fill of pit/tree throw pit. grey brown silty clay		0	1
Area B	6251	1	1	Cut of ditch. Moderate concave sides. Flat base. NE-SW orientation. 0.92m wide, 0.27m deep.	B19	3.1	
Area B	6252	fill	6392	Single fill of ditch. Dark blackish brown, silty clay. 10% inclusions of sub angular possible pottery emper stones. 1% charcoal		3.2	C11-C13
Area B	6253	cut		Cut of ditch. E side straight, moderately steep. N-S orientation. 0.71m wide. 0.18m deep	B33	3.3	

Area	Context	type	Fill	Description	Feature label	Period	Spot date
Area B	6254	fill	6253	Single fill of ditch. Mid grey brown silt clay. Rare inclusions of charcoal flecks.	B33	3.3	C11-C13
Area B	6255			Void			
Area B	6256			Void			
Area B	6257	cut		Cut of ditch. S side steep and concaving. E-W orientation. 0.18m deep.	B34	3.2	
Area B	6258	fill	6257	Mid grey brown silty clay. Common charcoal flecks.	B34	3.2	
Area B	6259	cut		Cut of ditch. East side steep convex, rounded base. S-N orientation. 0.25m wide, 0.29m deep.	B39	3.3	
Area B	6260	fill	6259	Single fill of ditch. Mid greyish/yellowish brown silty clay. 2% charcoal.	B39	3.3	C11-C13
Area B	6261	cut		Cut of ditch. S side convex, moderate sides. Flat base. E-W orientation. 0.15m deep	B40	3.3	
Area B	6262	fill	6261	Single fill of ditch. Mid greyish brown silty clay. 10% inclusions of charcoal	B40	3.3	
Area B	6263	Ì		Void			
Area B	6264	ĺ		Void			Ī
Area B	6265	fill		Single fill of ditch. Pale brown grey clay. 20% inclusions of redeposited natural. 5% inclusions of limestone.	B38	2	
Area B	6266	cut		Cut of ditch. Steep, concave sides, rounded base. N-S orientation. 0.75m wide, 0.28m deep.	B38	2	
Area B	6267	cut		Cut of pit. Short steep straight sloped sides. Flat base. N-S orientation. 2m wide, 0.2m deep		3	
Area B	6268	fill	6267	1st fill of pit. Mid greyish brown silty clay/clay		3	
Area B	6269	fill	6267	2nd fill of pit. Mid yellowish brown clayey silt.		3	C11-C13
Area B	6270	cut		Cut of ditch. Steep west side, moderate and uneven on the east. Rounded, irregular base. N-S orientation. 0.66m wide, 0.24m deep.	B18	5	
Area B	6271	fill	6270	Single fill of ditch. Dark grey brown silty clay	B18	5	
Area B	6272	cut		Cut of linear. Sides and base not excavated. N-S orientation. 0.53m wide.	B20	5	
Area B	6273	fill	6272	Single fill of ditch. Dark brown grey clay silt.	B20	5	
Area B	6274	cut		Cut of ditch. U-shaped profile. NE-SW orientation. 0.33m wide, 0.1m deep	B32	3.2	
Area B	6275	fill	6274	Single fill of ditch. Mid brown orange silty clay.	B32	3.2	
Area B	6276	cut		Cut of ditch. U-shaped profile. NE-SW orientation. 0.8m wide, 0.2m deep	B23	3.2	
Area B	6277	fill	6276	Single fill of ditch. Mid grey brown silty clay	B23	3.2	C11-C13
Area B	6278	cut		Cut of oval pit. Gradual NW side, steeper SE side. Flat base. SE-NW orientation. 1.42m long, 3.11m wide, 0.3m deep		3	
Area B	6279	fill	6278	Single fill of pit. Mid greyish orangey brown clay.		3	
Area B	6280	cut		Cut of ditch. Concave sides and base. N-S prientation. 0.41m wide, 0.14m deep		3.2	
Area B	6281	fill	6280	·		3.2	
Area B	6282	cut		Cut of ditch. Concave base, N-S orientation. 0.09m wide, 0.47m deep.	B32	3.2	
Area B	6283	fill	6282	2 Single fill of ditch. Mid brown orange silty clay. B32 3		3.2	
Area B	6284	cut		Cut of ditch. Steep sides, concave/flat base. E-W orientation. >0.35m wide, 0.17m deep.	B33	3.3	
Area B	6285	fill	6284	Single fill of ditch. Mid brown sandy clay	B33	3.3	
Area B	6286	cut		Cut of ditch. U-shaped profile. N-S orientation. 1.06m wide	B29	2	
Area B	6287	fill	6286	Single fill of ditch. Light yellow brown silty clay.	B29	2	RB

Area	Context	Context type   Fill   Description				Period	Spot date
Area B	6288	cut		Cut of ditch. Moderate concave sides and flat base. NE-SW orientation. 0.16m deep.	B13	3.1	
Area B	6289	fill	6288	1st fill of ditch. Light to mid yellowish brown clay.	B13	3.1	
Area B	6290	fill	6288	2nd fill of ditch. Mid to dark brown clay.	B13	3.1	
Area B	6291	cut		Cut of ditch. Moderate concave sides, flat base. E-W orientation.	B16	3.1	
Area B	6292	fill	6291	Single fill of ditch. Mid grey brown silty clay.	B16	3.1	
Area B	6293	cut		Cut of ditch. N-S orientation. 0.6m wide, 0.2m deep.	B29	2	
Area B	6294	fill	6293	Single fill of ditch. brown sandy clay	B29	2	
Area B	6295	cut		Cut of ditch. Gradual sloped sides. W-E orientation.	B34	3.2	
Area B	6296	fill	6295	Single fill of ditch. Mid yellowish brown sandy clay. Rare manganese	B34	3.2	C11-C13
Area B	6299	cut		Cut of ditch. U-shaped profile. E-W orientation. 0.7 wide, 0.21m deep.	B31	3.2	
Area B	6300	fill	6299	Single fill of ditch. Mid greyish brown silty clay.	B31	3.2	
Area B	6301	cut		Cut of ditch. Gentle slope towards base. NW-SE orientation. >0.5m wide, 0.1m deep.	B30	2	
Area B	6302	fill	6301	Single fill of ditch. Mid greyish brown silty clay	B30	2	
Area B	6303	cut		Cut of ditch. U-shaped profile. N-S orientation	B35	3.3	
Area B	6304	fill	6303	Single fill of ditch. yellow grey brown silty clay.	B35	3.3	C11-C13
Area B	6305	cut		Cut of ditch. U-shaped profile. E-W orientation.	B34	3.2	
Area B	6306	fill	6305	Single fill of ditch terminus. grey brown, silty clay.	B34	3.2	
Area B	6307	cut		Cut of ditch. Gentle to moderate concave sides, flat base. E-W orientation. 0.6m wide, 0.16m deep.	B33	3.3	
Area B	6308	fill	6307	Single fill of ditch. Dark grey brown clay. 2-5% charcoal.	B33 3.3		C11-C13
Area B	6309	cut		Cut of ditch. U-shaped profile. NW-SE orientation. 0.63m wide, 0.19m deep.	B30	2	
Area B	6310	fill	6309	Single fill of ditch. Mid yellowish brown silty clay.	B30	2	
Area B	6311			Void			
Area B	6312			Void			
Area B	6313			Void			
Area B	6314			Void			
Area B	6315	cut		Cut of ditch. Steep sides and concave base. N-S orientation. 0.48m wide, 0.22m deep.	B29	2	
Area B	6316	fill	6315	Single fill of ditch. Light brown sandy clay	B29	2	
Area B	6317	fill	6318	Single fill of ditch. Pale brownish grey silty clay	B33	3.3	C11-C13
Area B	6318	cut		Cut of ditch. Straight sides, flat base. NW-SE orientation. 1.07m wide, 0.15m deep.	B33	3.3	
Area B	6319	fill	6320	Single fill of ditch. Pale greyish brown silty clay.	B23	3.2	C11-C13
Area B	6320	cut		Cut of ditch. Moderate side, rounded base. NW-SE orientation. 0.63m wide, 0.16m deep.	B23	3.2	
Area B	6321	fill	6323	2nd fill of ditch. Mid brown grey silty clay. B40 3.3		3.3	C11-C13
Area B	6322	fill	6323	1st fill of ditch. Light yellow grey Silty clay.	B40	3.3	
Area B	6323	cut		Cut of ditch. Straight steep sloping sides. Flat base at West, concave at east. W-E orientation. 1m wide, 0.36m deep.	B40	3.3	
Area B	6324	cut		Cut of ditch. Terminus. U-shaped profile. E-W orientation. 1.14m wide, 0.63m wide 0.13m deep.	B37	2	
Area B	6325	fill	6324	Single fill of ditch. Mid grey brown silty clay.	B37	2	
Area B	6326	cut		Cut of ditch. U-shaped profile. N/S orientation. 1.6m wide. 0.12m deep.	B38	2	

Area	Context	Context type   Fill of   Description				Period	Spot date
Area B	6327	fill	6326	Single fill of ditch. Light yellow brown silty clay.	B38	2	
Area B	6328	cut		Cut of ditch. Steep sides. N-S orientation. 0.16m deep.	B28	5	
Area B	6329		6328	Single fill of ditch. Mid grey brown silty clay.	B28		
Area B	6330	cut		Cut of ditch. Steep sides, flat base. W-E orientation. 0.17m deep.	B23	3.2	
Area B	6331	fill	6330	Single fill of ditch. Mid brown grey silty clay.	B23		
Area B	6332			Cut of ditch. Shallow sloped sides, W-E orientation. 0.52m wide, 0.16m deep.	B24	3.2	
Area B	6333	fill	6332	Single fill of ditch. Mid brown grey silty clay.	B24	3.2	
Area B	6334	cut		Cut of ditch. side gently sloping. NW-SE orientation. 0.38m wide, 0.19m deep.	B22	3.2	
Area B	6335	fill	6334	Single fill of ditch. grey brown with orange Silt clay.	B22	3.2	C11-C13
Area B	6336	cut		Cut of ditch. U-shaped profile. W-E orientation. 1.21m wide, 0.42m deep.	B23	3.2	
Area B	6337	fill	6336	Single fill of ditch. grey brown with orange Silty clay.	B23	3.2	C11-C13
Area B	6338	cut		Cut of ditch. Sharp straight, steep sloped sides. Flat base. NE-SW orientation. 0.34m deep.	B25	3.2	
Area B	6339	fill	6338	Single fill of ditch. Mid greyish brown. Silty clay. 20% inclusions of charcoal.	B25	3.2	C11-C13
Area B	6340	cut		Cut of ditch. Moderate sides. Flat base. NW-SE orientation. 0.31m deep.	B28	5	
Area B	6341	fill	6340	Single fill of ditch. Mid greyish brown silty clay.	B28	5	
Area B	6342	fill	6251	Single fill of ditch. Mid yellowish brown silty clay.	B19	3.1	C11-C13
Area B	6343	cut		Cut of ditch. U-shaped profile. 0.91m+ wide, 0.16m deep.	B30	2	
Area B	6344	fill	6343	Single fill of ditch. yellow brown Silty clay.	B30	2	
Area B	6345	cut		Cut of ditch. U-shaped profile, 0.92m+ wide, 0.41m deep.	B29	2	
Area B	6346	fill	6345	1st fill of ditch. Mid yellowish brown silty clay	B29	2	Late prehistoric?
Area B	6347	fill	6345	2nd fill of ditch. Mid yellowish brown clayey silt.	B29	2	
Area B	6348	cut		Cut of ditch. U-shaped profile. NE-SW orientation. 1.07m wide, 0.23m deep.	B27	3.1	
Area B	6349	fill	6348	Single fill of ditch. Mid yellowish brown silty clay.	B27	3.1	C11-C13
Area B	6350			Cut of ditch. Concave sides, flat base. E-W orientation. 0.07m deep.	B37	2	
Area B	6351	fill	6350	Single fill of ditch. Mid greyish brown Silty clay.	B37	2	C11-C13
Area B	6352	cut		Cut of ditch. Concave sides, flat base. E-W orientation. 0.08m deep.	B34	3.2	
Area B	6353	fill	6352	Single fill of ditch. Light red brown silty clay.	B34	3.2	C11-C13
Area B	6354	cut		Cut of ditch. U-shaped profile. NW-SE orientation. 0.07m deep.	B38	2	
Area B	6355	fill	6354	Single fill of ditch. Mid yellowish brown silty clay.	B38	2	
Area B	6356	cut		Cut of ditch. U-shaped profile. NE-SW orientation. 0.07m deep.	B33	3.3	
Area B	6357	fill		Single fill of ditch. Mid greyish brown silty clay. 5% B33 3. inclusions of small charcoal pieces.		3.3	C11-C13
Area B	6358	cut		Cut of ditch. U-shaped profile. E-W orientation. 0.83m wide, 0.15m deep.	ofile. E-W orientation. B34 3.2		
Area B	6359	fill	6358	Single fill of ditch. Mid greyish brown silty clay	B34	3.2	C11-C13
Area B	6360	cut		Cut of ditch. NE-SW orientation. 0.8m wide. Base not excavated.	B34	3.2	

Area	Context	type	Fill	Description	Feature label	Period	Spot date
Area B	6361	fill	6360	Single fill of ditch. Mid yellowish brown silty clay.	B34	3.2	
Area B	6362	cut		Cut of ditch. E-W orientation. >1m long, 1.2m wide. Base not excavated.	B36	3.2	
Area B	6363		+	Single fill of ditch. Dark yellowish brown silty clay.	B36	_	
Area B	6364		6365	Single fill of ditch. Mid grey brown/orange clay.	B26		C11-C13
Area B	6365	cut		Cut of ditch. Irregular sides, concave slightly irregular base. NE-SW orientation. 1.33m wide, 0.18m deep.	B26	3.1	
Area B	6366	cut		Cut of ditch. Moderate sloped, irregular sides. Uneven base. N-S. 0.62m wide, 0.26m deep.	B11	5	
Area B	6367	fill	6366	Single fill of ditch. Mid brown silty clay.	B11	5	
Area B	6368	cut		Cut of ditch. steep/moderate sides. Concave base. N-S orientation. 0.23m deep.	B19	3.1	
Area B	6369	fill	6368	Single fill of ditch. Mid brownish grey silty clay.	B19	3.1	
Area B	6370	cut		Cut of ditch. U-shaped profile. NE-SW orientation. 0.42m wide, 0.22m deep.	B41		
Area B	6371	fill	6370	Single fill of ditch. Dark to mid blackish brown clay.	B41		C11-C13
Area B	6372	fill	6373	Single fill of ditch. Pale grey clay	B29		
Area B	6373	cut		Cut of ditch. Moderate sides. Base not excavated. N-S orientation. 0.72m wide, 0.38m deep.	B29	2	
Area B	6374	fill	6375	Single fill of ditch. Pale yellow brown clay	B25		
Area B	6375	cut		Cut of ditch. Steep, concave sides. E-W orientation. 0.43m wide, 0.21m deep	B25	3.2	
Area B	6376	fill	6377	Single fill of ditch. Pale yellow brown clay	B31	3.2	
Area B	6377	cut		Cut of ditch. U-shaped profile. E-W orientation. 0.65m wide, 0.08m deep	B31	3.2	
Area B	6378	cut		Cut of ditch. East side moderate concave, west side stepped. Uneven base. S-W orientation. 0.89m wide, 0.98m deep.	B38	2	
Area B	6379	fill	6378	1st fill of ditch. Mid greyish brown with blue and orange patches. Silty clay.	B38	2	
Area B	6380	fill	6378	2nd fill of ditch. Light brown. Silty clay.	B38	2	
Area B	6381			Void			
Area B	6382			Cut of pit. 0.6m long, 0.54m wide, 0.08m deep. Base and edges not visible.		3	
Area B	6383	fill	6382	Single fill of pit. Mid greyish brown silty clay. 45% inclusions of charcoal.		3	C11-C13
Area B	6384			Cut of ditch. Steep concave sloped sides, flat base. N-S orientation. 0.84m wide, 0.21m deep.	B38		
Area B	6385		6384	Single fill of ditch. Light yellowish grey silty clay.	B38	2	
Area B	6386		1	Void			
Area B		layer		Mid grey clay. Frequent inclusions of gravel.			C11-C13
Area B	6388			Cut of ditch. Moderate concave sides. Flat base. NE-SW orientation	B19		
Area B	6389		6388	Single fill of ditch. Mid yellowish brown silty clay.	B19		
Area B	6390			Cut of ditch terminus. Moderate sides and flat base. NE-SW orientation. 1.39m wide 0.15m deep.	B26		
Area B	6391		6390	Single fill of ditch terminus. Mid grey brown/orange.	B26		
Area B	6392			Cut of ditch. Steep concave sides, concave base. NE-SW orientation. 0.52m wide, 0.3m deep.	B41		
Area B	6393			Cut of ditch. Convex sides. Rounded base. E-W orientation. 1.56m wide 0.42m deep.			
Area B	6394	fill	6393	Single fill of ditch. Mid grey brown, orange mottling silty clay. Moderate charcoal	B25	3.2	C11-C13

Area	Context	type	Fill of	Description	Feature label	Period	Spot date
Area B	6395	cut		Cut of ditch. U-shaped profile. E-W orientation. 0.88m wide, 0.25m deep.	B23	3.2	
Area B	6396	fill	6395	Single fill of ditch. Mid grey brown, orange mottling. B23 Silty clay. Occasional charcoal.			C11-C13
Area B	6397	cut		Cut of ditch. U-shaped profile. E-W orientation. 0.8m wide, 0.25m deep.	B24		
Area B	6398	fill	6397	Single fill of ditch. Mid orange grey silty clay.	B24	3.2	C11-C13
Area B	6399			Grave cut. Irregular sides and flat base. N-S orientation. 1.96m long, 1.01m wide, 0.15m deep.		2	
Area B	6400		6399	SK6400. Supine skeleton, mostly destroyed. NW-SE orientation.		2	
Area B	6401	fill	6399	Heavily disturbed backfill of grave. orange grey silty clay.		2	
Area B	6402	cut		Cut of ditch. U-shaped profile. N-S orientation. 0.7m wide, 0.16m deep.	B39	3.3	
Area B	6403	fill	6402	Single fill of ditch. Light brown grey silty clay.	B39	3.3	
Area B	6404	cut		Cut of ditch. U-shaped profile. N-S orientation. 0.74m wide, 0.28m deep.	B35	3.3	
Area B	6405	fill	6404	Single fill of ditch. Mid grey brown silty clay	B35	3.3	
Area B	6406	cut		Cut of ditch. U-shaped profile. N-S orientation. 1.76m wide, 0.11m deep.	B36		
Area B	6407	fill	6406	Single fill of ditch. Light grey brown silty cay.	B36	3.2	
Area B	6408	cut		Cut of ditch. U-shaped profile. E-W orientation.	B40	3.3	
Area B	6409	fill	6408	Single fill of ditch. Light grey brown silt clay.	B40	3.3	
Area B	6410	cut		Cut of ditch. Shallow sided, concave base. W-S	B36	3.2	
Area B	6411	fill	6410	Single fill of ditch. Light brown grey silty clay.	B36	3.3	
Area B	6412	cut		Cut of ditch. moderate sides. Uneven base. NE-SW orientation. 1.08m wide, 0.28m deep.	B34	3.2	
Area B	6413	fill	6412	Single fill of ditch. Mid grey brown silty clay with 5% inclusions of charcoal.	B34	3.2	C11-C13
Area B	6414	fill	6415	Single fill of ditch. Pale grey brown clay.	B23	3.2	
Area B	6415	cut		Cut of ditch. Steep concave sides, E-W orientation. 0.38m wide, 0.21m deep.	B23	3.2	
Area B	6416	fill	6417	Single fill of ditch. Pale brown clay.	B29	2	
Area B	6417	cut		Cut of ditch. Steep concave sides, flat base. N-S orientation. 0.2m wide, 0.22m deep.	B29	2	
Area B	6418	cut		Cut of ditch. U-shaped profile. SW-NE orientation. 0.8m wide, 0.2m deep.	B34	3.2	
Area B	6419	fill	6418	Single fill of ditch. brown grey/ bluey grey Silty clay.	B34	3.2	C11-C13
Area B	6420	cut		Cut of ditch. U-shaped profile. N-S orientation. 0.9m+ wide, 0.38m deep	B29	2	
Area B	6421	fill	6420	1st fill of ditch. Mid greyish blue silty clay.	B29	2	
Area B	6422	fill	6420	2nd fill of ditch. Mid greyish brown silty clay.	B29	2	
Area B	6423	cut		Cut of ditch. not excavated. N-S. 1.84m wide.	B18	5	
Area B	6424	fill	6423	Single fill of ditch. Dark yellowish grey, clayey silt.	B18	5	
Area B	6425	cut		Cut of ditch. not excavated. E-W. 1.3m wide.	B23	3.2	
Area B	6426	fill	6425	Single fill of ditch. blue grey/grey orange clay	B23	3.2	
Area B	6427	cut		Cut of ditch. not excavated. 0.75m wide	B20	5	
Area B	6428	fill	6427	Single fill of ditch. Dark brown grey clayey silt.	B20	5	
Area B	6429			Cut of ditch. not excavated. E-W. 0.92m wide.	B27		
Area B	6430	fill	6429	Single fill of ditch. Mid yellowish brown sily clay.	B27		
Area B	6431	cut		Cut of ditch. not excavated. N-S. 0.6m wide.	B20		
Area B	6432	fill	6431	Single fill of ditch. Dark brown grey clayey silt.	B20	3.3	

Area	Context	type	Fill of	Description	Feature label	Period	Spot date
Area B	6433	cut		Cut of ditch. not excavated. E-W. 1.63m wide	B27	3.1	
Area B	6434	fill	6433	Single fill of ditch. Dark yellow grey sandy clay.	B27	3.1	
Area B	6435	cut		Cut of ditch. not excavated. N-S. 1.73m wide	B28	5	
Area B	6436	fill	6435	Single fill of ditch. Mid greyish brown silty clay.	B28	5	
Area B	6437	cut		Cut of ditch. not excavated. E-W. 1.98m wide	B26	3.1	
Area B	6438	fill	6437	Single fill of ditch. Mid grey brown/orange silty clay.	B26	3.1	
Area B	6439	cut		Cut of ditch. Not excavated. N-S. 1.91m wide	B28	5	
Area B	6440	fill	6439	Single fill of ditch. Mid greyish brown silty clay.	B28	5	

### APPENDIX B: PREHISTORIC AND ROMAN POTTERY

By E. R. McSloy

Pottery which pre-dates the medieval period amounts to 86 sherds (377g). The large majority dates to the Roman period and consists of material clearly re-deposited in later deposits. More notable are the small number of sherds dating to the Middle or Later Iron Age from Area A and derived mostly from Enclosure A or associated features (Table B2).

The pottery has been recorded in accordance with standards recommended for archaeological material (Barclay *et al.* 2016). This included quantification by fabric and according to sherd count/weight, and rim EVEs (estimated vessel equivalents), recording of vessel form and rim morphology, and evidence for use (residues etc). For the prehistoric component, sherd thickness and decoration type/location were also recorded. Codes used for recording of fabrics are set out in Table B2. For the Roman group these match the codings of the National Roman Fabric Reference Collection (Tomber and Dore 1998) and a concordance is provided showing equivalent codes of the Gloucester city pottery type series (Timby and Tyres 2018).

The pottery is for the most part heavily fragmented and abraded, its condition consistent with a predominantly residual assemblage. Context group size is in all instances small, not exceeding six sherds and the mean sherd weight is low (4.4g).

Assemblage range: prehistoric (Table B1)

Pottery of this period amounts to only 26 sherds (66g), all of which were hand-recovered. The majority (25 sherds; 62g) came from features in Area A, concentrated in the vicinity of medieval Enclosure A. Medieval pottery from the same features indicated that the prehistoric pottery was re-deposited, possibly as the result of truncation of Iron Age ditches or other features in the area, although no such features were identified within the stratigraphic record.

Pottery fabrics for the prehistoric group are defined in Table B1. A single, abraded sherd in a coarse grog-tempered fabric probably dates to the earlier or Middle Bronze Age and was residual in Area A/Period 3.1 Ditch A50 (fill 3145). The remaining pottery is all considered of later prehistoric, probably Iron Age, date. Handmade calcareous (limestone-tempered) types which form the majority represent a mix of local (or probably local) and non-local types. The non-local types are made up of sherds in Paleozoic limestone-tempered fabrics, a type commonly encountered in Middle and later Iron Age assemblages from the area (Peacock 1968) and probably originating from the Malvern Hills or Woolhope Hills of Worcestershire/Herefordshire.

The single rim sherd recorded from the later prehistoric material has been illustrated (Fig. 27; no. 1). This vessel, from Period 3.1 Enclosure A1 Ditch A30, features impressed decoration to its rim top and below the rim (exterior), n the case of the latter, seemingly using a shaped implement. The decoration is in the tradition of Cunliffe's Croft Ambrey-Bredon Hill style (Cunliffe 1991, 81) which characterises Middle Iron Age pottery from the north Gloucestershire/Worcestershire area, in particular that produced in the Malverns.

## Illustration catalogue

1. Fabric LI1. Neckless, barrel-shaped or ovoid vessel with a short, everted rim. Impressed decoration to shoulder and rim top. Area A/Period 3.1 Enclosure A1/Ditch A30 (fill 3230).

Roman

The Roman group amounts to 60 sherds (311g), the majority certainly residual, with 44 sherds (73.3%) coming from deposits also containing medieval pottery. Approximately two thirds (41 sherds) were recorded from Area A deposits, with the remainder from Area B.

In its composition (Table B2), the Roman group is typical of material from the Gloucester environs. Local coarsewares are strongly dominant in the form of Severn Valley ware types and reduced coarsewares (GW1, GW2). Traded wares occur in small quantities as Southeast Dorset Black-burnished ware (DOR BB1), Oxfordshire red slipped ware (OXF RS) and Mancetter/Hartshill whiteware (MAH WH), the latter types as mortaria base sherds. In addition, a single sherd in a shell-tempered fabric is from a Midlands source, probably the kilns at Harrold, north Bedfordshire. Only five rim sherds were recorded, all identifiable as from jars from among the Severn Valley ware, Black-burnished ware and greywares.

Although small and mostly residual, the Roman group provides evidence for Roman activity in the wider area. The few more closely datable elements include the sherds of Oxfordshire red slipped ware and shell-tempered ware (each from Area A/Period 3 Ditch A50), both of which are of the period after *c*. AD 270/300.

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Table B1: late prehistoric pottery fabrics summary, showing locations

fabric	Description	Ct.	Wt.(g)	Location
LI1	sparse poor-sorted limestone; sparse shell	6	11	Ditch A22, A30
LI2	abundant fine limestone and shell	4	14	Pit 3538, Ditches A26, A30
MALREB	Malvernian limestone-tempered	14	25	Ditch A22, A30
VES	vesicular (leached limestone/shell)	1	4	Ditch B29
GRm	Common self-col grog 0.5-2mm	1	12	Ditch A50
Total		26	66	

Table B2: Roman pottery fabrics summary

Fabric*	Glos TF†	Description	Ct.	Wt.(g)
GW1	-	greyware, sandy; red core/margins	2	22
GWfm	11a?	Greyware, fine, micaceous	5	12
OXID	-	Sandy oxidised	1	7
SVW OX2	11b	standard 'oxidised' Severn Valley ware	41	205
SVW Oxg	11b	SVW - early (grogged)	1	13
SVW Oxo	17	Oxidised SVW with organic (charcoal) inclusions	1	1
SVW RE	11b	Reduced Severn Valley ware	1	7
SVW REO	17	Reduced SVW with organic (charcoal) inclusions	2	22
DOR BB1	4	Southeast Dorset Black-burnished ware (BB1)	3	6
MAH WH	9d	Mancetter-Hartshill mortaria	1	3
OXF RS	12a	Oxford red-slipped ware	1	12
ROB SH	22	(Late) Roman shell-tempered	1	1
Total			60	311

<sup>\*</sup>types in bold match NRFRC Codes (Tomber and Dore 1998) †Gloucester Type Series codes

## **APPENDIX C: MEDIEVAL AND LATER POTTERY**

By Stephanie Rátkai

## General introduction and methodology

This report concentrates on the oolitic limestone-tempered ware, coded TF41B in the Gloucester pottery type series (<a href="http://glospot.potsherd.net">http://glospot.potsherd.net</a>). This is because there is documentary evidence that pottery was made in Haresfield, from at least the final quarter of the 11th century, and because this is the most extensive collection of fabric TF41B yet excavated. The focus is also on the pottery from Period 3, the earlier medieval *floruit* of the site, and on the enclosure groups of that period since this provided the best way to isolate large groups of pottery that could be compared one with another.

A second aim of this report was to publish a representative sample of the vessel forms encountered, since these must be part of the Haresfield potters' repertoire.

The pottery has been recorded using the Gloucester pottery type series. It has been quantified by count and weight, rim, handle and base count, and rim percentage. Vessel form was recorded. Details of decoration, sooting, wear and other characteristics of the pottery were recorded in a comments field. The data are itemised spatially by excavation area (Areas A and B), major feature type (e.g. enclosure, trackway) and by feature identification. All data are stored on an MS Access database and form part of the digital archive.

### **Overview of the Pottery**

# Background

A comparatively large assemblage, taken largely from ditch sections and a few other features, was gathered (Tables C1 and C2). A group of potters are recorded in the Domesday survey as living at Haresfield; the current village of Haresfield lies 1km south-east of the site but to date there has been no excavation within the village and no kilns have been uncovered.

In some ways the medieval pottery assemblage from Quedgeley East is extraordinary, since all but a handful of sherds are in the same oolitic limestone-tempered fabric, TF41B, and it is the single largest group of this type of pottery that has yet been found. In contrast, despite numerous archaeological interventions, large groups of TF41B have not been found in Gloucester, a city that must have been the intended market for the Haresfield potters. This means there is a mismatch between small, stratified, and, to some extent, datable groups in Gloucester, and the large groups of pottery from Quedgeley East which are difficult to date independently.

Fabric TF41 is conventionally divided into a pre-Conquest type (TF41A) and a post-Conquest type (TF41B), but although this division is useful, the interface between the two types is somewhat blurred. Wasters of TF41A have been found in Gloucester (Vince 1979), but both hand-formed and wheel-formed versions are known and the possibility of different sources for the ware, although still local, are not inconceivable. There appears to have been a period of time possibly quite short, when both TF41A and TF41B were in use. Wasters for TF41B are not known from Gloucester, suggesting that production was outside the city, and this has always been presumed to relate to the Haresfield potters listed in Domesday Book.

## Characteristics of the pottery from Quedgeley East

Almost all of the 4,526 medieval sherds from the site have oolitic limestone temper. There are some variations but it is in essence the same fabric, Gloucester fabric TF41B. The greater number of these sherds have oxidised surfaces varying from brown through to pinkish-red, orange and buff. The core is nearly always grey. It is rare to see an oxidised margin and it is most usual to see the oxidised surfaces as little more than a thin skin on an otherwise reduced grey pot. It is not uncommon to find sherds that have rather patchy colour on the exterior and/or interior so that a predominantly orange vessel could have buff and/or grey patches. The colour of the pots suggests limited control over the firing, or rather, limited control over the oxidation/reduction process. A particularly striking sherd (Fig. 29, no. 59) is half red and half grey, the division running exactly along the break. The cause of this is likely to be the pot cracking and breaking whilst on a domestic fire or in a kiln and the fragments landing in different environments, one where oxygen was present, the other where it was not. A second example of this phenomenon is also present within the assemblage.

Many of the sherds are rough to the touch, with abundant limestone inclusions standing proud above the surfaces, and the interiors of the vessels are often, but not always, rougher than the exteriors. It is also the case that the surface feel is inconsistent, so that some vessels (for example West Country dish Fig. 29, no. 68) are perfectly smooth for over half the surviving vessel but suddenly became rough further round the pot. In the case of the West Country dish, a small hole on the surface (but not extending through the entire wall) occurring on the line of one of the main breaks through the vessel seems to mark the transition from a smooth surface to a gritty one. It is tentatively suggested that the small hole was caused by a piece of flying debris in the kiln, with very much smaller fragments adhering to the external surface. However, that is not to say that all inconsistencies in the feel and surface texture of a pot were caused during firing.

Closer examination of the sherds revealed that the intended ideal was a smooth surface. Areas of some pots, particularly in less exposed areas such as the neck just below the rim, or the junction of rim and neck or shoulder, are clearly smooth and look as if they have been wiped or a thin wash or self-clay slip added to the external surface. This treatment can not be seen on the interiors, but this could be because there was less likely to be a 'protected area' where the original surface remained. Some vessels are very battered indeed, with virtually none of the original surfaces surviving and a rough, severely pocked aspect (e.g. Fig. 29 nos 42, 46, 61). The pottery is usually fairly soft and can be marked with a thumbnail, although some pressure has to be applied. Some sherds were re-washed by the author and the oxidised surfaces washed away as the result of any, even gentle, friction. The very poor surface condition of so many of the sherds may, therefore, have been due to the action of groundwater within the burial environment. Given the condition of the pottery, it is impossible to tell whether a vessel has been wheel-thrown, finished on a slow wheel or hand-formed. The balance of probabilities is that the vessels were hand-formed and finished on a slow wheel, but this cannot be proven.

In addition to the sherds with a rough to harsh feel, there is a smaller group of sherds that are extensively leached and corky. These sherds tend to have brown surfaces and a grey core, and seem to occur in distinct groups, such as in ditch fills of Enclosures D and K. They are smoother to the touch, sometimes with a slightly soapy or greasy feel also known from some shelly wares from the East Midlands. The sherds had contained ooliths and the inclusion size was slightly larger than that seen in the harsher fabric. Some of these sherds have also suffered a certain amount of abrasion. Leaching is usually the result of environmental causes, but the combination of patchy surface colour and overfiring seen in a group from Enclosure D (see below) suggests that these sherds are wasters, fired at too high a temperature and thus causing calcareous matter to disintegrate.

Evidence of glazing is almost absent from the TF41B sherds and can be detected on two pitchers only by the distinctive patchy grey reduced areas on the surface where glaze had been but has subsequently worn away.

In short, the condition of the greater part of the pottery is not good regardless of what contexts the sherds derived from. Whether this is due to environmental factors, repeated redeposition (for which there is evidence presented in the site discussion below), or is indicative of kiln waste or a combination of these is difficult to say.

# Evidence for pottery production on the site

There is evidence for pottery production on the site, but this relies on the sherds themselves; no kilns or kiln furniture pieces were found. The evidence comprises a lack of any substantial non-local component to the earlier medieval assemblage; the irregular firing of some sherds; the very bright surface colour on many sherds, very different from the appearance of the type sherds shown on the Gloucester Pottery Type Series website (glospot.potsherd.net); and evidence of overfiring. All these suggest that the sherds displaying these traits derive from a nearby kiln or kilns. This suggestion is supported by the paucity of sooted sherds and the total absence of any heavy carbonised deposits on the interior or exterior of the sherds, traits unusual for material that derives from domestic waste, especially of this date, even allowing for the heavy wear on some sherds that could have removed evidence of sooting along with the sherd surfaces. Another possible tell-tale sign that these sherds are kiln waste is a fine network of surface cracks on a few sherds. In addition, there are a small number of sherds that are definitely wasters (such as illustrated vessels Fig. 30, nos 78, 86), including examples where there is a flaw in the rim at the point of breakage and a different firing (usually complete oxidation) at this point. Several club rims have broken away at their junction with the main body of the pot. This junction is a constructional weak spot and often fails during firing. Further evidence is provided by the presence in a ditch fill (Ditch B19) of a localised dump of angular limestone pieces possibly intended for crushing to make temper to add to the clay body; limestone does not form the natural substrate on the site, but can be sourced within the higher parts of Haresfield, east of the site. The limestone is particularly interesting because the fired clay from the site (Appendix H) does not contain much limestone and to reach the condition of the pottery fabrics, a quantity of limestone temper would have to be added.

There was no structural evidence for kilns. Fragments of fired clay (Appendix H) associated with Enclosure A were undiagnostic and there is no indication that they derived from a kiln, although this possibility cannot be entirely excluded.

There were no classic deposits of wasters interleaved with ash, kiln rake-out and burnt clay superstructure fragments, but such deposits depend on the type of kiln used. An early post-medieval kiln site at Wednesbury in the West Midlands (Rátkai in prep. a.) did have these interleaved deposits but the multi-flued kilns from which they derived left barely a trace, limited mainly to thin burnt skims indicating the remains of the floor of the kiln. On the other hand, if the Haresfield potters were using a bonfire kiln where the pots for firing are placed directly on the ground (or possibly in a hollow, although the evidence for the use of hollows is rare; pers. comm. Oliver Kent) with the fuel, rather than a more permanent structure in which to fire their pots, then there would be less debris anyway and the evidence less likely to survive. Indeed, the use of bonfire firings is inferred from the patchy surface colour seen on many of the sherds and the sometime 'smoked' look of some internal surfaces. However, a patchy surface firing can be the aim of the potter (Oliver Kent pers. comm). In this instance this is perhaps not so likely, since larger, more complete vessels from the site seem to have a fairly consistent surface colour. Bonfire-fired pottery waste is very difficult to define. Sherds that are clearly different in colour at the join are likely to be wasters having fallen into different parts of the fire. Cracks and breakages can't be recognised (in a reconstructible vessel, distortion due to cracking might theoretically be detectable). Spalling where flakes detach from the surface is

another indicator. At Sherbourne (Best *et al.* 2013) wasters were very hard to find though, despite very large numbers of sherds (pers. comm. Oliver Kent). The difficulty of finding and recognising bonfire kilns is also discussed by Thér (2004, 45–6).

Work by Ecclestone (2000) concluded that the Haresfield potters were based south-east of Haresfield village, not to the north-west where the Quedgely East site lies. Ecclestone's evidence was largely documentary with some geological considerations, however, and lacked information from excavation. The most important facet of this study are the names Crockers (Hill) and Crockhorn. There is no doubt that the English place name element 'croc' is associated with pots and potters, and Ecclestone (ibid.) presents a reasonable case for potting clay being extracted from the area of Crockers Hill and, indeed, shows that clay dug from the presumed site of Crockers Hill, when fired, does resemble known Haresfield products i.e. fabric TF41B. Nevertheless, the evidence for Saxo-Norman potting in this area is not watertight. The 'croc-' names are not documented before 1441, some 300–400 years later than the time the TF41B pottery was being produced. In addition, Ecclestone notes that pottery from a moated site (The Mount; Fig. 1) close to Haresfield church (and somewhat closer to the Quedgeley East site, being about 450m to the south-east) was examined by Alan Vince who noted that the pottery derived from more than one clay source.

Ecclestone was unable to produce TF41B pottery sherds from the southern half of Danehill Field, the area he identified as Crockers Hill and his suggestion (Ecclestone 2000, 53) that it is hard to find pottery in clay soil is undermined by the survival there of Roman sherds. This suggests that there was no kiln at Crockers Hill, although the site could have been used for extracting potting clay.

To sum up, the evidence for pottery making at the putative Crockers Hill site is supported only by the documentary evidence; in contrast the Quedgeley East site contains the physical evidence of pottery making. However, the choice between the two sites need not be binary. It is possible that the earliest pottery production, perhaps small scale was sited at Crockers Hill; the toponym Crockhorn suggests that this industry could be pre-Conquest. However, perhaps Crockers Hill was only ever used for clay-digging and short term storage of clay. At some point, pottery production was set in motion at the Quedgeley East site. The site is actually a much better place for intensive pottery making because it is on relatively flat ground and less than 1.5km from the Roman Road (Fig. 1) into Gloucester; Crockers Hill, in contrast, is 3.3km from the road and the journey would be somewhat more difficult with a drop of over 60m from Crockers Hill across rougher terrain. The Quedgeley East site is therefore the more obvious location for a pottery production industry supplying most of Gloucester's needs.

As with so many aspects of the Quedgeley East site, it is difficult to be definitive as to the location of pottery workings, as the discussion above demonstrates. One difficulty lies in the bias automatically attendant on documentary sources. Because Crockers Hill can be located to the south-east of Haresfield village, only that part of the parish has been examined for evidence of potting but had there been no written evidence then the whole of the Haresfield parish would have been examined for clues as to where the Domesday potters could have operated. What is really needed is an extended programme of research involving landscape survey, a series of scientifically tested clay samples, and the closer examination, ideally though excavation, of some of the 'bumpy' features noted by Ecclestone (2000, 48) to the west of Crockers Hill. In addition, scientific analysis comparing the sherds from The Mount to those from Quedgeley East might put our understanding of the whole Haresfield industry on a firmer footing.

A very small number of fabrics other than TF41B were recorded (Table C4). These were mainly found in Period 4 (later medieval) Ring-ditch B; a few sherds were found in the Period 3 enclosures, but at least some of these must

be intrusive, such as the probable West Somerset? (TF57?, 17th–18th century) and Stroat (TF97, early 17th–18th century?) sherds found in Enclosure I, and the Malvernian (TF52, mid to late 14th–16th century) sherds found in Enclosures A and B, all of which post-date the abandonment of the enclosures (see below).

# Vessel Forms, parallels and dating

The pottery consists of hand-formed cooking pots/jars, both rounded and straight-sided with a number of different rim forms. The most homogeneous group are the straight-sided cooking pots with club rims, sometimes with a slight drop giving a shallow flange effect. The most complete example (Fig. 29, no. 42; Fig. 31, no. 105), which is very heavily abraded, was found in Enclosure D. This is a form particularly associated with oolitic wares made in the Cotswolds and commonly encountered in Oxfordshire (Fabric OXAC; Mellor 1994) and Warwickshire (Fabric CO01; Soden and Rátkai 1998).

Most of the rim forms have been illustrated. All rim types were sketched, but some are clearly quite subtle variations on a basic type and are more likely to be due to the difficulty of producing exactly the same form time and time again, and, on occasion, may reflect a different potter's take on the basic form. The rim forms were recorded in some detail but were subsequently grouped into broader categories (here referred to as Group 1A, 1B, 2A etc). The characteristics of the rim form groups and the distribution of these groups by enclosure are shown in Tables C5–C8. The club rims (Rim Group 2A) are associated with straight-sided cooking pots. The *floruit* for straight-sided cooking pots with club rims seems to be from the second half of the 11th century through to the mid 12th century, although continued use at a diminished scale is possible until the end of the 12th century. An example of this form is known from beneath the rampart at Stafford Castle (Rátkai 2007) so it is clearly an early form.

Most of the cooking pots do not have a marked neck zone, and on most rounded forms the transition from shoulder to rim tip is a continuous curve (Group 1A: Figs 28–30, nos 8, 17, 25, 33, 49, 54, 64, 74, 80, 81, 82, 89, 90, 100). Other examples with a more sinuous profile have some sort of thickening at the rim tip and a small internal projection (Group 1B: Figs 28–30, nos 6, 12, 38, 48, 50, 51, 52, 55, 56, 62, 67, 79, 93, 95, 100). This small projection is sometimes seen on other rim types and seems to be the result of running a thumb nail (or similar) just below the rim tip. Another set of simple curving rims are more elongated (Group 1C: Figs 28–30, nos 7, 10, 11, 32, 34, 37, 57, 60, 98). Some of these may be from pitchers (Figs 29–30, nos 39, 45, 77), and some are definitely so (Fig. 30, no. 76). Two further sub-groups belong in Group 1: Group 1D has very curving rims (Fig. 28, no. 14) whilst Group 1E has two different types of collar rims (Fig. 28, no. 29; Fig. 29, no. 59).

On other vessels there is a clearer, more angular change in direction from shoulder to rim tip (Group 3A [plain squared] Fig. 30, nos 78, 92); (Group 3B [angular] Figs 28–29, nos 13,14, 15, 16, 27, 40, 58). The fourth set of rims (Group 4) are found on very rounded cooking pots/jars and are everted but quite 'stubby' (Figs 28–30, nos 23, 30, 31, 38, 72).

Straight-sided cooking pots have club rims (Group 2a: Figs 28–29, nos 26, 35, 36, 42; Fig. 31, no. 105). Slightly flange-like rims are found on rounded cooking pots and some straight-sided cooking pots also (Group 2B: Figs 29–30, nos 63, 83). Horizontal rims have also been included here (Group 2C), although they are more likely to be associated with rounded forms (Figs 28–30, nos 18, 21, 22, 24, 28, 41,73, 91).

Uncommon rim forms were assigned to a miscellaneous group (Group 5).

The simple rims of Rim Group 1 are the most common, followed by club rims and then 'stubby rims'. However, there is no obvious spatial patterning discernible in the distribution of the Rim Groups across the site. There is one anomaly: Period 3 pit 3753 did not contain any club rim cooking pots. This pit was located in the southern part of Area A in Enclosure G, although there was no clear evidence that the pit was contemporary with the enclosure. The fills contained a mix of cooking pot sherds (the majority) and pitcher sherds; most of the sherds were from the fourth fill 3757. Many of the 156 sherds are quite large, wear is mainly quite light, and only 24 sherds have any sign of sooting or smoke-blackening and this is light. There is none of the heavy soot that would usually be associated with cooking pots. Because of these factors, and because the pottery forms are very similar to those found in feature B41 (see below) which was an undoubted waste dump, it seems likely that the pottery in pit 3753 was also waste.

The overwhelming majority of the TF41B vessels are cooking pot/jars but a small number of other forms are present (Table C9). The most common are spouted pitchers. There are three (or possibly four) types. The first has a jarlike form with a free-standing spout springing from the shoulder (e.g. Fig. 29, no. 46; Fig. 31, no. 102). No complete examples were found but there is the possibility that there were two opposed strap handles rather than a single handle opposite the spout. This type of unglazed pitcher probably began quite early, in the second half of 11th century, and possibly continued into the early 12th century. The second type has a tubular spout which sprang from the top of the shoulder and was fixed to the neck by clay strips (Fig. 29, no. 47a-b). A feature of the latter type appears to have been incised lines on the upper face of the rim. Again, there are only fragmentary examples, so it is difficult to gauge the look of the complete vessel. The attachment of the spout to the neck and rim would seem to indicate that this is a 12th-century form. There is no evidence that either type of pitcher was glazed, but the second type of pitcher has evidence of stamped decoration (Fig. 30, no. 71). This is a gridded sub-rectangular stamp. Other decoration consists of five tine ?comb teeth impressions, lines of rectangular roller stamping, and a combed whorl. All of these, apart from the roller-stamping, are on sherds from feature B41 and Ditch B38 of Enclosure I (Area B) in a deposit that is thought to contain production waste (see below). The third type of pitcher has quite a short stubby rim, a strap handle, and stamped 'rosette' decoration (Fig. 28, no. 1; Fig. 31, no. 103) and is also unglazed. The neck-rim is slightly concave on the interior and may have been designed to take a lid. There is also a rim-neck sherd from fill 6252 of feature B41 (Enclosure I, Area B; Fig. 30, no. 75). It could be part of a pitcher decorated with lines of rectangular roller-stamping but a small bowl seems more likely. Grey patches on the exterior from their shape seem to indicate areas of glaze which have worn or, possibly, burnt away, the glaze having provided a barrier to oxidation.

Several complete tubular spouts were found as single examples in Enclosures B, D, H, K and within Period 4 Ring-ditch B. Two further examples came from pit 3753, including the illustrated example (Fig. 29, no. 46; Fig. 31, no. 102).

Several sherds have strap handles springing from the rim. These have been classed as handled jars, but it is quite possible that they are pitchers. A similar vessel is illustrated in Vince (1983, fig. 76, 17). Strap handles appear to have been attached to the body of the vessel by a clay 'dowel' that projected from the handle and was inserted into a hole cut through the wall of the vessel. Apart from the stamp-decorated one (Fig. 28, no. 1; Fig. 31, no. 103), the handles are usually plain. There is one sub-rectangular handle that has been scored (Fig. 30, no. 86), and two plain rod handles (Fig. 29, nos 61, 65). Fig. 28, no. 3, which is of a circular-sectioned rod form, could have been either a 'pan handle', such as are found on skillets and pipkins, or an elongated tripod foot. It had evidently been attached by the clay dowel method (see above) which might suggest a handle is more likely. However, if this was a handle, then it would be unusual to find it amongst pottery pre-dating 1200. It is unfortunate that it was found in

a pit with no stratigraphic relationship with other features and so of uncertain phasing within the medieval sequence. Other pottery from the same pit fill consists of a West Country dish, TF41B cooking pot/jar sherds, and a non-local sherd, probably rather later in date. This sherd is from a lid-seated, oxidised cooking pot/jar in a fabric with moderate red quartz 0.25–0.5mm, mica flecks, small and rare voids from burnt out calcareous material, and very rare rounded limestone inclusions, which is not matched in the Gloucester type series. A short stubby tripod foot was also found (Fig. 30, no. 84) along with probable pottery production waste in Enclosure I, Area B (see below). A small, circular-sectioned lug handle (Fig. 30, no. 97) from Enclosure I is likely to have come from a jar rather than a pitcher.

The next most common form in the assemblage is the West Country dish, a fairly complete example of which (Fig. 29, no. 68) was found in Enclosure I, Area B. A small, roughly circular depression from which a crack runs, suggests that this example was struck with debris of some sort during firing which caused the pot to crack. It is to the left of this crack that the external surface is rough with frequent projecting limestone inclusions. Other examples of West Country dishes were found (Figs 28-29, nos 9, 43-44). In total only seven vessels of this kind were recorded but this is a difficult form to recognise unless there is a substantial part of the profile, or the pre-firing holes are present. The exact function of these vessels is not understood. As the name suggests, they are found in the south-west, although there are also examples from south Wales. Fig. 29, no. 68 by its findspot (see below), and by its appearance, indicates that this vessel type was made at Haresfield. West Country dishes were found in Period 3.3 Enclosure D (two examples), Period 3.2 Enclosure F, Period 3.1 Enclosure I (two examples) and in Period 3.3 Ditch A7 associated with the trackway in Area A. A thick-walled vessel with a marked shoulder (unlike Fig. 29, no. 68) from Period 3.2 Enclosure F is possibly another West Country dish. There is a circular cut-out in the neck just above the shoulder. Three joining base sherds have evidence of a piercing at the break. The basal piercing would be unusual for a West Country dish, but it is a known variant found at Cosmeston in a fabric known as Vale ware (McCarthy and Brooks 1988, 369 and fig. 229, 1559). West Country dishes in calcareous fabrics have been dated to the 12th century in Wiltshire (ibid., fig. 102, 404-6) whilst the Vale ware examples are dated no earlier than the 13th century. Given the rest of the pottery from Quedgeley East, the earlier date is more likely for the examples found here.

Three sherds (Fig. 30, no. 85), probably from a single pedestal lamp, although the sherds do not join, were found in fill 6252 of feature B41 (Enclosure I, Area B). This form occurs first in the Late Anglo-Saxon period and is found, for example, in Stafford ware and Thetford ware. Examples are also found in post-Conquest contexts, such as at Castle Neroche (Davidson 1972, fig. 25, 11). A pedestal lamp was also found on 13–15 Eastgate Street, Gloucester (Atherton, 2000, 26 and figs 5–6) and a second one from Park Street (Atherton 2000).

A further vessel form was recorded. This is rather fragmentary but was probably a shallow dish (Fig. 29, no. 70). Cross-joining but very worn sherds came from two separate sondages along Ditch B41 (see below).

# Clay disc

There was an unusual object found as an unstratified deposit in cleaning layer 6387 (layer not illustrated) in Area B. This is a clay disc 16mm thick and with a diameter of approximately 330mm (Fig. 30, no. 94). Both surfaces are oxidised orange-brown, although there are small patches of reduction on one side; the core is reduced mid grey. Fragments of shell are visible in the clay body as well as oolitic limestone fragments. The object is well-made, and some care has been taken in its construction. It is suggested, speculatively, that this is a lid, possibly for use in a vessel like the illustrated dish (Fig. 29, no. 43) with its short row of four perforations. The form of the vessel would have been similar to that shown in Fig. 29, no. 68, the rim diameter of which is approximately 290mm. The lid could have rested on the top of the rim, or there is the possibility that it sat inside a dish, weighing down the contents and

squeezing excess liquid out through the drainage holes. The key thing is that the lid, if that's what it is, is completely flat. As such, additional weights could have been placed on top of it. However, there is a definite lid from Period 3.2 Ditch A41 in Enclosure F, which is a waster. This too is flat, but it is much thinner at 7mm than the disc from layer 6387 and has a central knop handle. This may throw some doubt on the identification of the disk from layer 6387 as a lid, or reflect a different function (Fig. 30, no. 93). An alternative use for the disc from layer 6387 is as a ceramic equivalent of a bakestone, on which flatbreads, for example, could have been made, or as part of a portable oven. There is not much evidence of portable ovens in the medieval period, but no-one has really looked for them. The concept was known and used in the Roman period and Jane Evans (2018, 227-39) brings together a large amount of evidence for their use, which seems on the basis of the current evidence to have been peculiar to Worcestershire and North Gloucestershire. A circular 'oven plate' fragment identified by her does look very similar to the example from layer 6387 (ibid., fig. 154, 5) and it is feasible that a medieval portable oven superstructure was something more basic than the better known Roman examples, an up-turned pot for example. It is true that there is not really any evidence of burning on the Haresfield disc, but if charcoal embers were used, then there would be less likelihood of sooty particles. Charcoal often does not produce soot residues (pers. comm. Sarah Jennings). If the disc from layer 6387 was a base element for a portable oven, then it is conceivable that a West Country dish was inverted over it and that embers were placed on the disc and covered over - if this were the case then the holes in the West Country dishes would allow the ingress of air to keep the embers alive; in effect it would be a two-part curfew. Whether it would be possible to cook something under what would be a rather shallow lid is moot, but not necessarily impossible.

It is also possible that West Country dishes were used for cheesemaking or as cheese presses but this cannot be the whole story since the 'drainage' holes are not always found towards the base of the vessel; some are found at shoulder level. There was one such example from the site (Enclosure F, Ditch A41), but it was too fragmentary for illustration. In relation to a use in cheesemaking, recent work on the West Country dishes looking for lipid residues has met with mixed success. Those from Cosmeston that were analysed contained no lipid traces (pers. comm. Dr Alice Forward), so the idea that the West Country dishes were cheese presses seems to be not necessarily the case, based on both lipid analysis and the placement of the drainage holes.

The distribution of vessel forms does not appear to have a particular pattern. The more unusual forms, i.e. those vessels other than cooking pots, largely reflect the location of the larger groups of pottery (Table C9), so reveal nothing very helpful other than that there are no significant clusters spatially. Looking at the larger groups, the percentage of sherds that do not belong to cooking pots is between 2.5% and 4%; for Enclosures B and D, the figure is somewhat lower, whilst Enclosures C and E have only cooking pots. However just under 14.5% of the sherds from the Period 4 Ring-ditch B were not cooking pots. Thus, there seems to be little difference between the various areas in Period 3 but a definite difference between Periods 3 and 4. When the cooking pot jar rim forms are looked at by period there is little difference there either.

## Decoration

Most of the pottery has little in the way of surface treatment or decoration (Table C10). Stamped decoration is associated with the pitchers. Stamped designs consist of small rosettes (Fig. 28, no. 1), of which there is the single example, and sub-rectangular gridded stamps (Fig. 30, nos 71, 77). An example of the use of multiple grid stamps was found at Gloucester Castle in the backfill of the Phase VII Castle Ditch, F11 (Darvill 1988, fig. 13, 19). The ditch was backfilled probably by the late 11th-century (Phase IX) but clearly the sherd could date from earlier in the century. There are also examples of rectangular roller-stamping, rather lightly impressed (Fig. 30, no. 75), or rather deeper intersecting lines of roller stamping from fill 3755 of pit 3753 (Fig. 31, no. 101); the latter resembles pottery

from the continent. The grid stamps and the roller-stamping are particularly associated with Ditch B25 (Enclosure K) and feature B41 Enclosure I, the latter a dump of pottery waste. Single sherds that may have had stamped decoration were found in a Period 3.2 ditch in Enclosure K and in one of the Period 4 Ring-ditch B fills. Examples of five tooth comb impressions and wavy combing were also found in this group (Fig. 31, no. 101). The rosette stamped jar (Fig. 28, no. 1; Fig. 31, no. 103) came from Period 3.3 Trackway A Ditch A77, north of Enclosure A, and is an outlier both in terms of the decoration and its findspot. Decoration is associated, not surprisingly, with pitchers and a number of pitcher rims are decorated with scoring along the upper face (eg Figs 29–30, nos 47a, 55,76,87). Pitchers decorated in this way are probably more likely to date to the early 12th century (see above).

A small number of cooking pots have finger impressions or pinching, or tool impressions on the rim. These are listed in Table C10. The most unusual manifestation of this are rims where only part of the rim was treated in this way (Fig. 28, no. 8). Here the inner face of the rim has four elliptical impressions, matched by indentations on the upper edge of the rim, but the remainder of the rim is plain. This arrangement is paralleled at West Gate, Gloucester (Vince 1981, fig. 9, 107) in a pit dated to the early 12th century. Two further rims of this type are ascribed to the early 13th century (Vince 1983, fig. 11, 153–4), but these later groups contain quite fragmentary pottery and the chances of residuality are high. Ireland (1984, 81) was dubious about TF41B lasting into the 13th century and these quite odd treatments of the rim do not really seem to fit in the 13th century. Whatever the date, there are more rim 'treatments' in Area A and most seem to occur in Periods 3.1 and 3.2 (Table C10).

### Dating

Despite a number of archaeological excavations in Gloucester itself, the quantity of Saxo-Norman pottery discovered (and published) has been quite small and there remains uncertainty about the transition from TF41A to TF41B and the dating of TF41B. To date, there has been no independent dating of the type through radiocarbon assay. The pottery from Quedgeley East has a fabric that is relatively free of inclusions other than those derived from oolitic limestone, which suggests that the fabric must be TF41B, although generally speaking large ooliths like those mentioned by Vince (1978, 116) are not an obvious feature in the assemblage, an exception being the heavily leached pottery from fill 3150 of Ditch A66 (Enclosure D), which is likely to be production waste (see below). Radiocarbon dates for fill 3150 (though not on the pottery itself) provide a date range for the fill deposition from the early 11th to mid 12th century (Appendix S). In the 1978 report, Vince (ibid.) suggests a late 10th to early 11thcentury date for TF41A. Three years later, he noted (Vince 1981, 311) that there was a strong possibility that many of the wares known in the 12th century were introduced in the 11th century, and there is the suggestion that the unglazed spouted pitchers, often decorated with stamping, were made in that century. Ireland (1984, 81) was of the opinion that although Gloucester early medieval ware (TF41B) was found in street sections in Gloucester dating to the early 13th century, it may be residual since evidence from outside the city indicates that it had largely gone out of use around the mid 12th century. In the Westgate Street report, Vince (1981, 177) suggests that TF41B was in use in the late 11th century but continued into the early 13th century. He gives a date of late 11th to early 12th century for the spouted unglazed pitchers, although none was found at Westgate Street itself. In the excavation of the East and North Gates of Gloucester, Vince (1983, 125-6) once again points out the difficulty of knowing for certain when TF41B was first made based on excavated evidence. At Gloucester Castle (Darvill 1988) pottery found in Phases V-IX indicated that Fabric TF41B was in use from the mid 11th century to the early 12th century, but as there was continuous occupation from the Roman period to the Late Saxon period beneath the Norman castle, it helps little with establishing a more exact 'mid 11th century' date. However, the illustrated TF41B pottery from Phases VI-IX (ibid., fig. 12; fig. 13) can in every case be paralleled by pottery from Quedgeley East. We can therefore be confident that TF41B was made in the early years of Norman rule and was the main pottery type in use at the motte and bailey castle up to the early 12th century.

The straight-sided cooking pot with club rim, one of the frequently encountered vessel forms at Quedgeley East, seems not to last much into the 12th century in Warwickshire although the Warwickshire examples are not Haresfield products. At Banbury Castle (Rátkai, in prep. b) the use of this type of cooking pot (again not a Haresfield product) also seems to decrease after the mid 12th century if, not stop completely. The general trend, therefore, seems to be that where straight-sided club rim cooking pots were popular in the mid to late 11th century, they were superseded by rounded forms in the following century.

Parallels for many of the Haresfield cooking pot types can be found at Westgate Street, Gloucester (eg Vince 1979, fig. 9, 107; fig. 10, 132, 137, 141; fig. 11 147, 153, 154) in late 11th to early 13th-century contexts, but it is very difficult to pin down obvious forms that belong to a specific period. More parallels come from Gloucester's East and North Gates (Vince 1983, fig. 76, 3–21), including a handled jar/pitcher (ibid., fig. 76, 17). Further parallels are recorded by Ireland (1984, fig. 58, 84, 94–97, 83, 98–99). Spouted pitchers were not found at Westgate Street (Vince 1979, 177) so it is not possible to form an idea of what would be found with the pitchers in a domestic environment. Neither Vince nor Ireland mention West Country dishes, and there is something of a mismatch between what was found at Quedgeley East and what has been found in Gloucester. The dating at Quedgeley East is all the more difficult because of the almost total absence of other datable finds, including pottery, from Period 3 contexts, although there are some radiocarbon dates (see below).

Elements such as the stamped decoration are not only uncommon on site but are uncommon generally. Vince illustrates a rosette stamp (Vince 1983, 23) on a lid made in Bath A fabric. A general overview of pottery from the 10th to mid 12th centuries in McCarthy and Brooks (1988) reveals that there are few areas that had stamped decoration, examples being limited to Chichester (ibid., fig 98. 370, 374) and Bristol (ibid., fig. 105, 443). Mellor (1994) notes stamped vessels in oolitic fabric OXAC (ibid., fig. 13, 1, 4) from Witney, Oxfordshire, and in flint-tempered fabric OXBF from Oxford (ibid., fig. 14, 2, 8–9). Stamped vessels are also known from Somerset, with a cluster of pottery with similar stamps (but on different fabrics) being noted on the Mendip plateau by Pip Osborne (Community Archaeology on the Mendip Plateau Group) who is currently preparing a paper on these stamped vessels (pers. comm. David Dawson). Stamps are also recorded from Bath (Cunliffe 1979, 146) and Ilchester (Leach 1982, 80).

The spouted pitcher with a rather jar-like form has its inspiration from the continent and is found in both pre- and post-Conquest contexts in England. Cotter's (1997) work on the mid 12th-century Pound Lane pottery kiln in Canterbury is invaluable for demonstrating not only the influence of continental prototypes on indigenous English pottery, but also the presence of a north French potter in Canterbury itself. At Castle Neroche, it has been suggested that a potter from north-west France was active in the area *c*. 1066–80 (Davidson 1972, 42–4). Some continental influence is visible in the Quedgeley East assemblage also, through the spouted pitchers (Fig. 29, no. 46; Fig. 31, no. 102), the heavy roller stamping (Fig. 31, no. 101), and the grid and rosette stamps (Fig. 28, no. 1; Fig. 30, nos 71, 77; Fig. 31, no. 103). The Quedgeley East decorative motifs and some of the cooking pot/jar forms can be paralleled at Leiderdorp in the western Netherlands (Verhoeven 2016); although the pottery there is Carolingian in date, the stamps were still used in the 11th century and then abruptly ceased before the 12th century (pers. comm. Arno Verhoeven). The rare collar rim form found at Quedgeley East in fill 3182 of a natural hollow (Fig. 29, no. 59), in Period 3.3 Trackway Ditch A77 and Period 3.2 Enclosure F Ditch A45 (Fig. 28, no. 29, is a feature of continental pottery (Cotter 1997, 73). A fourth example from Enclosure D may have been from a pitcher rather than a cooking pot. This slight evidence is nevertheless interesting and could be investigated further. It

throws up the possibility of a non-native potter (or potters) at Quedgeley East, or a native potter catering for a non-native market.

Another strand of dating evidence is the mention of potters at Haresfield in the Domesday survey, so clearly there was a well-established group in existence by 1086. Le Patourel, cited by Vince (1981), believed that these Domesday references to potters refer to "a community of potters working independently but in a physically limited area", for example a small hamlet set apart from the rest of the manor. The location of the Quedgeley East excavation with its evidence of pottery making would fit this description but as we have seen (above) there is also a suggestion (Ecclestone 2000) that pottery manufacture was possibly (also) occurring at the other end of Haresfield parish, to the south-east of the village.

The radiocarbon dates (Appendix S) agree with most of what has been deduced from the pottery evidence. There is nothing to suggest that, excepting Period 4 Ring-ditch B, there was much occupation after *c.* 1150. This confirms Ireland's (1984) suspicion outlined above that TF41B pottery dates to no later than *c.* 1200. The range of vessel forms and the absence of glazing are also consistent with an end date for pottery production in the mid 12th century. This too is the date that sees an upsurge in the pottery industries in Minety and the Malverns, whose products were destined to be important in Gloucester. Whether an upsurge in competition put the Haresfield potters at a disadvantage, or whether the Haresfield potters were in decline enabling other makers to step in, is a matter of conjecture. It is also possible that the pottery production evidenced at Quedgeley East moved to another area close by and continued as before, a possibility that only wider survey and excavation could test.

If the end of the Haresfield pottery around *c*.1150–1200 seems certain from the pottery excavated elsewhere and from the radiocarbon dates from the current site, it is not so easy to gauge the start of the industry from the radiocarbon dates. It is unfortunate that despite a thorough search through the assemblage for sherds with heavy soot residues or burnt deposits for carbon dating, not one suitable sherd was found. Thus, there is no independent dating of the vessels themselves. The radiocarbon dates include pre and post-Conquest values, and origins for TF41B within the mid 11th century seem likely, although closer dating is not yet forthcoming. Some of the pottery described in this report has clear Late Saxon affinities, whilst other sherds show continental influences or are of types known to have been in use in the century or so following the Conquest.

### The pottery and the site

As can be seen from the preceding section, it is not easy to find any independent or secure dating for the pottery types or the features in which they were found. There is little evidence of structures that might help put the finds more in context and the occasional pit assemblage that could have a primary deposit (e.g. pit 3757, described above) sits in isolation. It is important to understand exactly how the pottery got into the cut features since, as described below, much has the hallmarks of having been disturbed, possibly frequently.

### AREA A

Period 3.1-3.3 Enclosure A

Enclosure A was a stratigraphically early part of the medieval (Period 3) farmstead. The pottery from this enclosure is unspectacular, with few diagnostic form sherds and none that are sooted, and few sherds recovered overall. The average sherd weight is very low, indicating that the sherds had a hard life before finally ending up in the ditches.

Of the small amount of pottery from the enclosure, most was from Ditch A22 along the south-eastern perimeter which produced thirteen sherds from a single pitcher along with fifteen undiagnostic bodysherds, none of which are closely datable. A further vessel, a club rim cooking pot, was found in Period 3.3 Ditch A26, which formed part of Sub-enclosure A2. This vessel form dates from approximately the mid 11th century and continued in use into the 12th century.

To the east of Enclosure A was a possible small enclosure indicated by Period 3.2 Ditch A36, partly uncovered at the edge of the excavation. What little pottery came from this was mostly undiagnostic TF41B material. However, there was a strap handle with deep longitudinal scoring. This was originally recorded as TF41B also, but the form can be matched by a Minety (TF44) handle (Fig. 28, no. 2) in the Gloucester pottery type series. Either the sherd is Minety ware, or it is a local copy.

### Period 3.1 Enclosure C

Enclosure C was stratigraphically contemporary with the Period 3.1 development of Enclosure A. Ditches A64 and A79 and trackway Ditch A13 forming the eastern section of Enclosure C contained only a few sherds. Four rimsherds were present in A13. The rim types are those found commonly across the whole site and consist of a straight-sided club rim cooking pot (such as Fig. 29, no. 42; Fig. 31, no. 105) and two simple everted rims with an internal projection (such as Fig. 30, no. 93). A third simple everted rim probably came from a Saxo-Norman tubular spouted pitcher. Three joining rimsherds from a flange rim cooking pot (Fig. 28, no. 4) were found in a northern section of Ditch A16. Evidence of normal domestic pottery usage was provided by an otherwise undiagnostic sherd which was sooted on the exterior and had a 'dribble' through the soot, presumably the result of a pot boiling over. The sherd was found in the entrance terminal of Ditch A79 and provides what is, for the site, a very rare example of a sherd from a vessel used in domestic activity.

# Period 3.1 Enclosure E

Enclosure E was broadly contemporary with Enclosures A and C to the north and produced at least 21 vessels by minimum rim count out of a total of 209 sherds. The rims, however, were very fragmentary, seldom representing more than 6% of the complete rim, and often less. Only two rims, each 11% of the total diameter, are greater than 10%. The fragmentary nature of the rims is reflected in the average sherd weight for the group of 5.9g.

A striking thing about the pottery from this enclosure is the fact that so many sherds were heavily leached and are soft and 'soapy' to the touch. In addition to the leaching, some of the sherds are also worn but not heavily. One rimsherd (Ditch A51) is much grittier with limestone inclusions protruding from the surface, and rough to the touch. This more closely resembles the pottery found in the northern part of Area A and Area B. A small number of sherds (less than 10%) have some light sooting. Three sherds from Ditch A50 look as if they could be wasters but, if so, this is not an adequate number to draw conclusions about the likelihood of pottery production in this area of the site. One sherd, probably from a straight-sided club rim cooking pot, has a drilled hole, either functional or part of a repair (see above).

Cooking pots/jars are the only forms recognised from Enclosure E. There is no evidence of pitchers, unless a very small sherd with a scored raised rib (Fig. 31, no. 101) is from such a vessel. Many of the vessel forms found in Enclosure E were also encountered in Area B and the northern part of Area A and consist of straight-sided club rim cooking pots and rounded forms with fairly simple everted rims. However, there are some oddities, described below.

Four of the rims are of the short stubby type, springing from the shoulder (Rim Group 4A). This type of rim form would not be out of place in a Late Anglo-Saxon context but examples from Quedgeley East have a range of rim diameter size, the upper end of which is rather larger than one would expect for this. One rim has the right sort of diameter of 160mm for a Late Saxon date, but the remaining rims are from larger vessels, including that illustrated as Fig. 28, no. 12. The rim on this illustrated vessel, which also has fingertip impressions on it, looks as if it is possibly designed to take a lid. There are also two unique rim forms, an almost 'cavetto' rim (possibly a residual Roman sherd or possibly Late Anglo-Saxon) and an upright rim with a slight bead-like projection at the external tip (not assigned a Rim Group); this too may be residual from another period entirely. Taking all the evidence together it is possible that Enclosure E, like Enclosure A had relatively early (Late Saxon) origins.

# Period 3.2 Enclosure B

By Period 3.2, Enclosure C had gone out of use and was replaced by Enclosure B. This enclosure had one of the larger pottery groups, primarily from Ditch A18 forming its eastern edge. A number of sections were cut across the ditch during excavation and potsherds were fairly equally divided throughout the fills. The one exception was ditch section 3329 through Ditch A18 which contained 89 sherds, just over a quarter of the group. The average sherd weight per context was usually below 10g, which suggests that there was little primary deposition. Like the large groups from Enclosure I, Area B (see below), the condition and look of the sherds varies, making it difficult to establish how much of the pottery was contemporary.

Thirty-one vessels are represented in the ditch fills of Enclosure B by minimum rim count. These are mostly from rounded cooking pots with simple everted rims (Fig. 28, no. 7 from Ditch A18) often with some thickening or modelling at the tip; a possible lid-seated rim (Fig. 28, no. 6 from Ditch A18) was also identified, and one rim may have been deliberately finger impressed. Straight-sided club rim cooking pots were found, but these are very much in the minority. One of these has three dimple-like impressions on the top of the rim; these may have been accidental. There are also examples of much more unusual rim forms (such as Fig. 30, no. 91, a very heavy ?club rim), an angular everted rim (possibly Roman?), and another rounded cooking pot with a stubbier, angular, everted rim. There are also examples of rounded cooking pots/jars with stubby everted rims, similar to Late Saxon types but with diameters rather greater than cooking pots of that period so unlikely to be Late Saxon.

An unusual triangular rimsherd from Ditch A18 could be from a pitcher since the diameter is only 160mm (Fig. 28, no. 5). The interior of the vessel is very heavily abraded, and this is often a characteristic of pitchers from this site. A handled jar (or possibly pitcher) was also identified (Ditch A18) and is of interest in that it is clear to see, because of the way the pot has broken, how the handle was attached. This attachment was by a clay 'dowel' that was pushed through a hole in the vessel wall and then smoothed over on the inside. This does seem to be a trait of the pottery from the site as other examples were noted, including either a circular-sectioned 'pan handle' or, possibly, a tall tripod foot (Fig. 28, no.3).

Two club rim cooking pots/jars may have drilled holes, as could the illustrated cooking pot (Fig. 28, no. 7) from Ditch A18. These drilled holes are usually taken to be evidence of a repair and hence indicate a domestic deposit. However, it is strange to think that it would be worth repairing cooking pots when the very same ones were being made on the doorstep, so it is possible that the holes are a modification associated with vessel function. These particular examples are too fragmentary to draw any definite conclusion. There is very light sooting or smoke blackening on some of the sherds, particularly noticeable on a group from fill 3328l of Ditch A18, but generally the sherds are soot free and, where soot is present, it is only light. The surface quality of the sherds is variable from harsh and gritty to smooth and soapy-feeling. A small proportion of the sherds are smooth and leached. The

absence of coherent traits associated with the sherds from Enclosure B suggests that they were not coeval, had been subject to different post-breakage histories, and may have derived from more than one source.

#### Enclosure F

In Period 3.2 Enclosure F superseded Enclosure E and was defined by two ditches (A40 and A41) which produced 624 sherds, weighing 5260g. This provides a group that can be compared with that from Period 3.1 Enclosure I in Area B (see Table C8 and below). A further 135 sherds came from smaller ditches in Enclosure F. Generally, these cut features contained very little pottery, often fewer than ten sherds. There were two exceptions: Ditch A72 (46 sherds) and Ditch A45 (48 sherds). The latter was unphased because its relationship to the enclosure was uncertain. The pottery does not clarify the situation; a small rimsherd, possibly from a pitcher, was noted and four other rimsherds from cooking pots/jars (types GP1F (Fig. 28, no. 29), GP2A, GP2C and GP3B. These provide insufficient evidence for close dating. Eleven sherds (28g), including an undiagnostic rim tip, appear to be from a single vessel. The pottery from Ditch A72 includes five rimsherds (GP1C (two examples), GP2A (with circular impressions along the top of the rim, Fig. 28, no. 26), GP2C (Fig. 28, no. 28), GP4A (Fig. 28, no. 27)) and another undiagnostic rim tip. The presence of club rim, straight-sided cooking pots in both ditches suggests that the ditches could have been open before the mid 11th century, during the Late Saxon period.

Pottery from Ditch A41, 172 sherds in total, came from several sections. With the exception of ditch section 4065 with 84 sherds, each section produced only a few sherds, all from cooking pots with a variety of rim forms (Groups 1A (three examples), 1B, 1E, 2A (two examples), 3B and 4A (two examples). A small diameter rimsherd with an elliptical-sectioned handle may have come from a jug or a small jar (a similar handle came from Period 3.2 Ditch B25, Enclosure K). Ditch section 4065 contained seven rimsherds from just two rim types GP1B (two examples) and GP2a (five examples); the straight-sided club rim cooking pots were therefore in the majority and again point to pre-Conquest origins.

Ditch A41 produced more than three times the number of sherds that Ditch A40 yielded. Like Ditch A40, there were numerous sections cut, most of which contained only a handful of sherds and often rather small sherds at that. The largest group came from ditch section 3964 (217 sherds, 1479g, Fig. 28, nos 16–18); the second largest group was from ditch section 4067 (100 sherds, 1155g Fig. 28, nos 19–23, 104a-b). Most of the sherds are from cooking pots. Ditch section 3964 rim types are GP1A (four examples), GP1D, GP2A (three examples), GP2C and GP4A); ditch section 4067 rim types are GP1A, GP1C (two examples) and GP4a (three examples) and this assemblage is notable for containing no straight-sided, club rim cooking pots (GP2A). Other illustrated cooking pots from Ditch A41 were Fig. 28, no. 8 (GP2A), Fig. 28, no. 14 (GP1B), Fig. 28, no. 24 (GP2c). A possible bowl Fig. 28, no.15 is also illustrated.

Apart from cooking pots/jars there are two examples of handled jars (Fig. 28, nos 19–20; Fig. 31, no. 104a–b) from Ditch A41, and a very fragmentary West Country dish. A further six sherds from a rather thick-walled West Country dish with single perforations at the shoulder and in the base came from the ditch. A possible lid (Fig. 32, no. 108) from Ditch A41 is an interesting find in view of the West Country dish sherds found in the same ditch (see discussion regarding West Country dishes, above). There is also a sherd with a cratered green glaze on its interior surface. This is not a local sherd and has been tentatively identified as TF119 and dating to the 11th century.

Taking Enclosure F as a whole, there is often wear on the sherd surfaces, but the degree is variable and there seems to be no distinct pattern to the levels of wear between fills. Unlike the Enclosure I or Enclosure B groups, there are sherds from Enclosure F that are leached or 'corky'; sometimes these sherds are smooth, even 'soapy',

to the touch. Fewer than 5% of the sherds have any sort of sooting or blackening, and in most cases, it was not clear whether this was directly due to domestic use. There are certainly no large scale, heavy soot deposits either internally or externally on the sherds, and, even though a quite heavy charcoal content was noted in fills 4066 and 4079, the sherds from these deposits are not noticeably sooted.

### Period 3.3 Enclosure D

In Period 3.3 Enclosure D replaced Period 3.2 Enclosure F. The ditches which formed this enclosure contained 460 sherds. Enclosure D contained a much higher proportion of pottery that is smooth or soapy to the touch and leached than any other enclosure. There is evidence that the assemblage from Enclosure D includes pottery production waste. Some of the pottery, particularly that from fill 3150 of Ditch A66, is clearly over-fired, surface colour is very variable, and there are many examples where the original sherd surface or surfaces are partly or wholly absent. Under perfect firing conditions the pottery was evidently intended to have a smooth oxidised surface with few limestone inclusions visible. The inclusions are larger than in pottery from other areas of the site and a high proportion of them appear to be ooliths. Again, this is different from most of the other pottery sherds in the overall site assemblage. Ditch fill 3150 is described as a dump of a material 'rich in charcoal and pottery' which adds some weight to the identification of the fill being pottery production waste. This charcoal was used for radiocarbon dating which produced a date range of cal. AD 1031–1159 (95.4% probability; BRAMS 4828), dates that allow pre-Conquest activity and which indicate that the deposit pre-dated the mid 12th century.

The average sherd weight for the Enclosure D pottery is 8.6g, similar to that for the earlier Enclosure F. Minimum rim count, expressed as a percentage of the total sherd count, is 10.3%. Looking at the Enclosure D assemblage as a whole, it seems that although fewer sherds were deposited in the north-western section of the enclosure ditch, these sherds were larger and contained a greater number of rimsherds than elsewhere along the ditch. Clearly there were completely different depositional factors at work. However, differences in the range of vessel/rim forms from various parts of the enclosure ditch are not quite so obvious. Straight-sided, club rim cooking pots (e.g. Fig. 29, nos 35–36, 42; Fig. 31, no. 105), noted above as possibly indicative of Late Saxon dating, are the most common type, forming at least 25% of the group, and were found across the enclosure. One of the most substantial vessels from the site (Fig. 29, no. 42; Fig. 31, no. 105), although badly abraded, was found in Ditch A65, a curvilinear ditch truncated by Enclosure D but otherwise of uncertain phasing within Period 3.

The long, rather upright rims (often associated with pitchers and handled jars (e.g. Figs 28–29, nos 32, 34, 37, 45) were most common on the eastern side of the enclosure. Simple, plain rims (e.g. Fig. 28, no. 33) are not a common type but slightly more were found in the eastern half of the enclosure, whilst angular rims (Fig. 28, no. 31) were only found in this area. Short stubby rims like that illustrated as Fig. 29, no. 38 are not common, but occurred across the enclosure. Simple rims with a sinuous profile and thickened or developed tip to the rim (for example Fig. 28, no. 14; Fig. 29, no. 67; Fig. 30, nos 74, 79, 80, 88, 95 from other areas of the site) were mainly a feature of the eastern area. However, there are probably too few examples of any one type to draw any firm conclusions about the distribution of the vessel forms.

Other forms besides cooking pots/jars are few. Two West Country dishes from Ditch A65 (Fig. 29, nos 43–44) are nothing like as substantial as the one from feature B41 in Area B (Fig. 29, no. 68). A sherd with the stub of an elliptical handle is evidence of a handled jar or pitcher from Ditch A65. Another handle sherd was found in Ditch A38 and the same ditch contained a tubular spout from a pitcher. Three further rimsherds from Ditch A38 may have come from pitchers (Fig. 29, no. 39), and another rather battered example also came from Ditch A38, along with one from fill 3150 of Ditch A66, the possible waster group (see below).

### Pits in Area A

Only a small number of pits contained medieval pottery; these were not closely phased within Period 3 but are illustrated on Figure 14. They are described below in relation to enclosures for ease of reference only. Seven sherds were found in pit 3480, just south of Enclosure A. The sherds from this pit are quite large and don't display the usual signs of wear/weathering so common on many sherds from the site. The most striking of these sherds is a rod handle (Fig. 28, no. 3) discussed above. Two cooking pot rimsherds also came from the pit (Rim Groups 1B and 5B, the latter in a fabric that could not be paralleled, see above), and part of a West Country dish with a hole in the base (a less common placement for such holes). In total there were seven sherds from the pit.

A group of five pits were in the eastern half of Enclosure D. Pits 3155, 3205 and 3239 contained only small amounts of pottery and can tell us little. Pit 3178 also had only seven sherds but amongst them is a later medieval Malvernian TF52 bowl sherd (4g). Pit 3176 was rather different since 126 sherds weighing 540g were in its fill (3177). The pit was just a little south of Ditch A66. Seven rimsherds were in the pit, two possibly from the same vessel Fig. 29, no. 41 (Rim Groups, 1C (two rims), 2A (three rims) and 2C (three rims) i.e. a mix of straight-sided and rounded cooking pots). The sherds are largely unabraded with some leaching and a soapy feel to the surfaces, very similar, in fact, to the pottery found in adjacent fill 3150 of Ditch A66. The lack of wear and the breakage of rims from club rim cooking pots at their junction with the body – a firing weak spot – suggest that this pit contained pottery production waste. If so, that could indicate that both rounded and straight-sided cooking pot forms were produced at the same time. This contrasts with pit 3753 (below) where no club rim cooking pots were found.

In Enclosure E, pit 3092 contained just three sherds weighing 5g. In Enclosure F there were three pits (3026, 3034, 3036) that contained pottery. Pits 3026 and 3034 contained single sherds of just 2g and 3g respectively. Pit 3036 had two sherds in the second fill; one TF41B (5g), but the other probably a later medieval Malvernian sherd, TF52 (2g). This would be the only pit with later pottery, but the sherd is so small the later material might easily be intrusive.

Another group came from Period 3.3 pit 3753 in Enclosure G. The pit contained 156 sherds weighing 2996g, including 17 rimsherds (291% eves - estimated vessel equivalents), eleven bases and a handle. There are no straight-sided club rim cooking pots. The rounded cooking pots most commonly have simple rims: Rim Group 1A (one example Fig. 29, no. 49), 1B (three examples Fig. 29, nos 48, 50, 53), and 1C (four examples, Fig. 29, nos 51, 56, 57), but other types are also present: Rim Group 3C (one example, Fig. 29, no. 54), 4A (three examples Fig. 29, nos 52, 58) and 5B (one example). One rim Fig. 29, no. 57 has finger impressions, and another may show attempts at decoration (Fig. 29, no. 56). Four pitchers were identified (Fig. 29, nos 46, 47a-b, 55) amongst which two quite different pitcher types are represented. One, with a scored rim (like the sherds from feature B41 and Ditch B25), has evidently had the spout attached with applied clay strips (Fig. 29, no. 47a). The interior and exterior of the pitcher is slightly blackened or smoked-looking. The second and more complete pitcher has a free-standing tubular spout (Fig. 29, no. 46; Fig. 31, no. 102). It is in poor condition and very badly degraded on the interior, although the tubular spout is relatively unaffected. A second, rather worn, pitcher rimsherd has faint traces of scoring. A complete tubular spout was also found (Fig. 29, no. 47b). One sherd with deeply impressed rectangular roller stamping (Fig. 31, no. 101) probably also comes from a pitcher. The pottery from pit 3753 has a relatively high average sherd weight (19.2g); just under 11% of the sherds are rimsherds, and those rimsherds are large with, on average, 17% of the total rim present. This is the highest proportion of any feature group. Surface colour is often patchy and there are variable amounts of wear from light to guite heavy. There is no sooting or limescale on the sherds indicative of use in a domestic setting. Taking all these factors together, the pit appears to contain a

primary deposition of kiln waste. Pit 3774, also in Enclosure G, had one dark fill which included a single rim (Rim Group 5B, Fig. 29, no. 52).

### AREA B

Three Enclosures were found in Area B: Period 3.1 Enclosure I, and Period 3.2–3.3 Enclosures H and K. The highest percentage of pottery came from Enclosure I, whilst Enclosures H and K had similar amounts to one another (Table C12). The relative proportions from each enclosure are very similar whether the pottery was quantified by sherd count or weight.

For all of Area B, the average sherd weight is not very high at 10.3g. This suggests that the pottery has been subjected to trample, exposure to the elements or frequent disturbance before finding its way into ditches. The degree to which this has happened does not seem to vary to any significant extent by phase or by location.

### Period 3.1 Enclosure I

The most interesting and largest group from Area B came from Enclosure I, and relates to Period 3.1 Ditch B19 and specifically to a dump of material within this ditch, a localised dump labelled as B41 (fills 6370 and 6392) and phased to Period 3.2. It is the B41 dump which is of interest; the fills of B19 otherwise contained very little pottery.

Only eleven sherds were found in Ditch B19. A rimsherd is possibly a waster since it is distorted and the entire original inner surface of the club rim cooking pot/jar is missing, although the exterior is virtually unworn. This small group also includes a rare example of pottery that does not belong to the TF41 group. This is a small bodysherd in TF43 (Sand and Oolite Tempered Ware) dating to the 12th–13th centuries. Ditch B19 also included one rimsherd from a rounded cooking pot in TF41B with a simple, short, outward curving rim (GP1B, Fig. 29, no. 67). The eleven sherds from Ditch B19 contrast with the 724 sherds from the B41 dump. In the latter there are cross-joins (i.e. sherds from the same pot but found in different contexts) between fills 6370 and 6392. A number of the pots from B41 are illustrated (Figs 29 and 30, nos 67–84; Fig. 32, no. 106).

Thirty-one vessels are represented by rimsherds, two from Ditch B19 and 29 from dump B41 (the latter comprising 12 from fill 6370, 16 from fill 6392, and one cross-joining vessel from fills 6392 and 6370 (Fig. 29, no. 70). Further B41 vessels were identified by base sherds (19 base sherds in total but this would be a maximum count) or other diagnostic sherds (e.g. a tripod foot, a small handle and eight decorated sherds). The size of the B41 group is the largest from a single feature on the site by a considerable margin; the second and third largest groups being at 97 sherds and 95 sherds from enclosure ditches elsewhere on the site. With the obvious disparity between the amount of pottery from B41and these other features it is not surprising that some cooking pot types were unique to the larger (B41) group. In contrast, three forms (Figs 29 and 30, nos. 64, 79–80) and the straight-sided club rim cooking pot/jars (e.g. Fig. 29, no. 67) which are amongst the commonest in Area B and across the entire site, are represented by only six examples in total in B41.

All the West Country dishes from Area B were found in B41 and most of the (spouted) pitcher sherds. A substantial section of a West Country dish was found in fill 6370 (Fig. 29, no. 68). The rim is somewhat uneven, making it difficult to measure the rim diameter accurately, but it seems to be approximately 290mm. The dish has oxidised surfaces although there are areas of patchy colouration and small areas of reduction. The condition of the dish is good for the most part, but one section of the exterior has a harsh-feeling surface with numerous protruding limestone grits. This vessel could be a waster. The second West Country dish (not illustrated), from fill 6392, is

very much less complete and was identified by a hole made before firing, approximately 25mm above the base. The upper part of the vessel does not survive.

The pottery from dump B41 also includes sherds from spouted pitchers, all unglazed. Four rimsherds are present, all probably from different vessels. A small rounded tripod foot indicates that tripod pitchers are present. Fig. 30, nos 71, 76 are pitcher rims with incised lines along the upper surface of the rim. The same type of decoration is present on a pitcher rim from Period 3.2 Enclosure K Ditch B25, 50m north-west of B41. A more substantial example (Fig. 29, no. 47a) came from pit 3753, although this pit wasn't closely phased within the medieval Period 3 scheme. Other examples of decoration seem to be associated with spouted pitchers/handled jars, and decoration can be divided into five types. Lozenge-shaped grid stamps (Fig. 30, nos 71, 77), rows of rectangular roller stamping, incised lines, combing, and comb teeth impressions (Fig. 31, no. 101). Pitcher (Fig. 30, no. 71) is unusual in having a rather faint lozenge-shaped grid stamp on the interior of the rim/neck. There is a single example (Fig. 30, no. 75) of roller-stamped decoration and everything about this vessel is unique: the form, the fact that it had originally been glazed, and the decoration itself of shallow rectangular roller-stamping. Another form unique in Area B was a shallow bowl or dish (Fig. 29, no. 70), see above. The surface colour of the pitcher sherds varies from mid grey, light grey and orange. This is partly because of differential wear patterns on the sherds, relatively unworn surfaces retaining their oxidised surface, but not entirely since there were unworn islands where the surface was grey. A rather small handle (Fig. 29, no. 69) is surely too small to have come from a pitcher and may be more of a lug handle from a storage jar.

Other possible examples of decoration occur on two cooking pots/jars from dump B41. An unabraded sherd has crude roughly circular impressions on the upper face of a simple everted rim and possible finger impressions on the tip of the rim. The second example is rather nebulous and is on a 'flange rim' made up of two joining sherds. The rim is not particularly worn, half of interior is blackened and unabraded, and this stops at the break. However, wear is present on the oxidised part of the sherd. This is not the only example of marked differences in appearance between joining sherds (see above).

The condition of the sherds from B41 is varied. Although there is a large collection of sherds from this feature group, nearly all are undiagnostic bodysherds. In addition, the average sherd weight is low at 10g, especially considering the pottery was found in a ditch fill. As a general rule of thumb, approximately 10% of a normal domestic assemblage is composed of rimsherds, so in theory this group of 724 sherds should have contained approximately 70 rimsherds. Even allowing that the rim count of 32 sherds is a minimum count and does not take into account joining rimsherds, there is only about half the expected rim count. A note was made of the condition of the sherds in terms of wear and sooting: the sherds vary from unworn to slightly worn with surface feel correspondingly fairly smooth to slightly rough and powdery. A very small number of sherds have heavier wear, and 1–2% are very smooth and leached. Degrees of wear vary within the same vessel but also on individual sherds. Overall however, there is a greater tendency for the interior of sherds and vessels as a whole to be more worn than their exterior surfaces. Surface colour both inside and out is often patchy, suggesting little control over the firing process. There are no examples of heavy soot deposits on the sherds, either internally or externally. nor of what could be termed smoke blackening; the latter are not common and the greyed surfaces are as likely to be found on the interior as exterior, suggesting they result from the firing rather than from domestic use.

The question is, what sort of deposit is B41? In many ways this particular group is atypical of domestic pottery and atypical of pottery from a cut feature. There is no evidence for a dwelling in the vicinity. Nevertheless, the small sherd size suggests that very little, if anything, is a primary deposit. Then there is the sheer number of sherds from

B41 which would be in keeping with a dump rather than gradual accumulation, especially as the other fills of Ditch B19 contain so little pottery. The variable wear pattern, and in some cases variation in colour, suggests that many of the B41 sherds have had their own life history before final deposition in the ditch. The fact that joining sherds are not uncommon would perhaps suggest that the sherds had been lying around for some time before deposition but that the area in which they were lying was fairly compact. Cross-joining sherds from the dish (Fig. 29, no. 70) link fills 6370 and 6392, and the two incised rimsherds may indicate another such link. Because these two sets of sherds are so distinctive, it took no effort to spot that they were probably from the same vessels and it is possible that other cross-joins are amongst the less distinctive sherds. There are undeniable wasters such as (Fig. 30, no. 78), the rim of which is only slightly distorted, but the firing at the breaks indicates that the vessel cracked during firing. A second possible waster came from Ditch B19 (see above). If we combine the various traits associated with the pottery from dump B41 outlined above, especially the patchy surface colour, the lack of sooting patterns from domestic use, and the presence of wasters, then it seems reasonable to suggest that this group represents primarily kiln waste. Further corroborating evidence is found in the presence of limestone fragments in the ditch fill, possibly for crushing to provide temper for the clay body of the pots. The natural substrate on the site is clay, so any limestone was likely imported from the nearby scarp.

### Period 3.2-3.3 Enclosure H

Enclosure H had a comparatively small amount of pottery and that came mainly from internal Ditches B1 and B3. Ditch B1 produced eight rimsherds and one base out of a total of 89 sherds. These are all cooking pots, mainly rounded although two straight-sided club rim types are present. The rimsherds are usually badly abraded. Ditch B3 produced 97 sherds, amongst which are only two rims (Fig. 29, nos 61–62) and one base. That illustrated as Fig. 29, no. 61 is a handled jar or pitcher extremely worn on the interior. The sherd shown as Fig. 29, no. 62 is a cooking pot with a sinuous profile and no distinct neck zone. These two groups have the look of deliberate dumps; there are no obvious wasters, but neither is there any of the sooting and limescale patterns that might be expected on a domestic group.

The remaining pottery from Enclosure H is made up of cooking pots, with the usual mix of straight-sided club or flange rim types (Rim Groups 2A and 2B) which are in the minority, and rounded cooking pots with rims in Groups 1a–1C). A complete tubular spout was found in Ditch B9 of the type seen on Fig. 29, no. 46. The pottery from Enclosure H is quite worn, more so than that from Enclosure K (see below). There is no sooting on the sherds. The average sherd weight is 11.1g and rims formed 5.7% of the Enclosure Group.

### Period 3.2–3.3 Enclosure K

The assemblage from Enclosure K has a slightly higher than average sherd weight (12g), although this may have be due to a substantial clay disc (Fig. 30, no. 94) from Period 3.2 Ditch B23. The disc, interpreted as a lid, bakestone, or part of a portable oven (see above), was found along with three other vessels. Two of these vessels have been illustrated (Fig. 30, nos 92–93). That shown in Fig. 30, no. 92 is a well-made cooking pot with oxidised surfaces, unsooted and with minimal wear. Only one other example of this rim form was also found in Area B, in fill 6269 of pit 6267. The other illustrated rim is a more common form, mostly found in the southern part of Area A in Enclosures D, E and F. The third rim fragment is incomplete but may have come from a club rim cooking pot/jar.

A higher than average number of rimsherds (15.4% of the sherds were rims) mark Enclosure K out. However, in terms of the vessel types, there is no divergence from the pattern seen in the other enclosures, with most of the

sherds being from cooking pots (Fig. 30, nos 88–93). That illustrated as Fig. 30, no. 91 is an unusual, rather heavy rim form from Period 3.3 Ditch B33. This is an uncommon type and the only other example came from Period 3.3 Ditch A19 in Enclosure B (Area A).

Three, possibly four, pitchers were identified from Enclosure K. A complete tubular spout was found (not illustrated but like the one in Fig. 29, no. 46; Fig. 31, no. 102). A strap handle found in Period 3.2 Ditch B25 (Fig. 30, no. 86) is a waster. A pitcher rim from the same context as the handle had a scored rim, like those recorded in Enclosure I. A soft, underfired, grey-brown rimsherd with a pouring lip was found in Period 3.2 Ditch B23. The latter sherd is very 'battered' on the interior, had a powdery, slightly rough feel to the exterior, and may have been a waster.

The pottery from Enclosure K is sometimes a little worn, but this is not such a prominent feature as seen from the assemblages from other enclosures within the site. A few sherds are leached including Fig. 30, nos 88–89.

### Pits in Area B

Like Area A, pits containing pottery were infrequent in Area B; those discussed below are illustrated on Figure 14, but are not certainly sub-phased within the overall Period 3 scheme. In Enclosure H, three pits (6058, 6099 and 6191) contained fewer than ten sherds each (thirteen sherds in total weighing 93g), all undiagnostic bodysherds. A fourth pit lying outside the enclosures (pit 6267) contained a small cooking pot rimsherd, of Rim Group 3B, one of the rarer rim forms.

In Enclosure I, pit 6382 contained five sherds weighing 72g. The pit is of interest in that it had a single fill, 50% of which was charcoal, and was described by the excavator as a 'dump of material'. Only five sherds were in the fill: an unworn pitcher rimsherd (31g), a worn roller-stamped sherd, and three body-base sherds. Taken with the charcoal, this perhaps represents pottery firing waste.

## Period 3 Summary and Comparisons

There are potential pitfalls in trying to compare pottery groups from the site. Setting aside the pottery from dump B41 which is exceptional (see below), one of the striking features is how few sherds individual context groups contained. There were 290 individual Period 3 contexts that contained pottery. Only five contained over 100 sherds and all but one of them fewer than 141 sherds (Table C13). Contexts with more than 50 sherds were scarcely more numerous (Table C14). Looking at these two tables it is clear that larger accumulations of sherds are seemingly random with most fills with pottery containing very few sherds; many contexts contained none at all. It is therefore very difficult to find sufficient individual context groups in terms of sherd count, area or period to sustain any real comparisons across the site as a whole.

Even when the data are examined by larger groups, only Ditches A07, A18, A40, A41, A50, A65 and A66 contained over 100 sherds. Apart from dump B41, the single largest group came from Ditch A41 in Enclosure F (451 sherds). By far the largest pottery group came from dump B41 and to put this into context, the remaining Area B assemblage was scanned for other occurrences of pitchers, West Country dishes and wasters. No other examples of the dishes were found. Pitchers were found in other contexts but they were not common. A complete tubular spout was found in Period 3.2 Ditch B23 of Enclosure K, a little to the north-east of dump B41. A second spout came from Period 3.3 Ditch B9 in Enclosure H. A rim with handle sherd (Fig. 29, no. 61) was the only other pitcher sherd found in Enclosure H (Period 3.2 Ditch B3). A pitcher rim and a sherd decorated with comb teeth impressions were in Period 3 pit 6382, within Enclosure I. The use of comb teeth impressions as decoration is paralleled at Castle Neroche in a local fabric (Davidson 1972, fig. 25, 8) and although the example there cannot be securely dated, it pre-dates *c*.

1150. Pit 6382 was notable for having a large quantity of charcoal from within its fill. Apart from the pitcher sherds there were only three other sherds in the pit. A base sherd shows some signs of wear but otherwise the sherds are in good condition, suggesting that there had been no long time lapse between breakage and deposition. Two more pitcher sherds came from Period 3.2 Ditch B25 of Enclosure K; one is a rimsherd with incised lines along the top of the rim (like sherds from dump B41). A base sherd with very heavy wear on the interior and patches of reduction on the exterior, the shape of which suggests that they represent former glazed areas, the glaze having worn away through exposure to the elements, was found unstratified but in the same general area as most of the other pitcher sherds. This is one of the few sherds that has evidence of glazing. A possible spouted pitcher or handled jar, based on a possible scar from a handle, was recorded in Period 3.1 Ditch B15 of Enclosure I. A rod handle, clearly from a different sort of vessel from the tubular spouted pitchers, although still likely to be from a pitcher, was also found in Ditch B15, and another later form is represented by a rimsherd with pouring lip from Period 3.2 Ditch B23 (Enclosure K). This latter item is probably a waster since it is soft, under-fired, and in very bad condition on the interior. The surfaces are light brown-grey and are powdery and slightly rough to the touch. Fragments of fired clay, undiagnostic as to function, came from the same context. A small diameter vessel rim (120mm) from Period 3.2 Ditch B11 (Enclosure H) could be from a jug.

Apart from the wasters mentioned above, there was also a cooking pot/jar waster (Fig. 30, no. 78) from dump B41 (Enclosure I) and another, a club rim cooking pot, from Ditch B19. A cooking pot waster was noted in Period 3.1 Ditch B15 (Enclosure I) and another in Period 3.2 Ditch B25, part of a trackway extending from Enclosure K. Unusually patchy surface colour on the sherds was noted in Enclosure H (Period 3.2) and in Enclosure K (Period 3.2/3.3). However, such sherds were most common in Period 3.1 Enclosure I, either within boundary ditches directly associated with the enclosure, or later features that cut through the enclosure, or within features that lay in the area between the southern boundary of Enclosure K and the northern boundary of Enclosure H. Fill 6195 of Ditch B11, like B41, contained a higher than normal concentration of charcoal and also limestone fragments possibly intended for crushing and use as temper.

Looking at Area B as a whole, it is difficult to see any obvious patterning. The largest groups of pottery occur in Enclosure H in Period 3.2 Ditch B3 and pit 6077 with 97 and 89 sherds respectively, and in Period 3.1 Enclosure I, with 95 sherds from Ditch B15. Apart from one Period 3.3 ditch in Enclosure K, all the remaining features contained fewer than fifty sherds and of these, about two thirds contained fewer than ten sherds. A few of the medieval ditches contained no pottery at all.

The taphonomy, therefore, makes it difficult to be sure of the integrity of the larger pottery groups, and the differing degrees of abrasion and the surface appearance of the sherds within groups does not instil confidence that all the pottery in a group is coeval, although there need not be any great chronological difference. In the case of dump B41, the identification of the fills as (largely) kiln waste is nevertheless supportable and seems to offer the best explanation. Ceramic dating of this material hinges primarily on the spouted pitchers, the form of which is Saxo-Norman and appears to be most common in the later 11th to early 12th centuries. This is within the range of a radiocarbon determination on a charred wheat grain from fill 6252 of dump B41, cal. AD 996–1157 (95.4% probability; BRAMS 4285), although that range extends back into the later 10th century.

The size of the B41 group is sufficiently large to produce meaningful statistical results. It is unfortunate that from the rest of the site there was nothing that came close to this in terms of sherd quantity, nor is any other group so clearly from a dump, and a dump of pottery production waste at that. Even so, the presence of charcoal and burnt cereal grains, from which the C14 date for this group was obtained, indicate that the taphonomy is not

straightforward, since, although chaff and crop processing waste can be used as fuel, the abundance of burnt cereal grains is likely to be evidence of domestic activity of some sort. As Oliver Kent (pers. comm.) notes:

'Grain production waste/straw is certainly a common fuel type. Firing times are very fast and the rapid burn of a very light fuel is advantageous. Fuels are packed around the ware before lighting - although stoking may happen it is not essential. That means that light fuels can be packed quite tightly in and around pots. I can imagine accidental inclusion of grain but surely not in large quantities.'

Coincidentally, charcoal and charred wheat grains were also found associated with other possible pot waste dumps in fill 3150 of Enclosure D Ditch A66, fill 4066 of Enclosure F Ditch A40, and fill 3757 of pit 3753 (Area A); in the latter case, round wood charcoal was also present, and this is characteristic (albeit not exclusively so) of kiln waste.

It can be seen from the above that any comparisons are fraught with difficulties, and it is far from certain that equivalent groups are being compared. General observations comparing the pottery across the site are set out in the *Overview of the Pottery* (above). However, a more detailed comparison between dump B41 (along Enclosure I) and Enclosure F, the second largest pottery group is made here.

There are some differences between the Enclosure F ditches and those of Enclosure I. Although the average sherd weight is very similar, there is a marked difference between the percentage of rimsherds in each group, with the Enclosure I ditch having the smallest proportion (4.1%); but the average percentage of each rimsherd varies from 12.3% in Enclosure I down to 6.7% in the smaller Enclosure F ditches. In effect, the ditches of Enclosure I produced fewer but larger rimsherds when compared to the Enclosure F ditches, perhaps suggesting an element of primary deposition combined with a background of redeposited sherds.

The Period 3.1 Enclosure I group and that from Period 3.2 Enclosure F do have certain rim/form types in common. Straight-sided cooking pots with club rims (Rim Group 2A) are common to both (e.g. Fig. 28, nos 18, 24, 26, 28) but more common in Enclosure F. Angular rims (e.g. Fig. 28, no. 13), stubby rims (e.g. Fig. 28, nos 16, 23, 27) and plain rounded everted rims (e.g. Fig. 28, no. 17) are more common in Enclosure F also. A rounded cooking pot with a sharply angled rim seems to be peculiar to Area A. Two examples were found in Enclosure F (Fig. 28, nos 21-22). Further rounded cooking pots with simple but more sinuous rims, usually with a thickened or 'developed' terminal (e.g. Fig. 28, no. 14) are found in both groups but are most common in the Enclosure I group. Cooking pot diameters are mostly in the 200-250mm range. Apart from cooking pots/jars, there are two examples of handled jars (Fig. 28, nos. 19-20; Fig. 31, no. 103), both from the second fill of Ditch A41, and a very fragmentary West Country dish. A rimsherd with a small elliptical handle may be from a small jug or handled jar, and a second rimsherd may be from a jug or small jar. It is possible that the three elongated rims are from handled jars like Fig. 28, no. 20 or pitchers, but there is no evidence to confirm this. A possible lid (Fig. 32, no. 108) from Ditch A22 is an interesting find in view of the West Country dish sherds found in the same ditch (see discussion regarding West Country dishes, above). A further six sherds from a rather thick-walled West Country dish with single perforations at the shoulder and in the base were found in Ditch A41; there is also a sherd from the Ditch A41 with a cratered green glaze on its interior surface. This is not a local sherd and has been tentatively identified as TF119 and dating to the 11th century.

There is often wear on the sherd surfaces, but the degree is variable and there seems to be no distinct pattern to the levels of wear between fills. Unlike the Enclosure I group, or even Enclosure B, there are sherds from Enclosure F that are leached or 'corky'; sometimes these sherds are smooth, even 'soapy', to the touch. Fewer than 5% of

the sherds have any sort of sooting or blackening, but in most cases, it is not clear whether or not this is directly due to domestic use. There are certainly no large-scale heavy soot deposits either internally or externally on the sherds, even those where the fills they came from contained frequent charcoal. Taken overall, however, the Enclosure F pottery is somewhat different to that from Enclosure I.

Looking at the Period 3 pottery overall no very coherent picture emerges. The condition of the sherds (worn/unworn, leached/unleached), the range of rim/vessel types and their distribution within features, and the differences between phases within Period 3 are never consistent. The result is that it is impossible to detect any clear pattern, no matter how the pottery data are tabulated. The only constant is that with one or two exceptions, average sherd weights are low. This, unfortunately, is more of a hindrance than a help, since it suggests that very few of the pottery groups are primary, the one obvious exception being dump B41 although even here sherd size is not very large; and even then, there is no guarantee that earlier pottery has not become caught up in a later deposit.

Another issue is what exactly do the larger groups of pottery represent? How did the sherds arrive in the ditches and pits? With a larger pit group such as from pit 3753 there are good reasons to believe that this is a primary deposition, but is that true of the larger groups found in the ditches? The balance of probabilities suggests that their deposition within the ditch is likely to have been a single deliberate event, but whether the pottery sherds themselves were contemporaneous or came from several different areas within the site is not apparent.

### Period 4 Ring-ditch B

Period 4 Ring-ditch B produced a sizeable amount of pottery and was the only feature that contained pottery other than TF41B in any quantity (Tables C4 and C15).

The pottery from Ring-ditch B consists largely of Fabric TF41B, which forms just under 74% of the pottery from the fills. The TF41B pottery is comparable to that from the Period 3 enclosures, with straight-sided club rim cooking pots (not illustrated) and rounded cooking pots with Group 1A and 1B rims (Fig. 30, nos 95, 100). There is one less common form with a marked angular everted rim (Fig. 30, no. 99). Only two other examples were found, one in Period 3.2 Enclosure F and one in Period 3.3 Enclosure D, both of which were truncated by the ring-ditch. There is a handled jar in very poor condition (Fig. 30, no. 97) and a pitcher which is partly leached on the interior (Fig. 30, no. 98). A dump of material (layer 3980) in the interior of the ring-ditch platform consists entirely of TF41B but the same deposit produced modern bricks indicating that the pottery was residual.

Within the ring-ditch fills there was later medieval material: Malvernian ware (TF52), a re-used Brill-Boarstall sherd (TF83), a possible Minety ware pitcher sherd (TF44) with an internal decayed glaze, and a later Minety ware jug with a thumbed base and neatly made rim and slashed handle (Fig. 30, nos 95a–b), which stylistically dates to the later 13th or 14th centuries. A very weathered pale grey sherd with traces of an external olive glaze could be a Redcliffe ware sherd (TF92). The Brill-Boarstall sherd has a hole drilled through it and could have been used as a spindle whorl (Fig. 32, no. 109). If so, this would be evidence for domestic craft but given that substantial ring-ditch sections were hand-excavated, there is really very little pottery indicative of late medieval domestic occupation. The Malvernian sherds are from two jars, three jugs and a bowl; there is also possibly a Malvernian glazed roof tile fragment; these all date to the 15th century. Three Malvernian jugs sherds and a bowl sherd are sooted.

It is unfortunate that the pottery associated with the ring-ditch is so hard to interpret. The key to understanding the dating of this feature lies in understanding how much pottery was present in each excavated section of the ditch, the size and condition of the sherds, the relative size of the sherds between known early fabrics and known later

fabrics, where the pottery comes from in the fill sequence of each section and how many cut features the ditch itself cuts at the point the section was dug; Tables C15 and C16 attempt to present the data in this degree of detail. Looking at Tables C15 and C16, not all sections produced pottery and, of those that did, the amounts are variable. Sections through the ring-ditch contained single fills or multiple fills. The depth of the ditch varied considerably but there was no correlation between depth and quantity of pottery present. Taking these facts into consideration, it appears that the backfilling of the ditch was unlikely to have been a one-off operation and the artefactual content of the ditch sections are likely to derive from weathering/slumping, deliberate discard and final, disuse backfilling.

Pottery was found in sections that cut no features underlying the ring-ditch (4008 and 4018). Section 4018 contained one of the larger groups of pottery. However, section 4001, one of the deepest cut sections of the ditch, cut no other earlier features and contained no pottery. If there is pottery from a ditch section then there is always some TF41B. The conclusion from these observations is that there is no real evidence that TF41B sherds in the ring-ditch fills were disturbed from underlying ditches.

Ditch section 4008 had a single fill. Unabraded and quite large sherds from a Minety Ware jug were found here. These look like a primary deposition (twelve sherds, some of which joined, 189g) with three (7g) small residual sherds of TF41B, and eight jug sherds (29g) in Malvernian fabric TF52. The Minety jug sherds stand out as different and it is therefore likely that they ended up in the ring-ditch when it was a functioning entity. On stylistic grounds, these sherds date to c.1250-1350. What is interesting is that in the fifth fill of section 4020, another deep section, is the lower half of a jug like the one from 4008 - so similar that they could be from the same vessel. This is well down in the fill sequence and again seems like a primary deposition. The only other pottery in this context is TF41B. This may be pottery waste; it is similar to what is found elsewhere on site in Period 3 contexts. The sherds are not very large and appear to be earlier than the jug sherd. In section 4027 in the sixth fill there is late medieval Malvernian TF52 pottery, so the fill must be late medieval but higher up in the fill sequence there is just a single sherd of TF41B and nothing else, indicating that the TF41B pottery is residual. In section 4018 there is a spindle whorl made out of a 13th-14th-century Brill-Boarstall sherd. The fill of 4018 contains TF41B sherds which are heavily leached. They are similar to pottery from nearby Period 3 Ditch A66.and may be evidence for a general spread of pottery left over from pottery production that found its way into the ring-ditch. It is difficult to see a marked difference between the TF41B pottery from Period 3 and that found within the ring-ditch, which again indicates that it is largely residual there. The final conclusion is that the balance of probabilities suggests that the ring-ditch was dug in the 13th century, after pottery production ceased on site.

The Ring-Ditch must have been abandoned in the 15th or 16th centuries because of the Malvernian TF52 pottery. Later is unlikely because there is no post-medieval pottery. Unfortunately, the TF52 sherds are not particularly diagnostic. Jugs and jars seem to be the most common. There are no drinking vessels. That could suggest a disuse date in the 15th century, but perhaps no-one was very interested in using ceramic cups and continued to use treen vessels into the 16th century.

### Other features

A small amount of pottery came from plough furrows and consists entirely of TF41B sherds. The same was true of the subsoil; all of this material is presumed residual from Period 3. The lack of later medieval and post-medieval pottery is interesting because it suggests that there was little or no domestic activity in this area once pottery production ceased.

### **Conclusions**

There are several unusual aspects to the pottery assemblage. It is striking that the Period 3 pottery appears to be almost entirely made up of oolitic limestone tempered ware TF41B. Two types are present; one with numerous small limestone grits and ooliths, the other with larger rounded limestone and ooliths which have leached out. Both types include wasters.

The TF41B pottery is almost entirely unsooted and devoid of limescale which points to it not being a normal domestic assemblage. Enclosure A, thought to be the occupied core of the farmstead, was disappointing in the paucity of medieval pottery associated with it. However, this paucity need not imply that there was no domestic occupation since rural medieval sites tend not to have pottery dumped in ditches with household waste and manure was disposed of instead in middens before being spread on fields. This can be seen at Burton Dassett, Warwickshire, where relatively little pottery was found in cut features (Rátkai, in press).

There is enough circumstantial (and a little direct) evidence for pottery production which seems to have occurred in Enclosure I and in the enclosures in the south of Area A, although it is impossible to know which of the four enclosures (D, E, F and G) it was associated with, and it could have been all of them at different times, or some or all of them could have contained kilns at the same time. There is a possibility that there was pottery production in Enclosure K but this is less certain. On the current evidence, there is no way of knowing the geographical spread of pottery manufacture in Harefield parish at the time of Domesday, but it would be unwise to suggest that Quedgeley East was the sole location. The difficulty of locating the archaeological traces of bonfire kilns is a very real problem since they are ephemeral by nature.

The similarity in the pottery across the site, even given inherent conservatism in much medieval pottery production, suggests that the pottery represents a relatively short timespan. Although, there are very few non-local sherds, the absence of Malvernian cooking pot (TF40), apart from four tiny fragments from the Period 4 ring-ditch fill, may be significant. This Malvernian type of pottery began to feature in assemblages in Gloucester from the late 12th century (Vince 1984) but it was at peak distribution in the 13th century. Its paucity on the Quedgeley East site can perhaps be taken to indicate that there was little or no activity on the site then, aside from the Period 4 ring-ditch. This supposition is supported by the almost complete absence of glazed pottery and jugs, again suggesting that the enclosures went out of use in the 12th century. The radiocarbon dates are consistent with this conclusion, with the latest dates from Period 3 deposits extending to the 1150s cal. AD (Appendix S). The almost complete absence of pottery other than TF41B in the plough furrows and subsoil is a further powerful reinforcement that activity in the excavated area had ceased before the 13th century, other than in the immediate vicinity of the Period 4 ring-ditch.

The pottery produced from Quedgeley East featured both rounded and straight-sided cooking pots/jars with little attempt at decoration or embellishment. Many of the cooking pot/jar forms are paralleled in Gloucester. This strongly utilitarian character was leavened with the production of pitchers and handled jars, sometimes with incised, stamped, roller stamped or impressed decoration. There were also fragments from a cylindrical lamp of Late Saxon type (Fig. 30, no. 85). Similar decorated sherds were not recorded from Gloucester, apart from a lid with stamped decoration but this was in Bath B ware. The absence of bowls is interesting given that they are often associated with dairying and the site lies in an area of stock enclosures. The West Country dishes may sometimes have been used in cheesemaking, but, if that is the case, there are no other vessel types that are specifically associated with dairying.

The assemblage is important because of its size, because it provides new and firm evidence as to the range of pottery produced at Haresfield and since it suggests that the site at Quedgeley East is likely to have been where

at least some of these kilns operated. There is also the possibility of a Continental potter at work on the site, something evidenced elsewhere at Pound Lane, Canterbury (Cotter 1997) and Castle Neroche (Davidson 1972), both of which dated to the 11th century, which fits well with the dating of the production at Quedgeley east. The presence of the stamped decoration, paralleled in Europe, is evidence that some of the pottery pre-dates 1100. The pedestal lamp indicates some pottery could date before the Conquest, although there is no irrefutable evidence that this type of lamp was not made after the Conquest, but a number of the pot forms, described above, are characteristically Late Saxon. Unfortunately, the impossibility of obtaining radiocarbon dates on sherds, something reflecting their lack of use and therefore of sooting, means that the question of when TF41B began to be made, remains unanswered, including whether or not it pre-dated the Conquest.

### Catalogue of illustrated vessels (Figs 28-30)

- 1 Area of Enclosure A; Period 3.3, Ditch A77, fill 3584, TF41B, pitcher/jar with stamped decoration.
- 2 East of Enclosure A; Period 3.2, Ditch A36, fill 3364, TF44?, rectangular sectioned handle with parallel lines of longitudinal slashing.
- 3 South of Enclosure A; Period 3, Pit 3480, fill 3481, TF41B, rod ?handle with traces of dowel attachment.
- 4 Enclosure C; Period 3.1, Ditch A16, fill 3567, TF41B, cooking pot/jar.
- 5 Enclosure B; Period 3.2, Ditch A18, fill 3294, TF41B, pitcher? with small triangular rim.
- 6 Enclosure B; Period 3.2, Ditch A18, fill 3433, TF41B, cooking pot/jar with lid-seating rim?, patchy surface colour.
- Final Period 3.2, Ditch A18, fill 3328, TF41B, cooking pot/jar, possibly a waster, patchy surface colour, possible traces of a drilled hole.
- 8 Trackway Ditch; Period 3.3, Ditch A14, fill 3457, TF41B cooking pot/jar, patchy surface colour, four elliptical impressions on part of the rim.
- 9 Trackway Ditch; Period 3.3, Ditch A7, fill 3738, TF41B, West Country dish
- Trackway Ditch; Period 3.3, Ditch A7, fill 3738, TF41B, cooking pot/jar, drilled hole in neck and possible three on the shoulder.
- 11 Trackway Ditch; Period 3.3, Ditch A78, fill 3553, TF41B, bowl?
- Enclosure E; Period 3.1, Ditch A50, fill 3012, TF41B, cooking pot jar, lid seating(?), finger-impressed rim, some ext. patchy surface colour, no wear.
- Enclosure F; Period 3.2, Ditch A41, fill 3195, TF41B, cooking pot jar, slightly uneven, patchy surface colour, heavily worn and leached on interior.
- 14 Enclosure F; Period 3.2, Ditch A41, fill 3878, TF41B, cooking pot/jar, quite large and globular.

- 15 Enclosure F; Period 3.2, Ditch A41, fill 3864, TF41B, bowl? some wear.
- 16 Enclosure F; Period 3.2, Ditch A41, fill 3966, TF41B, cooking pot/jar, very worn.
- 17 Enclosure F; Period 3.2, Ditch A41, fill 3966, TF41B, cooking/pot/ jar, very worn
- 18 Enclosure F; Period 3.2, Ditch A41, fill 3966, TF41B, cooking pot /jar
- 19 Enclosure F; Period 3.2, Ditch A41, fill 4069, TF41B, handled jar (or pitcher), dowel attachment of handle, some wear on exterior, heavier wear on interior.
- 20 Enclosure F; Period 3.2, Ditch A41, fill 4069, TF41B, handled jar (scar where handle was attached), worn.
- 21 Enclosure F; Period 3.2, Ditch A41, fill 4069, TF41B, cooking pot/jar, very little wear, 'powdery' surface feel.
- 22 Enclosure F; Period 3.2, Ditch A41, fill 4069, TF41B, cooking pot/jar, not worn, some possible smoke-blackening on the rim tip.
- Enclosure F; Period 3.2, Ditch A41, fill 4069, TF41B, cooking pot jar, not worn on exterior, some wear on interior.
- 24 Enclosure F; Period 3.2, Ditch A41, fill 4083, TF41B, cooking pot/jar, heavy wear, especially on exterior.
- Enclosure F; Period 3.2, Ditch A41, fill 4100, TF41B, cooking pot/jar, lid-seating (?) rim, not worn some external soot.
- 26 Enclosure F; Period 3.2, Ditch A72, fill 3863, TF41B, cooking pot/jar, circular impression along the top of the rim, very worn.
- 27 Enclosure F; Period 3.2, Ditch A72, fill 3863, TF41B, cooking pot/ jar with stubby rim
- 28 Enclosure F; Period 3.2, Ditch A72, fill 3863, TF41B, cooking pot/jar, patchy external surface colour, slightly 'soapy' surface feel, little wear.
- 29 Enclosure F; Period 3, Ditch A45, fill 4044, TF41B, cooking pot/jar with collar rim, slight wear, slightly harsh and powdery to the touch.
- 30 Enclosure F; Period 3, Ditch 4123, fill 4124, TF41B, dish?, some wear
- 31 Enclosure D, Period 3.2, Ditch A66, fill 3150, TF41B, cooking pot/jar, very worn, possibly not medieval.
- 32 Enclosure D, Period 3.2, Ditch A66, fill 3150, TF41B, leached, some wear.

- Enclosure D, Period 3.2, Ditch A66, fill 3150, TF41B, cooking pot/jar, leached, slightly 'soapy' feel, large area missing from the external surface, possibly spalled, small patch of soot on exterior, rim rather uneven.
- Enclosure D, Period 3.2, Ditch A66, fill 3150, TF41B, cooking pot/jar, leached, slightly 'soapy' feel, worn, patchy external surface colour.
- 35 Enclosure D, Period 3.2, Ditch A66, fill 3150, TF41B, cooking pot/jar, leached, impressions on rim.
- Enclosure D, Period 3.2, Ditch A66, fill 3150, TF41B, cooking pot/jar, leached, exterior wear and patchy surface colour.
- 37 Enclosure D, Period 3.2, Ditch A66, fill 3150, TF41B, cooking pot/jar, leached, slightly rough to the touch.
- 38 Enclosure D, Period 3.3, Ditch A39, fill 3772, TF41B, cooking pot/jar
- 39 Enclosure D, Period 3.3, Ditch A38, fill 3907, TF41B, pitcher/jar?
- 40 Enclosure D, Period 3, Pit 3127, fill 3128, TF41B, cooking pot/jar, leached, 'soapy' feel
- 41 Enclosure D, Period 3, Pit 3176, fill 3177, TF41B, cooking pot/jar, patchy surface colour on exterior, 'soapy' feel, thumbnail impressions on the rim
- 42 Enclosure D, Period 3, Ditch A64, fill 4116, TF41B, straight-sided, club rim cooking pot, very worn.
- 43 Enclosure D, Period 3, Ditch A64, fill 4116, TF41B, West Country dish, perforations in the wall.
- 44 Enclosure D, Period 3, Ditch A64, fill 4116, TF41B, West Country dish, perforations in the wall.
- Enclosure D, Period 3, Ditch A64, fill 4116, TF41B, cooking pot/jar, patchy surface colour, reduced elliptical patch just below rim, possibly where the handle was attached?, very small patch of soot on rim.
- Period 3.3, Pit 3753, fill 3757, TF41B, spouted pitcher, very coarse fabric, badly worn/degraded on the interior, complete spout, largely unworn.
- 47a-b Period 3.3, Pit 3753, fill 3757, TF41B, spouted pitcher, incised lines on upper face of rim, spot originally attached to the neck with clay strips, complete spout may not be from this vessel, smoke blackening(?) on interior and exterior.
- 48 Period 3.3, Pit 3753, fill 3757, TF41B, cooking pot/jar, some wear.
- 49 Period 3.3, Pit 3753, fill 3757, TF41B, cooking pot/jar, patchy surface colour on exterior, no external wear but quite heavy on interior.
- Period 3.3, Pit 3753, fill 3757, TF41B, cooking pot/jar, quite heavy wear, patchy external surface colour.

- 51 Period 3.3, Pit 3753, fill 3757, TF41B, cooking pot/jar, quite heavy wear, patchy external surface colour.
- 52 Period 3.3, Pit 3753, fill 3757, TF41B, cooking pot/jar, patchy surface colour, no wear.
- Period 3.3, Pit 3753, fill 3757, TF41B, cooking pot/jar, slight wear.
- 54 Period 3.3, Pit 3753, fill 3757, TF41B, cooking pot/jar, worn.
- 55 Period 3.3, Pit 3753, fill 3757, TF41B, pitcher, faint traces of external lines on upper face of rim, worn.
- 56 Period 3.3, Pit 3753, fill 3757, TF41B, cooking pot/jar, no wear, possible attempt to decorate the rim.
- Period 3.3, Pit 3753, fill 3756, TF41B, cooking pot/jar, slight wear, finer fabric than usual with fewer inclusions, finger impressed rim.
- Period 3.3, Pit 3753, fill 3756, TF41B, cooking pot/jar, slight wear, finer fabric than usual with fewer inclusions, smoke blackened or light soot on interior.
- 59 Unphased deposit 3182 within natural hollow, TF41B, cooking pot/jar with collar rim, made up of two joining sherds, one with oxidised surfaces, the other reduced, leached.
- 60 Enclosure H, Period 3.1, Ditch B9, fill 6010, TF41B, rim slightly distorted, very light wear on interior.
- Enclosure H, Period 3.1, Ditch B3, fill 6056, TF41B probably a two handled jar, some wear on the exterior but very worn on interior, where sections of the original surface are missing.
- 62 Enclosure H, Period 3.1, Ditch B3, fill 6056, TF41B cooking potj/jar, heavy wear on interior, slightly worn and rough to the touch on exterior.
- Enclosure H, Period 3.2 Ditch B8, fill 6020, TF41B cooking pot/jar, some wear, wide-spaced stabbing on upper face of the rim.
- Enclosure I, Period 3.1, Ditch B17, fill 6133, TF41B, cooking pot/jar, thumbed rim, three impressions on inner face of rim.
- 65 Enclosure I, Period 3.1, Ditch B15, fill 6188, TF41B jug/pitcher, rod handle
- 66 Enclosure I, Period 3.1, Ditch B15, fill 6188, TF41B, cooking pot/jar, slightly worn
- 67 Enclosure I, Period 3.1, Ditch B19, fill 6342, TF41B, cooking pot/jar, slightly rough to the touch.
- Enclosure I, Period 3.1, Dump B41, fill 6371, TF41B, West Country dish, patchy surface colour, largely unworn area of limestone grits standing proud of the surface, possibly a waster.
- 69 Enclosure I, Period 3.1, Dump B41, fill 6371, TF41B, handled jar, very small handle or lug.

- 70 Enclosure I, Period 3.1, Dump B41, fill 6371, joins with sherds from fill 6252 of Ditch B41, TF41B, dish?
- 71 Enclosure I, Period 3.1, Dump B41, fill 6371, TF41B, pitcher, incised lines on upper face of the rim, faint grid stamp on inner face of neck/rim, some patches of grey on interior, a little wear, slightly rough, powdery feel.
- 72 Enclosure I, Period 3.1, Dump B41, fill 6371, TF41B, cooking pot/jar.
- Final Enclosure I, Period 3.1, Dump B41, fill 6371, TF41B, cooking pot/jar, not worn, interior feels slightly rough and powdery.
- Find the first period 3.1, Dump B41, fill 6371, TF41B, cooking pot/jar, variable wear, some areas unworn other areas on exterior where the original surface is missing, also heavy wear on part of external face of rim, smoke blackening on some of the external rim and patches on interior.
- Enclosure I, Period 3.1, Dump B41, fill 6252, TF41B, pitcher, roller-stamped decoration, areas of thin glazing.
- Final Section 76 Enclosure I, Period 3.1, Dump B41, fill 6252, TF41B, bowl?, scored upper surface of rim, internal smoke blackening extending over rim, not worn.
- 77 Enclosure I, Period 3.1, Dump B41, fill 6252, TF41B, jar, patchy external colour, grid stamp decoration.
- Enclosure I, Period 3.1, Dump B41, fill 6252, TF41B, cooking pot/jar, may have had a handle, one break is oxidised throughout suggesting breakage during firing, waster.
- Final Fig. 25. Feriod 3.1, Dump B41, fill 6252, TF41B, cooking pot/jar, patchy surface colour, harsh to the touch.
- 80 Enclosure I, Period 3.1, Dump B41, fill 6252, TF41B, cooking pot/jar, hard fired, gouge or slash to the rim.
- 81 Enclosure I, Period 3.1, Dump B41, fill 6252, TF41B, cooking pot/jar, not worn, slightly rough, more so on interior.
- 82 Enclosure I, Period 3.1, Dump B41, fill 6252, TF41B, cooking pot/jar, patchy surface colour, some wear.
- 83 Enclosure I, Period 3.1, Dump B41, fill 6252, TF41B, cooking pot/jar, not particularly worn, slight roughness to surfaces, possible deliberate impression on rim, half of interior is blackened, this stops at break, interior wear on unblackened sherd.
- 84 Enclosure K, Period 3.2, Ditch B25, fill 6394, TF41B, tripod pitcher foot.
- 85 Enclosure I, Period 3.2, Dump B41, fill 6252, Late Saxon pedestal lamp.

- 86 Enclosure K, Period 3.2, Ditch B25, fill 6394, TF41B, plain, elliptical sectioned ?pitcher handle, waster.
- 87 Enclosure K, Period 3.2, Ditch B25, fill 6394, TF41B, pitcher neck-rim, incised lines on upper face of rim, smooth to the touch, worn on ext, some of the limestone has leached out.
- 88 Enclosure K, Period 3.3, Ditch B35, fill 6086, TF41B, cooking pot/jar, quite crude, leached, especially on interior, patchy external colour.
- 89 Enclosure K, Period 3.3, Ditch B35, fill 6086, TF41B, cooking pot/jar, leached.
- 90 Enclosure K, Period 3.3, Ditch B33, fill 6197, TF41B, cooking pot/jar, patchy external colour, smooth surfaces, no wear.
- 91 Enclosure K, Period 3.3, Ditch B33, fill 6317, TF41B, cooking pot/jar, not worn, smooth to the touch, grey/blackened patches on interior and exterior.
- 92 Enclosure K, unphased layer 6387, TF41B, cooking pot/jar, well made, sherds nicely oxidised, thin-walled, not particularly worn, slightly rough powdery feel, many limestone flecks visible on surfaces.
- 93 Enclosure K, unphased layer 6387, TF41B, cooking pot/jar, rough abraded surface.
- 94 Enclosure K, unphased layer 6387, TF41B, bakestone/lid, not worn.
- Period 4 Ring-ditch B Platform, dump deposit 3980, TF41B, cooking pot/jar, largely reduced with some oxidised patches, worn on exterior.
- 96a-b Period 4 Ring-ditch B, Ditch A63, fills 4009 and 4025, TF44? (Minety ware), jug, with slashed strap handle and impressed base, buff fabric with grey core, fine oolitic limestone inclusions, well made, mid 13th to mid 14th century.
- 97 Period 4 Ring-ditch B, Ditch A63, fill 4033, TF41B, handled jar, very poor condition, wear on exterior but interior is very heavily worn with little of the original surface remaining.
- 98 Period 4 Ring-ditch B, Ditch A63, fill 4033, TF41B, light-coloured, worn, part of interior is leached.
- Period 4 Ring-ditch B, Ditch A63, fill 4033, TF41B, blackened on interior and over rim and down onto exterior of neck and a little onto the shoulder, slightly worn, slightly rough to the touch, thickened at junction of rim to body.
- Period 4 Ring-ditch B, Ditch A63, fill 4033, TF41B, reduced patches on interior and over rim, looks as if this intended to be an impressed rim but rather haphazard, not worn and smooth to the touch.

### Catalogue of photographed vessels (Figs 31-32)

101 Decorated sherds:

Top left - 'rosette' stamp Ditch 4070, A47, Enclosure F, Area A, Period 3;

- Second top left comb teeth impressions Pit 6382, Enclosure I, Area B, Period 3.2;
- Middle left incised rib, Ditch 3160, A50, Enclosure E, Area A, Period 3.1;
- Bottom left intersecting rectangular roller stamping, Pit 3753, Enclosure G, Area A, Period 3.3;
- Remaining sherds grid stamps, ?comb teeth impressions and ?combed whorl, dump of pottery waste, 6371, B41, Enclosure I, Area B, Period 3.2.
- Period 3.3, Pit 3753, fill 3757, TF41B, spouted pitcher, very coarse fabric, badly worn/degraded on the interior, complete spout, largely unworn.
- 103 Trackway A; Period 3.1, Ditch A77, fill 3584, TF41B, pitcher/jar with stamped decoration.
- 104a–b Enclosure F, Period 3.2, Ditch A41, fill 4069, TF41B, handled jar (or pitcher), dowel attachment of handle, some wear on exterior, heavier wear on interior.
- Enclosure D, Period 3, Ditch A64, fill 4116, TF41B, straight-sided, club rim cooking pot, very worn.
- Enclosure I, Period 3.2, Dump B41, fill 6371, TF41B, West Country dish, patchy surface colour, largely unworn but area of limestone grits standing proud of the surface, possibly a waster.
- 107 Enclosure K, unphased layer 6387, TF41B, bakestone/lid, not worn.
- 108 Enclosure F, Period 3.2, Ditch A41, fill 3965, TF41B, lid.
- 109 Period 4 Ring-ditch B, Ditch A63, fill 4019, TF83 possibly reused as a spindle whorl.

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Table C1: quantification of pottery by phase

PERIOD	Count	Weight (g)	MR	Rim %	ASW	Rim Ratio
Unstrat.	61	604	7	58	9.9g	11.50%
2	17	91	2	21	5.4g	11.70%
3	567	4666	47	409	8.2g	8.29%
3.1	495	3332	43	340	6.7g	8.69%
3.2	2389	22627	176	1721	9.4g	7.37%
3.3	751	9373	100	1128	12.5g	13.30%
4	252	2274	25	211	9.0g	9.90%
5	23	196	4	35	8.5g	17.40%
Total	4555	43163	404	3923	9.5g	8.90%

MR - Minimum Rim count ASW - Average Sherd Weight

Rim Ratio - rim sherds as a percentage of all sherds

Table C2: quantification of pottery by area

Area	Count	Weight (g)	MR	Rim %	ASW	Rim Ratio
Enclosure A	52	310	3	57	6.0g	5.8%
Area of Enclosure A	8	60	2	9	7.5g	50.0%
Enclosure B	396	3077	31	245	7.7g	7.8%
Enclosure C	73	578	6	53	8.0g	8.2%
Enclosure C Track	34	331	4	22	9.7g	11.8%
Enclosure D	546	4678	56	473	8.6g	10.3%
Enclosure E	209	1233	21	121	5.9g	10.1%
Enclosure F	793	6779	75	633	8.6g	9.5%
Enclosure G	236	3874	35	545	16.4g	14.8%
Enclosure H	317	3529	18	171	11.1g	5.7%
Enclosure I	857	8173	41	477	9.5g	4.8%
Enclosure K	266	3197	41	466	12.0g	15.4%
Ring Ditch	248	2261	24	206	9.1g	9.7%
Ring Ditch platform	69	604	6	66	8.8g	11.5%
Area A Trackway	281	2703	20	208	9.6g	7.1%
Area A North of Trackway	2	25			12.5g	
Area A South of Trackway	29	555	5	41	19.1g	17.2%
Area A East of Enclosure A	15	167			11.1g	
Area A Far west	4	38			4.5g	
Area A not located	58	405	9	81	7.0g	15.5%
Area B outside Enclosures	59	541	7	49	9.2g	11.9%
Unstratified	3	45		<u> </u>	15g	·
Grand Total	4555	43163	404	3923	9.5g	8.9%

MR – Minimum Rim count

ASW – Average Sherd Weight

Rim Ratio – rimsherds as a percentage of all sherds

Table C3: percentage of pottery in each major feature group

Period	Area	% Sherd Count	% Sherd Wght	% Rim Count	% Rim Percent
3.1 - 3	Enclosure A	1.1%	0.7%	0.7%	1.5%
3.2	Enclosure B	8.7%	7.1%	7.7%	6.2%
3.1	Enclosure C	1.6%	1.3%	1.5%	1.4%
3.3	Enclosure D	11.9%	10.7%	13.6%	12.1%
3.1	Enclosure E	4.6%	2.9%	5.2%	3.1%
3.2	Enclosure F	17.4%	15.7%	18.5%	16.1%
3.3	Enclosure G	5.2%	9.0%	8.6%	13.9%
3.1 - 2	Enclosure H	6.2%	7.5%	4.0%	4.0%
3.1 - 2	Enclosure I	18.7%	18.9%	10.1%	12.2%
3.2 - 3	Enclosure K	5.2%	5.9%	9.1%	10.4%
4	Ring-ditch	5.4%	5.2%	5.9%	5.3%
4	Ring-ditch platform	1.5%	1.4%	1.5%	1.7%
Percentage	e of Total Assemblage	87.6%	86.4%	86.4%	87.6%

Table C4: non-local pottery - quantification and distribution

Area	Period	Context	Feature	Fabric Code	Fabric Description	Quantity	Weight (g)	MR	Form
Enclosure A	3.1	3354	Ditch 3353	?	too small for ID	1	1		
Enclosure B	3.2	3506	Ditch 3505	TF52	Malvernian	1	3		
Enclosure D	3.0	3179	Pit 3178	TF52	Malvernian	1	4		bowl
Enclosure F	3.2	3197	Ditch 3194	TF119/TF54	Quartz free, micaceous	1	7		bowl
Enclosure F	3.2	3965	Ditch 3964	TF43	Sandy+calcitic inclusions	2	5		
Enclosure F	3.2	4069	Ditch 4067	T <b>F</b> 43	Sandy+calcitic inclusions	1	6		
Enclosure F	3.0	3038	Pit 3036	TF52?	Malvernian?	1	2		срј
Enclosure H	3.2	6194	Ditch 6193	TF43	Sandy+calcitic inclusions	1	6		
Enclosure I	3.1	6118	Ditch 6117	TF57?	West Somerset?	1	16		
Enclosure I	3.1	6120	Ditch 6119	TF52	Malvernian	1	1		
Enclosure I	3.1	6120	Ditch 6119	TF97?	Stroat?	1	5		bowl?
Enclosure I	3.1	6124	Ditch 6123	TF43	Sandy+calcitic inclusions	1	3		
Enclosure I	3.2	6252	Ditch 6392	TF43	Sandy+calcitic inclusions	1	7		
Enclosure I	3.2	6252	Ditch 6392	TF56?	Carboniferous limestone	1	5	1	срј
Moat	4.0	3992	Moat 3989	TF40/TF52	Malvernian	3	19		
Moat	4.0	3999	Moat 3995	TF52	Malvernian	3	42		jar
Moat	4.0	4009	Ditch 4008	TF44?	Minety ware?	12	189		jug
Moat	4.0	4009	Ditch 4008	TF52	Malvernian	8	29		jug
Moat	4.0	4012	Ditch 4010	TF52	Malvernian	1	2	1	jug
Moat	4.0	4019	Moat 4018	TF44?	Minety ware?	1	25		pitcher?
Moat	4.0	4019	Moat 4018	TF52	Malvernian	1	4		
Moat	4.0	4019	Moat 4018	TF52	Malvernian	4	140		
Moat	4.0	4019	Moat 4018	TF52	Malvernian	18	150		
Moat	4.0	4019	Moat 4018	TF83	Brill-Boarstall	2	13		re-used
Moat	4.0	4025	Moat 4020	TF44?	Minety ware?	1	78	1	jug
Moat	4.0	4025	Moat 4020	TF92	Redcliffe ware?	1	16		jug
Moat	4.0	4033	Moat 4027	TF40	Malvernian cooking pot	4	1		срј
Moat	4.0	4033	Moat 4027	TF52	Malvernian ?	1	3		jug
Moat	4.0	4033	Moat 4028	TF52	Malvernian	2	18		jar?
Moat	4.0	4033	Moat 4029	TF52	Malvernian	7	6		jug?
Moat	4.0	4077	Moat 4076	TF52	Malvernian	7	107	1	срј
South of Enclosure A	3.0	3481	Pit 3480	no match	Sandy+calcareous inclusions	1	26	1	срј
East of Enclosure A	3.2	3364	Ditch 3365	TF44?	Minety ware?	1	51		jug
Area A	5.0	3002	subsoil	TF52	Malvernian	1	89		bowl

MR – Minimum Rim count

Table C5: characteristics of the rim groups

Rim Code	Group	Name	Description
PL01-02, PL04	1A	Simple everted rim	simple everted rims springing from the shoulder
RE01 -06, RE09-10	1B	Simple curving rim	Short, smooth, rounded curve from shoulder to rim, usually with internal projection at rim tip, possibly made by running a thumb nail along the inside
EV01-03, EV06-07	1C	Simple curving rim	Long, smooth curving transition from shoulder to rim tip,
EV04-05, EV08, RE08	1D	Simple everted rim	Long, smooth curving transition from shoulder to rim tip, some thickening and/or modelling at the rim tip
CU01, EN02	1E	Simple curving rim	Very marked curvature from shoulder to rim tip
CO01, EV06a	1F	Collar rim	Upright rim with thickening at base and tip
CR01-07,	2A	Club rim	Classic rim associated with straight-sided cooking pots
FR01-02	2B	Flange rim	horizontal rim slightly dropped below rim tip
HZ01-03, AE05-06	2C	Horizontal rim	Usually occurring on vessels with a neck
AE01-AE04, EN01	3A	Angular, everted	fairly plain rim, angled out from the shoulder
SQ01-04	3B	Angular, everted	Rim with squared tip, springing from the shoulder
PL03	3C	Angular, everted	long everted, sharply angled rim springing from the shoulder
			short everted, plain angular rim springing from the shoulder (ST02 may have been intended as a lid-
ST01-06, AE02a	4A	Stubby rim	seating)
CH01	5A	Miscellaneous	Heavy rounded rim,
LS01-02, RE07, FR03?	5B	Miscellaneous	Lid-seating - rim 'dished' to accommodate a lid

Table C6: rim group (assignable to type) by area

	GP1	GP1A	GP1B	GP1C	GP1D	GP1E	GP1F	GP2A	GP2B	GP2C	GP3A	GP3B	GР3C	GP4A	GP5A	GP5B	Total
A Trackway		3	2	3	2		1	2	1	2	1				1		18
Enclosure A								1				1					2
Area of Enclosure A			1		1									2			4
Enclosure B		8	1	4	1			3		5				5		1	28
Enclosure C		4			1			2								1?	8
Enclosure D		8	7	10	7	1	1	16		5	3	2		9		1	70
Enclosure E	1	5	3	1		1		4		1				4			20
Enclosure F	1	11	6	4	1	1	1	16		6	3	3		11		1	65
Enclosure G		2	4	5	3		1	6		2			1	4		1	29
Enclosure H		3	3	2	3			3	3								17
Enclosure I		3	9	2				5	5	2		2		2	1		31
Enclosure K		9	8	3	1			7		2		1		3	1		35
Enclosure K?			1		1			1				1					4
Ring-ditch		4	2	1	2	1		6				1		2			19
Ring-ditch platform		2	1					1						1			5
Total	2	62	48	35	23	4	4	73	9	25	7	11	1	43	3	4 (5?)	355

Table C7: showing the relative proportion of all rim groups found in each period (Periods 3.1-4)

Period	GP1	GP1A	GP1B	GP1C	GP1D	GP1E	GP1F	GP2A	GP2A?	GP2B	GP2C	GP3A	GP3B	GP3C	GP4A	GP5A	GP5B	GP5B?	?	Total
3.1	2.3%	27.9%	7.0%	2.3%	4.7%	2.3%		18.6%	2.3%	2.3%	2.3%		2.3%		16.3%	2.3%		2.3%	4.7%	100.0%
3.2		15.3%	11.9%	8.0%	3.4%	0.6%		18.2%		4.0%	8.5%	1.7%	2.8%		10.2%		1.1%		14.2%	100.0%
3.3		13.1%	15.2%	16.2%	9.1%		2.0%	12.1%		1.0%	3.0%	3.0%	2.0%	1.0%	10.1%	2.0%	2.0%		8.1%	100.0%
4		16.0%	8.0%	4.0%	8.0%	4.0%		24.0%					4.0%		8.0%				24.0%	100.0%

Table C8: showing the relative proportion of each rim group by period (Periods 3.1-4)

Period	GP1	GP1A	GP1B	GP1C	GP1D	GP1E	GP1F	GP2A	GP2A?	GP2B	GP2C	GP3A	GP3B	GP3C	GP4A	GP5A	GP5B	GP5B?	?	Total
3.1	33.3%	18.8%	6.0%	2.7%	10.0%	25.0%		11.8%	100.0%	11.1%	3.8%		8.3%		16.3%	33.3%		100.0%	4.3%	10.6%
3.2		42.2%	42.0%	37.8%	30.0%	25.0%		47.1%		77.8%	57.7%	42.9%	41.7%		41.9%		33.3%		54.3%	43.5%
3.3		20.3%	30.0%	43.2%	45.0%		50.0%	17.6%		11.1%	11.5%	42.9%	16.7%	100.0%	23.3%	66.7%	33.3%		17.4%	24.4%
4		6.3%	4.0%	2.7%	10.0%	25.0%		8.8%					8.3%		4.7%				13.0%	6.2%

Table C9: less common vessel form by area (minimum vessel count)

Area	West Country dish	Pitcher	Tripod pitche	Pitcher/ja	Handled jar	Ja	Ju	Bow	Dis	Li	Baking sheet	Pedestal lamp	Reus
	Ocuminy distri		pitche	'									
S of Enclosure A	1												
A Area of Enclosure A				1									
A east of Enc A							1						
A Trackway	3					1							
Area B		1											
Enclosure A		1											
Enclosure B		3				1							
Enclosure C track						1?							
Enclosure D	2	1					2						
Enclosure F	2	1/?2			3		1	2		1			
Enclosure G		5		?2			?1						
Enclosure H		2					1						
Enclosure I	2	10	1	1	2		1	1	2		_	1	
Enclosure K		3 /?4				1					1		
Ring Ditch		4		2		1	6						1

Table C10: cooking nots with decorated rims

Period	Area	Decoration type	Illustrated
3.0	A Enclosure D	fingernail impressions on rim	Fig. xx.41
3.1	A Enclosure E	fingertip impressions	Fig. xx.12
3.2	B Enclosure I	one deliberate impression	Fig. xx.83
3.2	B Enclosure I	finger pinched rim, three impressions on inner face of rim	Fig. xx.64
3.2	B Enclosure I	crude circular impressions and finger tip impressions on rim tip	
3.2	A Enclosure B	possible finger impressions	
3.2	A Enclosure B	three dimples	
3.2	A Enclosure D	impressions	Fig. xx.35
3.2	A Enclosure F	circular impressions along the top of the rim	Fig. xx.26
3.2	A Enclosure F	fingernail impressions	
3.2	A Enclosure F	stabbing on rim interior	
3.3	A Trackway A	four elliptical impressions on inner face of rim, finger pinched edge to rim	Fig. xx.08
3.3	A Enclosure D	irregular impressions	
3.3	A Enclosure G	finger pinched rim	Fig. xx.57
4.0	A ring-ditch	haphazard impressions	Fig. xx.98

Table C11: comparison of selected pottery groups from Enclosures F and I

Area	Count	Weight (g)	MR	Rim %	ASW	Rim Ratio
Enclosure F: Ditch 3022 etc A40	172	1428	20	146	8.3g	11.7%
Enclosure F: Ditch 3014 etc A41	452	3832	36	361	8.4g	8.0%
Subtotal	623	5259	56	507	8.4g	9.0%
Enclosure F: smaller ditches	135	1215	17	115	9.0g	12.5%
Enclosure I: Ditch 6370 etc B41	725	7244	31	382	10.0g	4.1%

MR - Minimum Rim count

ASW - Average Sherd Weight Rim Ratio - rim sherds as a percentage of all sherds

Table C12: relative proportions of pottery from the Area B enclosures

Area	% count	% weight
Enclosure H	22.00%	23.70%
Enclosure I	59.50%	54.80%
Enclosure K	18.50%	21.50%

Table C13: contexts containing more than 100 sherds

Context	Count	Weight (g)	Period	Feature	Feature	Description
3150	102	1146	3.3	Ditch 3148	A66	Enclosure D
3177	126	543	3	Pit 3176		Enclosure D
4116	140	1459	3	Ditch 4115	A65	Enclosure D
3966	180	1178	3.2	Ditch 3964	A41	Enclosure F
3757	132	2638	3.3	Pit 3753		Enclosure G
6252	349	4351	3.1	Ditch 6392	B41	Enclosure I
6371	376	2893	3.1	Ditch 6370	B41	Enclosure I

Table C14: contexts containing 50-99 sherds

Context	Count	Weight (g)	Period	Feature	Feature label	Description
3577	55	281	3.2	Ditch 3576	A78	Trackway A
3738	53	635	3.3	Ditch 3737	A07	Trackway A
3328	89	619	3.2	Ditch 3329	A18	Enclosure B
3017	55	270	3.1	Ditch 3015	A50	Enclosure E
3021	65	256	3.1	Ditch 3018	A50	Enclosure E
4066	84	718	3.2	Ditch 4065	A40	Enclosure F
4069	88	1128	3.2	Ditch 4067	A41	Enclosure F
6056	97	1606	3.2	Ditch 6055	B03	Enclosure H
6068	78	579	3.2	Ditch 6067	B01	Enclosure H
6114	64	241	3.1	Ditch 6113	B15	Enclosure I

Table C15: pottery from the ring ditch fills														
	Deposit on platform	Deposit on platform	3989 third fill	3989 third fill	3995 fourth fill	3995 fourth fill	4008 fill	4008 fill	4010 second fill	4010 second fill	4014 first fill	4014 first fill	4018 fill	4018 fill
CBM													1	5
TF40														
TF40/TF52			3	19										
TF41b	69	604			7	29	3	7	6	30	5	45	26	103
TF44?							12	189					1	25
TF52					3	42	8	29	1	2			23	294
TF83													2	13
Total quantity/weight	69	604	3	19	10	71	23	225	7	32	5	45	53	440
Total quantity/weight	4020 fifth fill 69	4050 fifth fill 4050	4027 second fill ω	4027 second fill 6	4027 sixth fill 0	4027 sixth fill L4	4076 fill	225 III 9204	4094 first fill	4094 first fill	4125 fill G	4125 fill 45	Total count	Total weight &
Total quantity/weight  CBM				second fill			III							
				second fill			III						Total count	Total weight
CBM TF40 TF40/TF52	4020 fifth fill	4020 fifth fill	4027 second fill	4027 second fill	4027 sixth fill	4027 sixth fill	4076 fill	4076 fill	4094 first fill	4094 first fill	4125 fill	4125 fill	Total count	5 Total weight
CBM TF40 TF40/TF52 TF41b				second fill	4027 sixth fill	4027 sixth fill	III						Total count	5 1 19 2034
CBM TF40 TF40/TF52 TF41b TF44?	4020 fifth fill	4020 fifth fill	4027 second fill	4027 second fill	4027 sixth fill	1 <b>4027 sixth fill</b>	4076 fill	4076 fill	4094 first fill	4094 first fill	4125 fill	4125 fill	1 4 3 241 14	5 Total weight
CBM TF40 TF40/TF52 TF41b	4020 fifth fill	4020 fifth fill	4027 second fill	4027 second fill	4027 sixth fill	1 4027 sixth fill	4076 fill	4076 fill	4094 first fill	4094 first fill	4125 fill	4125 fill	1 4 3 241 14 52	5 1 19 2034
CBM TF40 TF40/TF52 TF41b TF44?	4020 fifth fill	4020 fifth fill	4027 second fill	4027 second fill	4 4027 sixth fill	1 <b>4027 sixth fill</b>	ی <b>4076 fill</b>	61	4094 first fill	4094 first fill	4125 fill	4125 fill	1 4 3 241 14	5 1 19 2034 292

Table C16: Period 4 Ring Ditch A63 – absence/presence of fabrics by section and fill

Table C10.1	FIIOU 4 IV	ing Dit	511 A05 - abset	ice/pres	CIICE OI	iabiles by	SCUIUTI ai	iu iiii	
			No. of	Malv					
Context	Cut	Fill	fills	TF52	Brill	Minety	TF41B	order*	
4009	4008	1	single	Х		Х	Х	1	not cutting any ditches
4012	4010	2	3	Х			Х	2	cuts one ditch
4019	4018	1	single	Х	Х	Х	Х	3	may have cut a ditch
4025	4020	5	6			Х	Х	4	may have cut a ditch
4033	4027	6	7	Х			Х	5	cuts several ditches
4077	4076	1	single	Х			Х	6	cuts same small ditch as 4125
4126	4125	1	single				Х	7	cuts same small ditch as 4077
3992	3989	3	4	Х			Х	8	cuts one ditch
3999	3995	4	5	Х			Х	9	cuts one ditch
4002-7	4001		6					10	not cutting any ditches
4015	4014	1	3				Х	?	
4095	4094	1	2				Х	?	
4114	4113	1	single					?	cutting a ditch

# APPENDIX D: WORKED FLINT

# By Jacky Sommerville

Two redeposited items (11g) of worked flint debitage were retrieved from the excavation: a flake from Period 3.2 (medieval) ditch A35 (fill 3286) and a blade, Ra. 53, from Period 3.1 (medieval) ditch A30 (fill 3269). Only broad prehistoric dating can be applied to the flake. The blade is most likely to date to the Mesolithic or Early Neolithic periods, but both items were residual within later deposits.

# **APPENDIX E: METAL ITEMS**

### By Katie Marsden

A small assemblage of ten items (291g), comprising four items of copper alloy and six of iron, was recovered from seven deposits (Table E1). Subsoil and ditch deposits produced 40% each of the assemblage, with the remaining 20% recovered from the fills of Ring-ditch B. The items were subjected to x-radiography by a specialist conservator (Karen Barker) and are stored in air-tight boxes with humidity control as appropriate.

The earliest-dated material comprises a copper-alloy buckle, of single-loop type of sub-triangular form, recovered from Period 5 subsoil 3002. The buckle dates from the mid 13th to 15th centuries (Whitehead 1996, 24, no. 106). A second copper-alloy buckle, a double loop type from the same deposit, is datable to the mid 14th to mid 17th centuries (ibid., 53, 294).

A single iron nail was recovered from Period 4 Ring-ditch B (fill 4025). Nails of similar forms, with flat heads and square shanks, were introduced in the Roman period and continued largely unchanged until industrialisation in the post-medieval period. Consequently, they cannot be closely dated.

A copper-alloy coin, recovered from Period 5 subsoil 3002 is of probable modern date, but is too worn to identify further. A complete iron horseshoe from Period 4 Ring-ditch B (fill 3004) and a copper-alloy fitting from Period 5 subsoil 3002 are more certainly of modern date. The remaining four iron items are too fragmentary to attribute to function or to date closely.

#### References

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

Table E1: Metal items summary

Conte	Feature							
		Material	Ra	Туре	Date	Ct.	Wt. (g)	Comments
		copper alloy	0	?tap fitting or similar	?modern	1	13	
		copper alloy	0	buckle	medieval	1	2	
		copper alloy	0	buckle	pmed	1	4	double loop
3002	subsoil	copper alloy	0	coin	Modern	1	13	dia: 29mm
3004	Period 4 Ring-ditch B	iron	50	Horseshoe	Modern	1	188	complete
3558	Period 3.3 Ditch A26	iron	0	unident		1	3	'
4025	Period 4 Ring-ditch B	iron	0	nail		1	16	
4033	Period 4 Ring-ditch B	iron	0	buckle?		1	10	
6233	Period 3.2 Ditch B36	iron	0	unident		1	40	
6389	Period 3.2 Ditch B19	iron	0	unident		1	2	

# APPENDIX F: WORKED BONE

# By Katie Marsden

Two joining fragments (8g) from one item of worked bone were recovered from Period 3 deposit 3182 (the fill of a natural hollow). The item is a medial fragment from a long bone of uncertain species which exhibits polished surfaces. Due to the level of fragmentation, function and dating cannot be ascertained, although it was found in association with medieval pottery.

A worked bone 'scoop', possibly made from a cattle ulna, came from Period 3.2 Ditch A40 (fill 4066).

### APPENDIX G: CERAMIC BUILDING MATERIAL

By Ioannis Smyrnaios

The site produced 23 pieces of ceramic building material (CBM) (5487g) deriving from five deposits. The material is in relatively good condition, with some pieces preserving metrical features.

The largest quantity of CBM derived from Period 5 (post-medieval to modern) rubble deposit 3979 located within the area enclosed by Ring-ditch B, which produced three large pieces of post-medieval/modern bricks (5184g), two of which are almost complete. Such bricks are encountered in coarse sandy fabrics with organic tempers (CSO) or vesicular and ferrous (CSVFE), including a variant with flint (CSVFFE). Similar fabrics were recovered from underlying Period 5 deposit 3980, which produced a small quantity (17 fragments, 187g) of at least four post-medieval/modern brick fragments. Fill 4019 of Period 4 (medieval) Ring-ditch B produced two fragments (17g) of post-medieval/modern CBM in medium sandy fabrics (MS), one of which with mixed clays and tempered limestone (MSXL). The former fragment is most likely a curved tile. The only fragment of possible Roman brick or tile (99g), made in a fine micaceous sandy fabric (FSM), derived from fill 6195 of Period 5 (post-medieval to modern) Ditch B11.

### **APPENDIX H: FIRED CLAY**

By Jacky Sommerville

A total of 39 fragments (385g) of fired/burnt clay was recovered from twenty deposits. Fifteen fabrics were identified. Most fabrics are medium or coarse and sandy (MS or CS) with a variety of secondary inclusions – ferrous (MSVFE), shell (MSSH or CSSH), clay pellets and/or vesicular (MSCP, MSV, CSVCP).

None of the fragments feature wattle impressions or perforations. However, several display external surfaces. A fragment from Period 3 (medieval) ditch 3024 (Area A) features a slightly curving surface. Period 3.1 Ditch A30 (fill 3258) produced a fragment with a more strongly curved surface and a flattish surface at right angles to one another. Two non-joining fragments from Period 3.2 Ditch B23 feature flat surfaces — one of these has two surfaces meeting almost at a right angle. A narrow fragment from Period 3.3 Ditch A26 displays a concave, curving surface. There is no indication that any of these fired/burnt clay fragments relate to kilns.

### **APPENDIX I: WORKED STONE**

By Ruth Shaffrey with a note on an architectural stone fragment by Peter Davenport

A total of four items of stone (251g) were examined. These were examined with the aid of a x10 magnification hand lens and fully recorded to save time at analysis stage. Details of all items can be found in a Microscoft Excel spreadsheet in the archive.

Two fragments of worked sandstone weighing 42g were recovered from fill 3615 of Period 3.3 Ditch A12 but they are too small for function to be determined.

Fragments of two sandstone discs were also recovered. One has been very crudely cut into an approximate circular shape and has slight traces of burning on one face, suggesting a kitchen use, perhaps as a pot lid (Period 3 pit 3753). The other disc is smaller and perforated. Its function is uncertain but it could have been a roughout for a spindle whorl (Period 5 dumped layer 3980).

Discs are common finds from medieval assemblages – relatively simple to fashion, easy to source from old roofing material, and multifunctional, so their recovery here is no surprise.

# Catalogue of worked stone

- Period 3 pit 3753, fill 3757. Disc. Old Red Sandstone. Very crudely cut disc, chipped into approximate circular shape. Traces of burning on one face. Measures 81–88mm diameter x 16mm thick. Weighs 187g.
- Period 5 dumped layer 3980. Perforated disc. Sandstone. Crudely shaped circular disc, *c*. 40% with tapered edges and neat drilled perforation of 8mm diameter. Possibly a spindle whorl although unfinished if so as too crude a shape to spin properly in its current form. Measures >50mm (approximately 60mm) diameter x 8mm thick. Weighs 22g.

# **Architectural stone fragment** by Peter Davenport

Period 3.2 Ditch B25, fill (6245) produced a piece of oolitic limestone of 90 x 60 x 80mm maximum dimensions (515g). It has three faces at right angles forming the corner of a cuboid but these are very roughly chopped to shape and not finished. The rear of the block is a worn curved surface with a curved arris, estimated at c. 90mm radius. Below this is the possible remnant of a surface at about a  $100^{\circ}$  angle. This has been mostly removed by the bottom face.

The curved surface has been cut into to form a roughly finished bowl-like depression in the top of the block. This has revealed natural rose-coloured mineral staining.

The only finished face is the curved one but this is rather too uneven to be convincing as part of an architectural moulding. The wear post-dates the "bumpiness". The fragment is too small to assign an original function. The purpose of the bowl is also unclear. There is no sign of burning or sooting to indicate use as an open lamp of Saxon type. The squaring-up may be contemporary with the bowl. The block has broken across the bowl where the base is thinnest.

# APPENDIX J: METALWORKING DEBRIS

# By David Dungworth

A total of 826.7g of metalworking residue was recovered. All of the material was examined visually and categorised following standard methods (Historic England 2015). All material was weighed and recorded by category and context. The categories of material recognised include:

Smithing	Plano-convex (or concave convex) accumulations of slag that are approximately circular
slag cake (SC)	in plan which have formed inside a blacksmith's hearth (McDonnell 1991; Serneels and
	Perret 2003).
Non-diagnostic	Most ironworking slag assemblages include a significant proportion of slag which lacks a
ironworking slag	diagnostic surface morphology that would allow the identification of the process(es) which
(NDFe)	produced them. In many cases, this is simply because the lumps of slag are small
	fragments of a larger whole; however, in some cases the lumps of slag are essentially
	complete but amorphous (Historic England 2015, fig. 18).
Vitrified ceramic	Fragments of highly fired (and often vitrified) ceramic are interpreted as fragments of a
lining (VCL)	clay-built hearth (Historic England 2015, fig. 11).

# Results

Material recovered (Table J1) includes a high proportion (91%) of smithing slag cakes. The remaining non-diagnostic slag and vitrified ceramic lining were all probably also produced by iron smithing. The high proportion of smithing slag cakes and the low proportion of vitrified ceramic lining suggests that this assemblage may be redeposited. Redeposition would be expected to lead to the fragmentation of more brittle waste, such as vitrified ceramic lining.

Table J1: Summary of slag and vitrified material examined (weight in grams)

Fill	Feature	Sample	Period	Slag type	L (mm)	W (mm)	D (mm)	Wt (g)
3016	Ditch A50		3.1	NDFe				3.6
3020	Ditch A50		3.1	SC	65	57	20	101
3021	Ditch A50		3.1	SC	75	54	34	100
3025	Ditch 3024		3	SC	72	72	37	102
3027	Pit 3026		3	NDFe				17.1
3181	Ditch A51		3	SC	59	52	32	80.4
3757	Pit 3753	15	3	NDFe				6.7
6153	Ditch B40		3.3	SC	110	83	37	372
6197	Ditch B33		3.3	NDFe				19.5
6197	Ditch B33		3.3	VCL				12.7
6252	Ditch B19		3.1	NDFe				11.7
Total								826.7

# Discussion

The slags and other materials from Quedgeley East indicate that blacksmithing took place in the medieval period. The quantity of iron smithing slag is modest and could have been produced in just a few days (*cf.* Soulignac 2017). The low incidence of ceramic hearth lining, and the absence of hammerscale, suggests that any smithing took place outside the areas excavated.

# References

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Historic England 2015 Archaeometallurgy. Guidelines for best practice. London, Historic England

McDonnell, J. G. 1991 'A model for the formation of smithing slag', Materially Archeologicne 26, 23-6

Serneels, V. and Perret, S. 2003 'Quantification of smithing activities based on the investigation of slag and other material remains', in Associazione Italiana di Metallurgia 2003, 469–78

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### APPENDIX K: HUMAN BONE

By Sharon Clough

A single individual (SK6400) was laid supine extended in grave 6399 in Area B. All skeletal material was examined and recorded in accordance with national guidelines (Brickley and McKinley 2004 and Mays *et al.* 2018).

#### Results

SK6400 had been laid in a supine extended position in the grave, with the head to the south. The arms appear to have been straight with the hands over the pelvic area. The very poorly-preserved skeletal remains comprised fragments of the long bones and cranium. Included were fragments of the left and right humeri shaft, right clavicle and scapula, and of the left and right radii and ulnae. The carpal bones included scaphoid (x2), hamate (x2), trapezium, triquetral, trapezoid and phalangeal heads of either proximal or intermediate (x7) and five distal phalanges heads. Fragments of the left and right femur shaft and left and right tibiae shaft were also present, along with cranial fragments (19) which were unidentified but likely occipital or parietal. There was also the left mastoid process and a fragment of central occipital bone.

A sample of the right femur was radiocarbon dated to cal. AD 130–320 (95.4% probability; SUERC-88058). No ageing or sexing diagnostic areas survived and there were no teeth. The bones were large and robust, which is a more masculine feature. Due to the poor survival of bone from areas likely to have pathological changes, there was no pathology identified. There were no measurable bones, nor areas to observe for non-metrics.

#### **Discussion**

Despite the poor preservation, it was possible to determine that this was an adult, and more likely to have been male. The individual has been radiocarbon dated to the Early to Middle Roman period. The burial position and grave location are typical for the Roman period and other similar burials have been found close by, including one at Standish, 2km to the south where an adult woman had been buried near the eastern periphery of the site (Wessex Archaeology 2004). At Hunt's Grove, Hardwicke, 800m north of Quedgeley East, a Late Iron Age/Early Roman cremation burial was found and there were two fragments of unburnt adult human skull bone within the fill of a Roman ditch (CA 2012). A further isolated burial within Hardwicke, found at Sellars Farm, was of uncertain date (Hart and Massey 2018). A further burial recovered at Mayo's Land, 4km north of Quedgeley East, was adjacent to a ditch and probably dated to the Roman period (CA 2015). Smith *et al.* (2018, 245) found that in the majority of all Roman farmsteads, the dead were buried not in defined cemeteries, but individually, usually aligned upon ditches.



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- CA (Cotswold Archaeology) 2012 Land at Hunts Grove, Hardwicke, Gloucestershire, Gloucestershire:

  Archaeological Evaluation. Cotswold Archaeology report 12664
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- Mays, S. Brickley, M., Dodwell, N and Sidell, J. 2018 *The Role of the Human Osteologist in an Archaeological Fieldwork Project.* Swindon, Historic England
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### APPENDIX L: ANIMAL BONE

By Matilda Holmes

# Introduction

Approximately 600 fragments of animal bone were recovered, largely from medieval features, of which *c*. 140 could be identified to taxa. They are in very poor condition, likely to produce an assemblage biased towards larger and older animals.

# Methods

All bones and teeth were recorded, although for some elements a restricted count was employed to reduce fragmentation bias: vertebrae were recorded when the vertebral body was present, and maxilla, zygomatic arch and occipital areas of the skull were identified from skull fragments. A basic recording method was employed to assess the potential of the animal bone assemblage. The number of bones and teeth that could be identified to taxa were noted, as well as those used to age the major domesticates (tooth wear and bone fusion). The quantity of bones likely to be useful for metrical data was also recorded. Other information included condition and the incidence of burning, gnawing and butchery marks. All fragments were recorded by context including those that could not be identified to taxa. Recording methods and analysis are based on guidelines from Baker and Worley (2014).

# **Summary of Findings**

The bones are generally in poor condition and highly fragmentary (Table L1). The low incidence of gnawing and butchery marks is more likely a reflection of the adverse preservation of the surface of the bones rather than a real absence from the original assemblage. A few burnt fragments were recorded, but no large quantities to imply that bones were routinely exposed to fire either as a means of cooking, disposal or fuel. Bones with grey concretions consistent with their deposition alongside organic waste were recovered from Period 3.2 Ditch A18 (fill 3433) and Period 3.3 Ditch A26 (fill 3526).

No associated bone groups were observed, nor were there any specific deposits of primary butchery, craft-working or skin-processing waste. The distribution of animal bones by count and weight is illustrated on Figures 17 and 18.

Cattle were most commonly recorded, followed by sheep/goat, then equid, with a few bones of pig also present (Table L2). A heavily butchered antler fragment was recovered from fill 3362 of Period 3.2 Ditch A36, although it showed no signs of use and was presumably waste from working. No birds, fish, micro-mammals or amphibians were recovered, even from the sieved samples (Table L3), and while it may be that this was a product of small sample size, the poor survival of bone on the site may also have resulted in their absence.

# References

Baker, P. and Worley, F. 2014 *Animal Bones and Archaeology: Guidelines for Best Practice*. Portsmouth, English Heritage

Table L1: Preservation and bone modifications observed on the bones for each context

		Preservation			Bone Modification			
Period	Description	Good	Fair	Poor	Fair-poor	Gnawed	Butchered	Burnt
3: medieval	Agricultural activity	1	27	72	5	3	4	3
4: later medieval	Ring ditch		1	5				
5: post-medieval to modern	Furrows		1					
Total no. of contexts		1	29	77	5	26	45	2

Table L2: Number of fragments recorded for the major domesticates, birds and other taxa

Period	Unidentified	Cattle	Sheep	Pig	Other	Total Id	Other taxa
3: medieval	458	60	45	3	26	134	Deer, eauid
4: later medieval	3	3	3	0	4	104	Equid
					<u> </u>		
5: post-medieval to modern	1						
Total	462	63	48	3	30	144	

Table L3: Abundance of bones identified to taxa from samples

Period	Context	<b>&lt;&gt;</b>	Burnt	Sheep/ goat	Pig
3: medieval	3692	12	9		
3: medieval	3775	17		1	1
3: medieval	4066	41	6		

# APPENDIX M: GEOARCHAEOLOGICAL ASSESSEMENT OF MONOLITH SAMPLES

By Agata Kowalska

# Introduction

A sequence of four monolith samples was taken from the fills within Period 4 Ring-ditch B (cut 4014) in order to answer questions regarding depositional processes within, and the function of, the ring-ditch (Fig. 23). The solid geology of the site consists of mudstone (undifferentiated Lias Formation and Charmouth Mudstone Formation) of the Jurassic and Triassic Periods; superficial deposits are not recorded (BGS 2019).

#### Methodology

The monolith samples were collected in steel tins measuring 100 x 100 x 500mm following standard sampling procedures (CA 2017). In the lab, the monoliths tins were opened, and the deposits cleaned, photographed and recorded. The lithostratigraphy of the samples was described according to standard geological criteria provided by Jones *et al.* 1999; Munsell Color 2018; and Tucker 2011. All observations are summarised in Tables M1–M4.

#### Results

The earliest deposit in the sequence, Unit 5 (fill 3003), was a very dark-grey compact silt/clay with very few shell fragments. This Unit represents the weathered upper part of natural bedrock, the Lias Formation and Charmouth Mudstone Formation, and is therefore not part of the ditch fill sequence.

Unit 5 was separated from Unit 4 (fill 4015) by a diffuse horizontal boundary. Unit 4 consisted of very dark grey friable silt/clay with a rare fine to medium sand-size fraction. Two medium-size laminations of light-brownish grey clay were recorded separating dark grey and relatively more gritty clay sediments. This, the lowermost fill of the ditch, indicates cyclical sedimentation of more coarse sediments, possibly eroded from the sides of the ditch shortly after it was cut. The silt/clay lamination could reflect low-energy deposited sediments, possibly a precipitation of finer material in stagnant water within the ditch. A fossil shell fragment derived from natural geology was noted.

Overlying Unit 4 was Unit 3 (fill 4016). The horizontal boundary between these units was diffuse and suggests slow continuous deposition of fine sediments within the ditch. Unit 3 consisted of grey compact silt/clay with yellowish red mottling reflecting changing oxidation conditions. The unit appears grey to pale grey in colour which suggests iron-oxide depleted groundmass due to a long (weeks to months) duration of water saturation and reduction (Lindbo et al. 2010, 138). Reddish-brown iron pans were recorded as horizontal bands. A ferrous iron is deposited when it meets oxygenated areas, for example in the upper oxygenated zone of sediments (Limbrey 1975). Iron oxides tend to be concentrated along air filled voids and iron replacement along root channels was recorded within the Unit. The presence of fine root channels may reflect some sparse vegetation within the fill of the ditch. Unit 3 was thick and homogenous without any coarse laminations visible at the level of macroscale assessment. However, very fine horizontal cracks were recorded throughout, suggesting cyclical input of relatively coarser silt/fine sand material, possibly either wind-blown or eroded from the ditch side. Also, a very few sand-size eroded chalky inclusions were recorded, possibly derived from the background geology. A few very fragmented snail shells were observed throughout.

Unit 3 was overlain by Unit 2 (fill 4017). The horizontal boundary between the units was diffuse, suggesting a slow rate of deposition. Unit 2 consisted of a grey compact clay with common redoximorphic features; brown iron oxide concentrations and yellowish red mottling developed by possible multiple fluctuations within the water table. As

Unit 2 was more mottled, it may be that it was more oxidized than Unit 3. The presence of very rare humified plant material and iron-replaced roots may suggest scarce vegetation or a short period of stasis within the ditch.

Uppermost Unit 1 (fills 4012 and 4011) was a light olive brown compact silt/clay with common redoximorphic features produced by a fluctuating water table. Unit 1 was homogenous and no differences between fills 4012 and 4011 were apparent. The homogeneity of the unit can be an indication of the continuation of a sedimentary regime. A few fragmented shells were present.

#### Discussion

The basal fill of the ditch, fill 4015, accumulated shortly after the ditch was cut and reflects the erosion of the unstable sides of the feature. The lamination within the unit may indicate sorting by water action. The upper sequence recorded within the ditch consists of homogenous, massive fine-grained sediments. Massive silt/clay deposits are often associated with water stagnation characteristic for man-made hydraulic structures (Karkanas and Goldberg 2018, 53). Diffuse boundaries and massive muddy layers can be a result of slow prolonged natural silting and a lack of rapid changes in sedimentation mode. It should be noted that bioturbation, for example borrowing snails and roots, could mix and blend the depositional boundaries. No lamination or changes in the grading of the sediments suggestive of rapid flooding were recorded.

No organic lamination or banding suggestive of prolonged vegetation or stabilisation of soil profile within the ditch was recorded (Limbrey 1975). Possibly, the iron pans reflect oxidized organic material and the presence of scarce vegetation was indicated by root channels, very rare humic organic material and iron replacement of organic material. Common redox features reflect post-depositional diagenesis of the original sediments as a result changing oxidation conditions due to fluctuating water table and wetting and drying cycles.

There is no clear evidence for systematic cleaning of the ditch. Most likely the sediments represent slow, natural silting over a long period of time, with wind-blown sediments and those derived from the cut edges settling into the ditch, at least sometimes into standing water. Oxidation features suggest the presence of standing water, possibly rain water and/or a fluctuating water table. The sediments are compatible with the interpretation of the feature as a moat and the water levels within the ditch most likely fluctuated. Pollen, charcoal and other biological remains could be destroyed or weathered within such fluctuating conditions (Rapp and Hill 1998, 90).

To assess the preservation and potential of pollen, four samples were taken from following locations and are detailed in Appendix Q:

- 1 sample from Unit 4, context 4015 (monolith sample 23);
- 2 samples from bottom and top of Unit 3, context 4016 (monolith sample 22);
- 1 sample from Unit 2, context 4017 (monolith sample 21).

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Table M1: Monolith sample 20

Depth [m] 0-0.50 Unit Context 4012/4011

1

Description

2.5Y 5/3 light olive brown, compact silt/clay. Common 7.5Y 6/6 yellowish red to 7.5 4/6 strong brown mottling. Homogenous. Few fragmented shells between 0.34m–0.48m.

# Table M2 Monolith sample 21



Unit Depth [m] 2 0–0.37

Context 4017 Description

0.25m overlap with monolith <22> and 0.10m with monolith <23>.

10YR 6/1 grey, compact silt/clay with Common 7.5Y 6/6 yellowish red mottling and Fe/Mn nodules. Diffuse boundary to:

0.37–0.50 4016

10YR 6/1 grey, compact silt/clay with few 7.5Y 6/6 yellowish red mottling and well developed 5YR 6/6 reddish brown iron pans between 0.25m–0.26m, 0.32m–0.33m and 0.36m–0.37m. Very few small shell fragments.

Table M3 Monolith sample 22

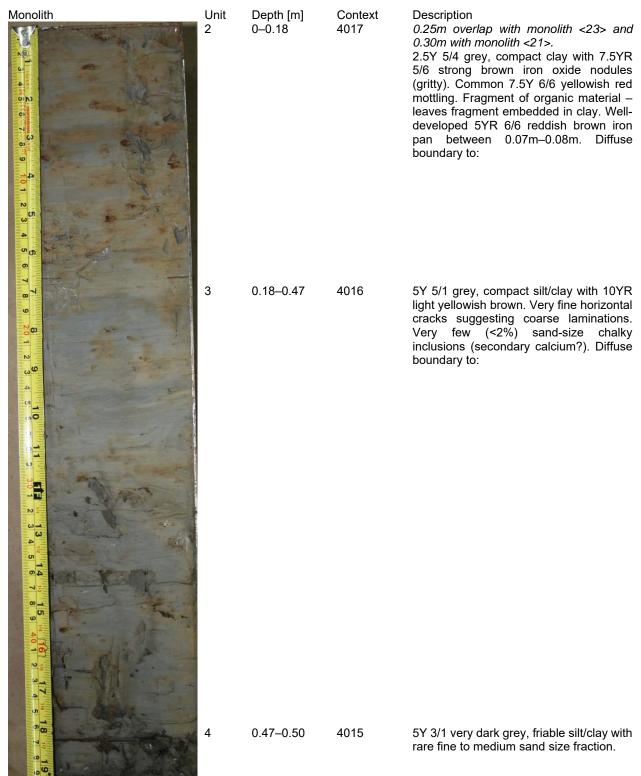


Table M4 Monolith sample 23

Manalith	1.1:4	Danth [m]	Camtavit	Description
Monolith	Unit 3	Depth [m] 0-0.28	Context 4016	Description 0.10m overlap with monolith <21> and 0.25m with monolith <22>.  5Y 5/1 grey, compact silt/clay with 5YR 4/6 yellowish red mottling. Very fine horizontal cracks suggesting coarse laminations. Diffuse to:
	4	0.28–0.35	4015	5Y 3/1 very dark grey, friable silt/clay with rare fine to medium sand size fraction. 2.5Y 6/2 light brownish grey clay medium laminations (3mm). 1 fossil shell fragment. Diffuse to:
10 14 13 15 14 16 16 7 8 9 50	5	0.35–0.50	3003	5Y 3/1 very dark grey, compact clay with very few (<1%) shell fragments. Rare possible gypsum crystals.

# APPENDIX N: THE CHARRED AND WATERLOGGED PLANT REMAINS

By Sarah F. Wyles

#### Introduction

As a result of the assessment of the 23 bulk samples from the site, the charred plant assemblages from a total of five of these samples were selected for further analysis. These samples were all from Period 3 (medieval) deposits: four from three ditches and a pit in Area A, and one from a ditch in Area B. Very few charred remains were recorded in the samples from Period 1 (prehistoric), Period 2 (Roman) and Period 4 (later medieval) features, so these were not chosen for more detailed work.

In addition, the waterlogged remains from one of the 13 small contiguous samples from Period 4 (later medieval) Ring-ditch B were also selected for further examination.

It was hoped that this more detailed analysis would provide some information on the nature of the settlement and surrounding landscape, and the range of crops and the crop-processing activities and techniques taking place on site during the medieval period. It was also hoped that the further analysis of the waterlogged assemblage from Ring-ditch B would provide more information on the nature of this feature.

# Methodology

The bulk samples were processed following standard flotation methods, using a 250µm sieve for the recovery of the flot and a 1mm sieve for the collection of the residue. All identifiable charred plant remains from these samples were identified and the results are recorded in Table N1. The waterlogged sample was wet sieved, using a 250µm sieve. The results are recorded in Table N2. The plant identifications in both instances follow the nomenclature of Stace (1997) for wild plants, and traditional nomenclature, as provided by Zohary *et al.* (2012), for cereals.

# Period 3: medieval

# **Enclosure C**

Fill 3489 (sample 11) of section 3487 of Period 3.1 Ditch A64 of Enclosure C produced a moderately high number of charred plant remains, with cereal remains predominant. The cereal remains are mainly those of free-threshing wheat (*Triticum turgidum/aestivum*), which became the predominant wheat species in Southern Britain in the post-Roman period (Greig 1991). Grains greatly outnumber the chaff elements and represent 85% of the assemblage. Other potential crops and edible remains include fragments of hazelnut shells (*Corylus avellana*) and seeds of celtic bean (*Vicia faba*). The few weed seeds include those of grass vetchling (*Lathyrus nissolia*), which is found in grassy places. This assemblage may represent the localised dumping of domestic food preparation/cooking waste into this ditch.

# Enclosure D

A large quantity of charred plant remains was recovered from section 3148 of Period 3.2 Ditch A66 of Enclosure D (sample 10). Again cereal remains are predominant and include those of free-threshing wheat. Within this assemblage, grains are more numerous than chaff, representing 74% of the remains. Other potential crops and edible remains include fragments of hazelnut shells and sloe (*Prunus spinosa*) stones, seeds of celtic bean/pea (*Vicia faba/Pisum sativum*) and brassica (*Brassica* sp.), and some of the oats may be those of the cultivated variety (*Avena sativa*). These would all be typical crops and food sources in the medieval period.

The weed seeds include those of vetch/wild pea (*Vicia/Lathyrus* sp.), curled dock (*Rumex crispus*), grass vetchling, brome grass (*Bromus* sp.), and rye-grass/fescue (*Lolium/Festuca* sp.). These are species typical of grassland, field margins and arable environments, and are reflective of the exploitation of a number of different habitats. Curled docks are typical of damper areas. Again, this assemblage may be representative of a dump of domestic food preparation/cooking waste material.

#### Enclosure F

The richest charred assemblage was recorded from section 4065 of Period 3.2 Ditch A40 of Enclosure F (sample 41). Cereal remains dominate this large assemblage, but in this instance although grains are predominant, representing 56% of the assemblage, the chaff elements form a significant part at 22%. The cereal remains are mainly those of free-threshing wheat, a few of which are identifiable as being those of bread wheat (*Triticum aestivum*). A few grains of barley (*Hordeum vulgare*) were recovered. Other potential crops and edible remains include fragments of hazelnut shells, seeds of celtic bean/pea; some oats may be those of the cultivated variety. The weed seeds include those of vetch/wild pea, oat/brome grass and tufted vetch (*Vicia cracca*). Tufted vetch is a species typical of grassy places, bushy areas and hedgerows. There are also a number of capsule fragments within the assemblage. This assemblage may be representative of a dump of crop-processing and food preparation waste material. It is possible that the chaff elements had been used as tinder.

#### Pit 3753

Fill 3757 (sample 15) of Period 3.3 pit 3753 produced a moderately high number of charred plant remains, with cereal remains predominant. These are mainly those of free-threshing wheat. Grains outnumber the chaff elements, representing 70% of the assemblage. Other potential crops and edible remains include fragments of hazelnut shells, seeds of celtic bean/pea and some of the oats may be those of the cultivated variety. The weed seeds include those of vetch/wild pea, oats/brome grass, curled docks, tufted vetch and grass vetchling. This assemblage may reflect dumped domestic food preparation/cooking waste material.

# Enclosure I

A small charred plant assemblage was recorded from section 6391 of Period 3.1 Ditch B19 of Enclosure I. This includes free-threshing wheat grains, seeds of celtic bean/pea, brassica, oats and vetch/wild pea, and a triangular capsule fragment. This may be representative of dumped domestic settlement waste material.

# Period 4: later medieval

# Ring-ditch B

The waterlogged assemblage recovered from fill 4016 (sample 34) of ring-ditch section 4014 includes remains of species typical of a number of different habitats. The deposit is the second fill of the ditch (Fig. 23, section AA). There is an indication of some rough grassland/waste ground/scrub in the vicinity of the ring-ditch, by the presence of species such as brambles (*Rubus* sp.), docks (*Rumex* sp.) and bristly oxtongue (*Picris echioides*). A number of the species, including clustered dock (*Rumex conglomeratus*), welted thistle (*Carduus crispus*), marsh thistle (*Cirsium palustre*), spiked sedge (*Carex spicata*) and glaucous sedge (*Carex flacca*), may have exploited damp grassy areas near the edge of the ditch. Downy birch (*Betula pubescens*) is also a species which prefers wetter soils. Common water-crowfoot (*Ranunculus aquatilis*) would have thrived in the wet environment within the ring ditch as would stonewort (*Chara*).

The mollusc assemblage from this sample appears to be indicative of a permanently wet, well-oxygenated, well-vegetated muddy environment within the ditch, together with a small indication of some damper grass in the vicinity (Appendix P). This is compatible with the waterlogged remains.

### **Discussion and summary**

The predominance of free-threshing wheat within the cereal remains in the Period 3 medieval assemblages is typical of assemblages of this date in southern England (Greig 1991). These assemblages may be generally reflective of domestic food preparation/cooking waste material. In these cases, the grain may have been stored after being threshed and winnowed in the fields, which would have removed most of the chaff elements, or it may have been brought into the site as a ready processed commodity from markets The assemblage from Enclosure F, however, is suggestive of some crop processing taking place on site, so it seems more likely that the grain was grown locally and stored as processed grain until needed. There is no evidence from these assemblages for large scale crop production on this site. Other potential food sources and crops include hazelnuts, sloes, brassicas, peas and beans, and possible cultivated oats. These were typical for the period and have been recovered from other rural medieval sites such as at Rodley Manor, Lydney, Gloucestershire (Wyles 2019) and Longforth Farm, Wellington, Somerset (Wyles 2016).

The Period 3 charred weed seeds are generally those typical of grassland, field margins and arable environments and are likely to have mainly been brought in with the crops. The waterlogged assemblage provides an indication of some rough grassland/waste ground/scrub and damper grass in the area of Ring-ditch B in the later medieval period (Period 4).

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Table N1: Charred plant Identifications

Area		В				
Phase			Perio	d 3: Medieva	al	
		Enclosure	Enclosure	Enclosure		Enclosure
Feature label		С	D	F	-	1
						Ditch
Feature type		Ditch A64	Ditch A66	Ditch A40	Pit	B19
Cut		3487	3148	4065	3753	6391
Context		3489	3150	4066	3757	6252
Sample		11	10	41	15	6
Vol (L)		20	16	17	15	1
Flot size		52	40	50	70	5
%Roots		2	1	2	2	
Cereals	Common Name					
Hordeum vulgare L. sl (grain)	barley	cf. 1	_	2	_	
riordodin valgaro E. or (grain)	free-threshing	01. 1				
Triticum turgidum/aestivum (grain)	wheat	12	52	52	23	
Triticum turgidum/aestivum (grain)	free-threshing	12	02	02	20	
germinated	wheat					
gerrilinated	free-threshing	-	-	-	-	
Triticum agetivum (rachie frag)	wheat			5		
Triticum aestivum (rachis frag)	free-threshing	-	-	5	-	
Tuitio una tumpial una (a a atium una (na abia fua ma)		4		110		
Triticum turgidum/aestivum (rachis frags)	wheat	1	8	110	7	
Triticum sp. (grain)	wheat	18	40	50		
Cereal indet. (grains)	cereal	26	50	140	22	
Cereal frag. (est. whole grains)	cereal	10	23	50	10	
Cereal frags (rachis frags)	cereal	-	-	-	1	
Cereal frags (culm node)	cereal	2	1	-	-	
Other Potential Crop and Food species			ı			
Corylus avellana L. (fragments)	hazelnut	1	6	1	1	
Brassica sp. L.	brassica	-	2	-	-	
Prunus spinosa L.	sloe stone	-	1	-	-	
Vicia faba	celtic bean	1	-	-	-	
Vicia faba/Pisum sativum L.	celtic bean/pea	2	2	2	2	
Pisum sativum L.	pea	-	-	-	-	
Avena sp. L. (grain)	oat	_	3	5	2	
Other Species and Remains						
Atriplex sp. L.	oraches	-	-	1	-	
Rumex sp. L.	docks	-	3	2	1	
Rumex crispus L. Type	curled dock	_	4	_	2	
Prunus spinosa L./ Crataegus monogyna	sloe/hawthorn type				_	
Jacq (thorns/twigs)	thorns	3	_	2	3	
Vicia L./Lathyrus sp. L.	vetch/wild pea	_	9	38	5	
Vicia cracca L.	tufted vetch	-		6	1	
Lathyrus cf. nissolia L.	grass vetchling	2	1		1	
Galium sp. L.	bedstraw		1	_	1	
Lolium/Festuca sp. L.	rye-grass/fescue	-	1	<u> </u>	'	
Avena L./Bromus L. sp.	oat/brome grass	-	14	27	6	
Bromus sp. L.		-			U	
	brome grass	-	1	-	-	
Monocot. Stem/rootlet fragments		-	-	3	-	
Bud Triangular and the second of the second of the second of the second of the second of the second of the second of		-	-	-	-	
Triangular capsule fragments		-	-	28	1	
Thorn		-	-	-	-	
Egg shell		-	-	3	20	



Table N2: Waterlogged plant remains

Area		Α
Period		4
Feature Type		Ring-ditch B
Feature		4014
Context		4016
Sample		34
Vol (L)		2
Sample depth (MAOD)		24
Waterlogged material		
Ranunculus sp.	buttercup	+
Ranunculus Batrachium	crowfoot	+
Ranunculus cf. aquatilis L.	common water-crowfoot	+
Betula pubescens Ehrh (bract)	downy birch	+
Betula pubescens Ehrh (fruit)	downy birch	+
Rumex cf. conglomeratus Murray	clustered dock	+
Rumex sp. L.	docks	+
Rubus sp.	brambles	+
Carduus cf. crispus L.	welted thistle	+
Cirsium cf. palustre	marsh thistle	+
Carduus/Cirsium sp.	thistle	+
Picris echioides L.	bristly oxtongue	+
Carex cf. spicata Huds.	spiked sedge	+
Carex cf. flacca Schreb.	glaucous sedge	+
Carex sp. L.	sedge	+
Woody stems/twigs fragments > 4mm		+
Woody stems/twigs fragments > 2mm		+
Chara	stonewort	+

Key: + = 1-49, ++ = 50-99, +++ = 100+

### **APPENDIX O: CHARCOAL**

By Sheila Boardman

# Introduction

Three charcoal rich samples were selected for further investigation, all from Period 3 (medieval) features. Sample 11 came from fill 3489 of ditch 3487 (Period 3.1 Ditch A64, Enclosure C), sample 15 was from fill 3757 of Period 3.3 pit 3753, and sample 68 was from fill 6252 of ditch 6391 (Period 3.1 Ditch B19, Enclosure I). The wood charcoal investigation was undertaken to assess evidence for the possible functions or uses of the features, the woody taxa selected for fuels during the medieval period, and the wider landscape and woodlands at this time.

# Methodology

The samples were processed in the standard Cotswold Archaeology manner. Greater than 2mm charcoal fragments were randomly extracted from the flots and pre-sorted charcoal fractions. The fragments were prepared and identified following methods and keys in Hather (2000), Gale and Cutler (2000) and Schweingruber (1990), using a Biolam-Metam P1 metallurgical microscope with up to x400 magnifications. The results are listed as fragment counts in Table O1. Plant nomenclature follows Stace (2010).

#### Results

Just five woody taxa representing two families were identified (see Table O1 and below).

#### Summary of woody taxa

Rosaceae

<u>Subfamily Prunoideae</u> – *Prunus* cf. *avium/padus*, probable wild/bird cherry, *Prunus spinosal domestica* type, blackthorn/plum type; *Prunus* sp., blackthorn/plum/cherry.

<u>Subfamily Pomoideae</u> - includes *Crataegus* spp., hawthorn, *Malus sp.*, crab-apple, *Pyrus* sp., pear, and *Sorbus* sp., rowan, whitebeam and/or service. One or more of these anatomically similar taxa may be present. *Fagaceae* 

Fagus sylvatica L., beech; Quercus spp., oak (Q. robur L., Q. petraea, or their hybrids).

### Discussion

The remains are similar in all three samples. They are dominated by oak (*Quercus*) timber fragments (mixed sapwood and heartwood), with smaller amounts of blackthorn/plum (*Prunus spinosa/domestica*) type, blackthorn/plum/cherry (*Prunus*) and hawthorn group (Pomoideae) fragments. The latter groups incorporate wild and cultivated species. In addition to hedgerow, scrub or woodland edge locations, the remains here may also include some orchard trees. Possible wild/bird cherry (*Prunus avium/padus*) type charcoal was identified in sample 11 (from ditch A64), and these remains may include cultivated sweet cherry (also *P. avium*) as well as wild cherry species. Almost all the *Prunus* and Pomoideae fragments appear to be either from narrow roundwood or immature wood (based on ring curvature). There is a single beech (*Fagus sylvatica*) roundwood fragment in sample 15 from pit 3753.

Most roundwood fragments (of all taxa) lack bark, pith or both, so their original ages and sizes can not be reconstructed accurately. The *Prunus* fragments in sample 11 have 2–9 surviving growth rings (representing the minimum ages of this material), with small concentrations of fragments with three and nine rings. The Pomoideae fragments in sample 11 have 3–8 surviving growth rings. There are fewer roundwood fragments of both taxa groups

in samples 15 and 68. The *Prunus* fragments from both samples have 2–6 surviving rings and Pomoideae ones, 4–8 rings. The single beech roundwood fragment has six surviving growth rings. Some immature oak wood is present among the sapwood remains in all three samples.

Oak, hawthorn group and blackthorn/plum/cherry type remains are very common in assemblages from Roman period sites in the region, usually accompanied by a range of other woody taxa, including ash (*Fraxinus excelsior*), hazel (*Corylus avellana*), birch (*Betula*), field maple (*Acer campestre*) and some beech. A similar range seems to be present at medieval sites across the wider region, but fewer sites and deposits have been sampled for post-Roman periods (Smith 2002). Oak was the dominant taxon in several Saxon pits at Bradley Stoke, South Gloucestershire, associated with possible charcoal production (Challinor 2011). This was accompanied by blackthorn/cherry, hawthorn group (here Maloideae), hazel and ash. The oak remains included branchwood, heartwood and burrwood, while the blackthorn/cherry and hawthorn group ones were largely from roundwood. The charcoal from the different pits at Bradley Stoke was very consistent, suggesting this possibly came from managed woodlands. While the purposes of charcoal production at Bradley Stoke are unclear, it most likely related to iron working activities in the region (ibid.).

Five charcoal rich samples were analysed from 13th to 14th-century deposits at Lydney B North, Gloucestershire, 14–15 miles south-west of Quedgeley East (as the crow flies), on the other side of the Severn. Three samples came from furnace pit fills and included some possible charcoal (cf. wood) fuels (Boardman 2019). The dominant taxa were birch and hazel. The other taxa included alder/hazel, alder, hawthorn group, beech, blackthorn/cherry, holly (*Ilex aquifolium*) and willow/poplar (*Salix/ Populus*). Another pit fill sample produced mostly beech and oak, with smaller quantities of gorse/broom (*Ulex/Cytisus*), blackthorn/cherry, hawthorn group, willow/poplar and ash. All taxa included roundwood. These remains were similar to those from the furnace pits (with industrial fuel debris). A second pit fill sample had mostly immature oak, with some hazel, willow/poplar, ash, alder, field maple and birch. This material more closely resembled the tree dominated, Roman period (2–4th century AD) samples from Lydney B, and it was suggested that this pit fill probably included some domestic fuel waste (Boardman 2019).

At Quedgeley, pollen analysis was carried out for a sequence of samples from Ring-ditch B, encompassing the earliest stages of ditch sedimentation through to later use of this feature (Appendix Q). The lowest ditch fill appears to indicate a period of higher woodland abundance but with this characterising Period 3 rather than Period 4, with tree clearance occurring soon after the ditch was cut. Tree pollen, dominated by oak and hazel, exceeds 50% of TLP (total land pollen), and the other taxa include elm (*Ulmus*), beech, birch, alder (*Alnus glutinosa*) and ivy (*Hedera helix*). The wider range of trees and shrubs indicated by the Period 4 pollen evidence can be contrasted with the Period 3 charcoal samples, where oak is the sole large tree represented in quantity. Oak therefore appears to have been deliberately selected for fuel from more mixed local woodlands. Blackthorn, possible cherry, blackthorn/cherry and hawthorn group remains may have come from woodland, woodland edge and hedgerow/scrub habitats. Predominantly the latter habitats are suggested by the larger proportion of narrow roundwood present. There is also very sparse evidence for Rosaceae pollen in the Ring-ditch B samples, suggesting rose family taxa possibly had a minor role in later mixed deciduous woodlands.

The wood charcoal remains from the three Quedgeley East samples are similar to each other, despite coming from different deposit types. The association of wood charcoal with other charred plant remains initially appears to point to domestic fuel waste. However, the selection of particular taxa and elements, and a comparison with data from other sites in the region, indicates that both domestic or non-domestic fuel debris may be present here, or a mixture of the two.

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Table O1: Wood charcoal identifications

Area		A	1	В			
Phase		P	Period 3 Medieval				
Feature label	A64	-	B19				
Feature type		Ditch	Pit	Ditch			
Cut		3487	3753	6391			
Context		3489	3757	6252			
Sample		11	15	68			
Sample vol. (L.)		20	15	17			
Identifed taxa							
Rosaceae							
Prunus cf. avium L./padus L.	cf. wild/bird cherry type	2r	=	-			
Prunus spinosa L./domestica L.	blackthorn/plum type	19r	4r	-			
Prunus L.	blackthorn/cherry	8r	2	1r			
Pomoideae (see below*)	hawthorn group	5r	1r	9r			
cf. Pomoideae	cf. hawthorn group	-	-	1			
Fagaceae							
Fagus sylvatica L.	beech	-	1r	-			
Quercus L.	oak	66sh	91hsb	89hs			
Indet. charcoal		1	5b	1			
Total fragments		101	104	101			

**KEY:** Counts include: h - heartwood; s - sapwood; r - roundwood; & b- bark. \*Pomoideae may include: *Malus* (apple), *Pyrus* (pear), *Crataegus* (hawthorn) & *Sorbus* (rowan, service, whitebeam).

### **APPENDIX P: MOLLUSCS**

By Sarah F. Wyles

#### Introduction

As a result of the assessment of the thirteen contiguous small samples taken from section 4014/4010 of Period 4 (later medieval) Ring-ditch B, eleven of the samples were selected for further molluscan analysis. The basal two samples were not selected due to molluscan remains only being preserved in very small quantities. The assemblages are dominated by shells of aquatic species and it was hoped that this analysis would assist in determining the nature of the aquatic environment within this ring-ditch, and whether this changed over time.

The analytical methods employed are standard, namely the identification of apical and diagnostic mollusc fragments > 0.5mm, using a x10–x40 stereo-binocular microscope. Nomenclature follows Anderson (2005). The results are tabulated in Table P1 and a histogram of relative abundance produced (Fig. P1) with the ratio of *Bithynia* operculum to *Bithynia* shells also recorded. The ratio of *Bithynia* opercula to shells can provide an indication of how much movement there may have being within the aquatic assemblage and may suggest whether the assemblages are autochthonous or allochthonous. Equal numbers of Bithynia opercula and shells would suggest that there has been little movement and that the assemblage is autochthonous, whereas if there are differences in the numbers this could indicate that there has been more movement and that the assemblage is allochthonous. Some species were grouped in the histogram. Details of the ecological preferences of the species follow Evans (1972), Kerney (1999) and Davies (2008).

#### Results

The eleven samples were taken alongside a series of monoliths and the sediments have been described in detail in the geoarchaeological report (Appendix M). The sediments are summarised in Table P2 below, and the relevant contexts are illustrated in Fig. 23.

Shell numbers vary from 33 to 517, with seven of the samples producing large assemblages. Species diversity is generally low, with three to six taxa being represented in nine of the samples. The two assemblages from samples 24 and 25, taken from the upper part of fill 4012, show a greater species diversity, with eleven taxa represented. Although the opercula generally outnumbered shells of *Bithynia*, the highest ratio was 2.4 opercula per shell in sample 32 and the lowest was 0.92 opercula per shell in sample 29. This appears to suggest that the assemblages should be regarded as more autochthonous than allochthonous.

#### Lower part of fill 4016 - sample 34 (24mAOD)

A high number of mollusc shells were recovered in sample 24 from the lower part of fill 4016. The moving water species, represented by *Bithynia tentaculata* and *Bithynia* sp., form over 60% of the assemblage. Most of the rest of the assemblage comprises indeterminate aquatic species, in particular *Radix balthica*. *Bithynia tentaculata* is a species "common in large bodies of slow-moving, well-oxygenated hard water, particularly favouring muddy bottomed, well vegetated areas" (Kerney 1999, 39), while *Radix balthica* is a "ubiquitous species which occurs in aquatic habitats of all kinds" (Kerney 1999, 56). This appears to be indicative of a permanently wet, well-oxygenated, well-vegetated muddy environment within the ring-ditch. There is also a small indication of some marshy grass in the vicinity.

# Upper part of fill 4016 - samples 33, 32 and 31 (24.1-24.3mAOD)

Sample 33 produced a large mollusc assemblage, while moderately small mollusc assemblages were recorded from samples 32 and 31. Again the assemblages are dominated by the moving water species, in particular *Bithynia tentaculata* and *Bithynia* sp.), which represents 88% of the assemblage in sample 33, declining to 73% of the assemblage in sample 31. The next significant group in all three assemblages comprises intermediate aquatic species. The main intermediate species are *Radix balthica* and *Gyraulus crista*. Gyraulus crista is a species which "lives in most kinds of lowland aquatic habitats apart from those liable to dry up" (Kerney 1999, 67). Again, this appears to be indicative of a permanently wet, well-oxygenated, well-vegetated muddy environment within the ring-ditch. There is also an indication of some marshy ground and areas subject to seasonal flooding and desiccation in the vicinity.

# Fill 4017 - samples 30 and 29 (24.4-24.5mAOD)

Samples 30 and 29 both contained moderately small numbers of mollusc shells. The assemblage in sample 30 is dominated by the moving water species (85%), which decline to 52% in the assemblage in sample 29. There is a corresponding increase within the intermediate aquatic species to 36% from 9%. Within the intermediate aquatic species, *Radix balthica* increases while *Gyraulus crista* declines. This may suggest that although the ditch still held water, it was becoming increasingly drier.

# Fill 4011 - samples 28 and 27 (24.7-24.8mAOD) and lower part of fill 4012 - sample 26 (24.8mAOD)

Shell numbers increase in this deposit and large mollusc assemblages were recovered in all three of these samples. This could be suggestive of a gradual sedimentation process. The moving water species are predominant, in particular *Bithynia tentaculata* and *Bithynia* sp., representing between 82% and 95% of these assemblages. There are a few shells of the ditch species *Acroloxus lacustris* in sample 28. This species is "a limpet inhabiting clean quiet water in canals, slow lowland rivers, lakes and drainage ditches: it is quite frequent also in small closed ponds" (Kerney 1999, 74). This may suggest the presence of aquatic vegetation for the limpet to attach itself to. Again, these assemblages appear to be indicative of a permanently wet, well-oxygenated, well-vegetated muddy environment within the ring-ditch.

# Upper part of fill 4012 - sample 25 and 24 (25.0-25.1mAOD)

Large numbers of shells were recorded in the samples from the upper part of 4012. There is a marked change in these assemblages and the range of taxa is the highest from the ditch sequence. These assemblages are dominated by the amphibious group, in particular *Anisus leucostoma*, representing 65% in sample 25 rising to 71% in sample 24. "*Anisus leucostoma* is found in a variety of aquatic habitats, but is most typical of swampy pools and ditches, especially those drying up in the summer" (Kerney 1999, 60). There are fluctuations within the moving water and intermediate species, with *Bithynia* and *Gyraulus crista* declining, while the *Pisidium* species and *Radix balthica* increase. These assemblages suggest that the ditch was gradually drying out, but that there were still some seasonally wet areas at this time.

### Summary

The mollusc assemblages provide some indication of a fluctuating aquatic environment within Ring-ditch B. There is a suggestion from the composition of the mollusc assemblages of a generally permanently wet, well-oxygenated, well-vegetated muddy environment within the ring-ditch, that became drier at times and as the ditch filled in, in particular by the time the upper part of fill 4012 had formed. There is also a small indication from these assemblages of some damper/marshy grass in the immediate vicinity of the ditch, possibly directly alongside the ditch and on the ditch sides. The waterlogged plant remains (Appendix N) from fill 4016 (sample 34) suggest an area of damp

grass and scrub near the ring-ditch and an aquatic environment within it, findings compatible with the environment indicated by the mollusc assemblages. The geoarchaeological report (Appendix M) suggests that the sediments represent slow natural silting over a long period of time, with an indication of the presence of standing water, possibly rainwater, and/or a fluctuating water table. Again, the mollusc assemblages are compatible with this interpretation.

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Table P1: Mollusc Assemblages from Ring-ditch B

Phase			4									
Feature Type			Ring-ditch B									
Feature				40	14	-				4010		
Context			40	16		40	17	40	4011		4012	
Sample		34	33	32	31	30	29	28	27	26	25	24
Processed vol (L)		2	2	2	2	2	2	2	2	2	2	2
Sample depth (MAOD)		24	24.1	24.2	24.3	24.4	24.5	24.7	24.8	24.9	25	25.1
Land Snails	Habitat	•						•				
Succinea cf. putris (Linnaeus)	М	-		-		-		-		-	2	-
Succinea/Oxyloma spp.	М	-		2		1		-		-	-	-
Vallonia cf. pulchella	М	1	1	-		-		-		-	-	-
Deroceras/Limax	I	-		-		-		-		-	-	1
Aquatic Snails	Habitat											
Bithynia tentaculata (Linnaeus)	MW	10	54	3	2	3	3	46	22	5	5	1
Bithynia spp.	MW	91	129	30	30	25	14	189	118	87	16	8
Bithynia opercula		182	208	80	42	40	16	463	299	216	39	12
Galba truncatula (Müller)	Α	•	•	-	1	-	•	-	-	1	4	2
Radix balthica (Linnaeus)	IA	16	15	-	3	1	11	8	1	2	•	14
Lymnaea/Galba/Radix spp.		35	3	-	4	1	2	7	2	5	4	5
Planorbis planorbis (Linnaeus)	D	•	•	-	-	-	•	-	-	•	•	3
Anisus leucostoma (Millet)	Α	3	•	-	-	-	•	-	4	3	145	366
Gyraulus crista (Linnaeus)	IA	5	3	3	4	2	1	1	-	4	26	3
Acroloxus lacustris (Linnaeus)	D	•	•	-	-	-	•	9	-	•	1	-
Pisidium cf. amnicum (Müller)	MW	•	1	-	-	-	•	-	-	1	3	10
Pisidium cf. casertanum (Poli)	MW	-	-	-	-	-	-	-	-	-	2	9
Pisidium cf. milium (Held)	IA	1	1	-	-	-	-	-	-	-	2	4
Pisidium cf. nitidum (Jeyns)	IA	-	-	-	-	-	-	-	-	-	1	7
Pisidium spp.		5	2	-	-	-	2	-	1	5	11	84
Taxa		6	6	3	4	4	4	4	4	6	11	11
Total		167	209	38	44	33	33	260	147	113	222	517
% Intermediate species		0	0	0	0	0	0	0	0	0	0	0.1934
% Marsh species		0.5988	0.4785	5.2632	0	3.0303	0	0	0	0	0.9009	0
% Amphibious species		1.7964	0	0	2.2727	0	0	0	2.7211	3.5398	67.117	71.18
% Intermediate aquatic species		13.174	9.0909	7.8947	15.909	9.0909	36.364	3.4615	0.6803	5.3097	13.063	5.4159
% Ditch species		0	0	0	0	0	0	3.4615	0	0	0.4505	0.5803
% Moving water species		60.479	88.038	86.842	72.727	84.848	51.515	90.385	95.238	82.301	11.712	5.4159
% Unassigned species		23.952	2.3923	0	9.0909	3.0303	12.121	2.6923	2.0408	8.8496	6.7568	17.215
ratio of Bithynia shells to operculum		0.5549	0.8798	0.4125	0.7619	0.7	1.0625	0.5076	0.4682	0.4259	0.5385	0.75
ratio of Bithynia operculum to shells		1.802	1.1366	2.4242	1.3125	1.4286	0.9412	1.9702	2.1357	2.3478	1.8571	1.3333

**Table P2**: Sampled context descriptions (depths are presented to correspond with those in the geoarchaeological samples, Appendix M; gaps in the sequence reflect steps in the section)

Depth	Context	Samples	Description
(MaOD)		-	
25.1–24.9	4012	24, 25, 26	2.5Y 5/3 light olive brown, compact silt/clay. Common 7.5Y 6/6 yellowish red to 7.5 4/6 strong brown mottling. Homogenous.
24.8–24.7	4011	27, 28	2.5Y 5/3 light olive brown, compact silt/clay. Common 7.5Y 6/6 yellowish red to 7.5 4/6 strong brown mottling. Homogenous.
24.5–24.4	4017	29, 30	10YR 6/1 grey, compact silt/clay with Common 7.5Y 6/6 yellowish red mottling and Fe/Mn nodules.
24.3–24.0	4016	31, 32, 33, 34	5Y 5/1 grey, compact silt/clay with 10YR light yellowish brown. Very fine horizontal cracks suggesting coarse laminations. Very few (<2%) sand-size chalky inclusions.

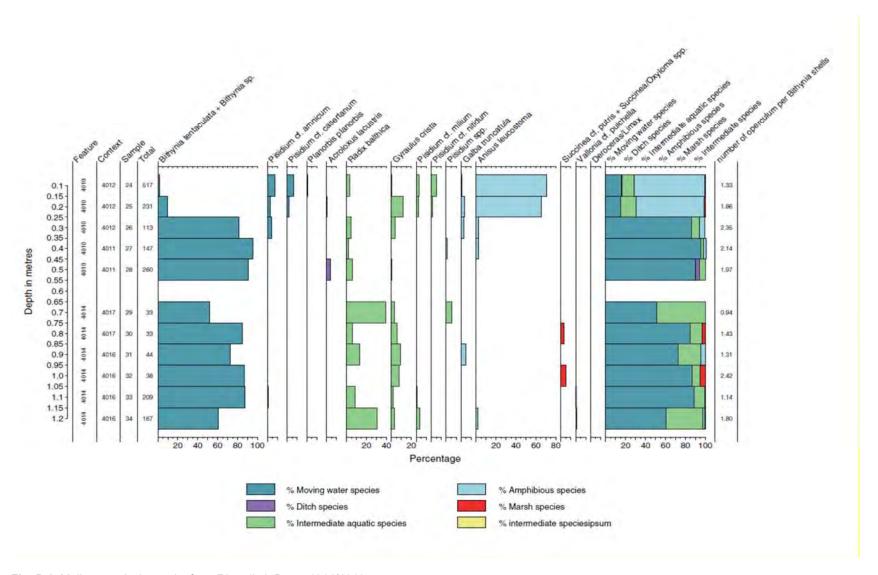


Fig. P.1: Mollusc analysis results from Ring-ditch B, cut 4014/4010

#### **APPENDIX Q: POLLEN**

By Dr Michael Grant

# Introduction

As a result of the assessment of four small samples for pollen taken from monoliths 21, 22 and 23 from section 4014/4010 of Period 4 (later medieval) Ring-ditch B (Fig. 23, section AA), these four samples were selected for full pollen analysis. An additional five samples from Units 3 and 4 in monoliths 22 and 23 were also analysed to better understand the environmental changes and land use associated with the ring-ditch, in particular the transition from open woodland towards more open arable and pastoral land use suggested by the pollen assessment (Table Q1).

# Methodology

Standard preparation procedures were used (Moore *et al.* 1991). A total of nine samples were selected for preparation (see Table Q2). 2cm³ of sediment was processed from each sample. To each sample a *Lycopodium* spike added (two tablets from batch 3862) to allow the calculation of pollen concentrations (Stockmarr 1971). All samples received the following treatment: 20 mls of 10% KOH (80°C for 30 minutes); 20mls of 60% HF (80°C for 120 minutes); 15 mls of acetolysis mix (80°C for 3 minutes); stained in 0.2% aqueous solution of safranin and mounted in silicone oil following dehydration with tert-butyl alcohol. Due to the highly minerogenic nature of these samples, additional sieving and decanting was undertaken between the KOH and HF stages.

Pollen counting was undertaken at a magnification of x400 using a Nikon transmitted light microscope. Determinable pollen and spore types were identified to the lowest possible taxonomic level with the aid of a reference collection kept at COARS, University of Southampton. The pollen and spore types used are those defined by Bennett (1994; Bennett *et al.* 1994), with the exception of Poaceae which follow the classification given by Küster (1988), with Cerealia-type grains further classified using Andersen (1979) and with plant nomenclature ordered according to Stace (2010). A total land pollen (TLP) sum of 400 grains was sought for the pollen analysis and was achieved for all samples in context 4016. Preservation was poorer in the overlying context 4017 and underlying 4015, so lower counts were achieved.

Table Q2: List of pollen samples

Sample No.	Monolith	Depth from top of sequence (m)	Elevation (m AOD)	Context
Pol_1	<21>	0.13-0.15	24.43	4017
Pol_2	<22>	0.20-0.22	24.21	4016
Pol_3	<22>	0.28-0.29	24.13	4016
Pol_4	<22>	0.34-0.35	24.07	4016
Pol_5	<22>	0.40-0.42	24.01	4016
Pol_6	<23>	0.29-0.30	23.90	4015
Pol_7	<23>	0.31-0.32	23.88	4015
Pol_8	<23>	0.32-0.33	23.87	4015
Pol_9	<23>	0.33-0.34	23.86	4015

# Results

Pollen concentrations are lowest in the base of the sequence (context 4015), at 2200 grains cm<sup>-3</sup>. These increase towards the top of context 4015, reaching 7700 grains cm<sup>-3</sup>. In the overlying context 4016, pollen concentrations are significantly higher, between 13000–28000 grains cm<sup>-3</sup>, before decreasing in the uppermost sampled context 4017 to 9100 grains cm<sup>-3</sup>. Pollen counts mirror the pollen concentrations, with the greatest pollen preservation and diversity in context 4016 and the lowest at the base of context 4015, coinciding with an increase in pre-Quaternary spores originating from the local geology. Pollen counts exceeding 400 TLP were only achieved within context 4016.

The basal sample in monolith <23>, within context 4015, is dominated by *Quercus* (oak) along with *Corylus avellana* type (hazel), with tree taxa exceeding 50% of the TLP. Other woodland components include *Ulmus* (elm), *Fagus sylvatica* (beech), *Betula* (birch), *Alnus glutinosa* (alder) and *Hedera helix* (ivy). There is limited diversity in the dwarf shrub and herb pollen taxa, though the presence of Cyperaceae (sedges), along with *Selaginella selaginoides* (lesser clubmoss) and *Filipendula* (meadowsweet), are probably associated with local damp ground, possibly around the ditch. Poaceae (grasses) account for 20% TLP with *Avena-Triticum*-type (oat-wheat) cereal pollen present in low amounts, sourced either from local arable activity or possibly from local crop processing.

Within the overlying context 4016, the amount of woodland has considerably reduced to 10–20% TLP, though there is a general continuation in the tree types locally present, with *Salix* (willow) appearing towards the top of Unit 3. Poaceae increases to *c.* 50% TP, along with an increase in *Avena-Triticum* type cereal pollen. The herb assemblage contains taxa that can be attributed to weed communities, such as Chenopodiaceae (goosefoots) and Polygonum (bindweed) which may reflect annual weeds. The presence of Chenopodiaceae and *Cichorium intybus*-type (including dandelion and chicory) are likely to be associated with areas of disturbance and increased nitrogen enrichment, and the colonisation of disturbed soils, and could suggest the presence of grazed grassland within the immediate vicinity of the ring-ditch. Evidence of ground disturbance is also supported by the presence of *Rumex acetosella* (sheep's sorrel) and *Plantago lanceolata* (ribwort plantain), along with *Pteridium aquilinum* (bracken).

The uppermost pollen sample, within context 4017, contained a similar pollen assemblage to the underlying context 4016, though there are higher abundances of Chenopodiaceae, Brassicaceae (mustards, crucifers or cabbage family) and *Cichorium intybus*-type. These elevated abundances may be a due to these pollen types being more resistant to deterioration and often overabundant in poorly preserved pollen assemblages. This suggestion is supported by the lower pollen concentration in context 4015.

# Discussion

Pollen analysis has shown that the earliest stages of ditch sedimentation, context 4015, coincided with a period of higher woodland abundance. While preservation is poor, it suggests a local mixed woodland was present at the site immediately prior to the construction of the ring-ditch, which might suggest local clearance around the site.

The ring-ditch itself was situated within an area dominated by grassland within which arable activity was prevalent, along with clear indicators of disturbed ground which might relate to some pastoral activity. Some aquatic pollen likely reflects standing water within the ditch. Many of the woodland types present in context 4015 are still seen in 4016, suggesting some continuation of small stands of woodland in the wider area.

#### Summary

The pollen results show an initially wooded environment, with woodland reducing in the overlying deposits coinciding with increased local arable activity and ground disturbance. After local woodland clearance, the local

area around the ditch was predominantly grassland with evidence for arable activity and some disturbed ground, possibly associated with pastoral activity.

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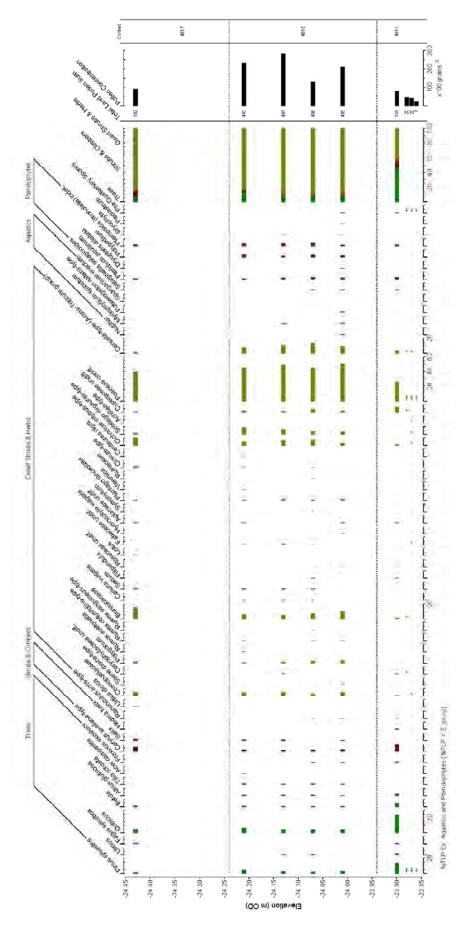


Fig. Q2: Pollen analysis results from Ring-ditch B, cut 4014/4010

#### APPENDIX R: ENVIRONMENTAL LANDSCAPE SUMMARY

By Sarah Wyles

This summary draws on information from the plant remains report (Appendix N), charcoal (Appendix O), mollusc report (Appendix P), pollen report (Appendix Q), sediment report (Appendix M) and animal bone (Appendix L) to provide an overview of the environmental evidence for the landscape and economy for each period represented by the stratigraphy.

# Period 1: prehistoric

There is very little environmental evidence from the site for this period. The small amount of molluscan evidence would suggest a generally open landscape if Ring-ditch A was a prehistoric feature.

#### Period 2: Mid to Late Roman

Again there is very little environmental evidence from the site for this period, and the few molluscan remains from the grave would suggest a generally open landscape

# Period 3: medieval

The potential food sources and crops recorded on the site included free-threshing wheat, barley, hazelnuts, sloes, brassicas, peas and beans and possible cultivated oats. The predominance of free-threshing wheat within the cereal remains from this site is typical of assemblages of this date in Southern England. During this period, it appears likely that the grain was stored on site as processed grain until it was needed. The charred weed seeds suggest that the grain was grown in a landscape of grassland, field margins and arable environments.

The charcoal and pollen evidence indicates the presence of mixed deciduous woodland, as well as hedgerows, scrub and woodland edge environments. There is also the possibility of some orchard trees. The range of species includes oak, blackthorn/plum/cherry, the hawthorn group and beech. It is possible that the charcoal remains were from both domestic and non-domestic activities and that some species selection was taking place.

There is evidence for some local pastoral activity and cattle were most commonly recorded, followed by sheep/ goat then equid, with a few bones of pig also present within the small poorly preserved animal bone assemblage from the site.

### Period 4: later medieval

The environmental evidence for this period is drawn from Ring-ditch B. The geoarchaeological report suggests that the sediments within the ring-ditch represent a slow, natural silting over a long period of time, with standing water, possibly rainwater and/or a fluctuating water table, within the ditch. The mollusc assemblages are compatible with this and are indicative of a generally permanently wet, well-oxygenated, well-vegetated muddy environment within the ring-ditch that became drier at times, together with a small indication of some damper/marshy grass in the vicinity. The waterlogged remains similarly suggest an area of damp grass and scrub near the ring-ditch and an aquatic environment within it.

The pollen evidence from the ring-ditch provides a wider picture of the local landscape. There is a suggestion that a local mixed woodland was present at the site immediately prior to the construction of the ring-ditch and that there may have been some local clearance taking place. The local woodland component at this stage appears to have

included oak, hazel, elm, beech, birch, alder and ivy. This is likely to be a continuation of the local woodland from the medieval period (Period 3) and the more restricted species list recorded in the Period 3 wood charcoal assemblages may be reflecting some species selection for fuel. The pollen results suggests that the level of woodland in the local area decreased in favour of grassland and/or arable during the later medieval period but that there was some continuation of small stands of woodland in the wider area. The ring-ditch itself was situated within a wider landscape dominated by grassland within which arable activity was prevalent, along with clear indicators of disturbed ground which might relate to some pastoral activity. There is a suggestion from the pollen evidence for some grazed grassland in the immediate vicinity of the ring-ditch.

The small bone assemblage from this period included bones of cattle, sheep/goat and equid.

#### **APPENDIX S: RADIOCARBON DATING**

By Emma Aitkin and Alistair Barclay

During the assessment stage, radiocarbon dating was undertaken in order to confirm the date of skeleton SK 6400. The samples were analysed during July/August 2019 at Scottish Universities Environmental Research Centre (SUERC), Rankine Avenue, Scottish Enterprise Technology Park, East Kilbride, Glasgow, G75 0QF, Scotland. The methodology employed by SUERC Radiocarbon Laboratory is outlined in Dunbar *et al.* (2016).

Following the assessment, further radiocarbon dating was undertaken in order to confirm the date of ditches 3148 (Period 3.2 Ditch A66 of Enclosure D); 3487 (Period 3.1 Ditch A64 of Enclosure C); 4065 (Period 3.2 Ditch A40 of Enclosure F); 6392 (Period 3.2 Ditch B41 of Enclosure I); and 4014 (Period 4 Ring-ditch B), all of which were provisionally phased as medieval. The samples were analysed between November 2020 and February 2021 at the Bristol Radiocarbon Accelerator Mass Spectrometry (BRAMS) Facility, University of Bristol, 43 Woodland Road, Bristol, BS8 1UU.

The results of both sets of radiocarbon dates are presented in Table S1.

The uncalibrated dates are conventional radiocarbon ages. The radiocarbon ages were calibrated using the University of Oxford Radiocarbon Accelerator Unit calibration programme OxCal v4.4.2 (2020) (Bronk Ramsey 2009 updated 2017) using the IntCal20 curve.

The four results (BRAMS-4282 to 4285) obtained for the Period 3 enclosures (C, D, F and I) have been placed within a simple Bayesian model using the OxCal program. The four dates are all on short-lived plant material and are likely to be close in date to the use of the enclosures. It can also be noted that the enclosures are also spaced some distance apart, removing the possibility of a simple parent source for the charred material or event for the burning of material with the notable exception of Enclosures D and F (stratigraphically the former replaces the latter). In the model presented in Figure S1 the results are placed in a single phase that also contains the sequence from enclosure F to D. There is no direct stratigraphic relationship between C, D/F and I. The model has also been used to generate a start and end date for Period three activity and also, using the OxCal parameter 'Span', a likely duration for settlement activity. Figure S2 illustrates the four dates plotted on the actual curve and the problem caused by the wiggle at approximately the mid to late 11th century, which essentially splits and extends the calibrated ranges. Overall, this could suggest that activity all happened within a short period from the second quarter of the 11th century (although see Appendix C for a discussion of the main pottery type encountered).

The model presented in Figure S1 and described above has good overall agreement (116) and reflects the good individual agreements of each date. The beginning of the Period 3 activity can be modelled as *Start early Med Period 3* as 950 – 1118 cal AD (95.4%) or more likely between 1014 – 1042 (26.0%) and 1070 – 1118 cal AD (42.3%) (at 68.3% probability). Activity appears to have ended during 1030 – 1230 cal AD (95.4% probability: modelled as End early Med Period 3) or more likely between 1038 -1052 cal AD (10.4%) and 1002 – 1166 (57.8%) (at 68.3% probability). Using the Oxcal parameter 'Span' to measure the likely duration of this activity indicates that it could all have happened within up to 42 years (68.3%) or 104 years (95.4%) or from two to four human generations. This would also support the suggestion that the settlement and pottery production was relatively short-lived perhaps starting in the later 11th century and ending within the first half of the 12th century.

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Table S1: Radiocarbon dating results

Feature	Lab No.		Radiocarbon age	δ <sup>13</sup> C	δ <sup>15</sup> N	C/N ratio	Calibrated radiocarbon age 68.3% probability	Calibrated radiocarbon age 95.4% probability	Posterior density estimate
Fill 3150 Ditch 3148 Ditch A66 Enclosure D Period 3.2	BRAMS- 4282	Charred plant remains: Free- threshing wheat grains ( <i>Triticum</i> <i>turgidum/aestivum</i> )	951 ± 24 yr BP	-28.4 ‰			1039–1048 cal. AD (7.6%) 1083–1151 cal. AD (60.7%)	1031–1159 cal. AD (95.4%)	1030–1056 cal AD (19.9%) 1078–1158 cal AD (75.5%)
Fill 3489 Ditch 3487 Ditch A64 Enclosure C Period 3.1	BRAMS- 4283	Charred plant remains: Celtic bean ( <i>Vicia faba</i> )	976 ± 24 yr BP	-25.9 ‰			1026–1047 cal. AD (24.0%) 1084–1126 CAL. Ad (38.2%) 1141–1148 CAL. Ad (6.0%)	` ,	1025–1050 cal AD (25.4%) 1080–1151 cal AD (70.0%)
Fill 4066 Ditch 4065 Ditch A40 Enclosure F Period 3.2	4284	Charred plant remains: Free- threshing wheat grains ( <i>Triticum</i> <i>turgidum/aestivum</i> )		-24.3 ‰			1084-1126 cal. AD (38.7%)		1022–1052 cal AD (31.6%) 1076–1147 cal AD (63.8%)
Fill 6252 Ditch 6392 Ditch B41 Enclosure I Period 3.2		Charred plant remains: Free- threshing wheat grains ( <i>Triticum</i> <i>turgidum/aestivum</i> )		-18.5 ‰			1025–1047 cal. AD (28.4%) 1084–1096 cal. AD (11.7%) 1102–1125 cal. AD (24.2%) 1142–1147 cal. AD (4.1%)	1018-1054 cal. AD (32.8%)	1024–1050 cal AD (26.2%) 1080–1152 cal AD (69.2%)
Fill 4016 Ditch 4014 Ring-ditch B Period 4		Waterlogged stem/root fragments	427 ± 24 yr BP	-35.1 ‰			1440–1470 cal. AD (68.3%)	1429–1491 cal. AD (95.4%)	
Fill 4016 Ditch 4014 Ring-ditch B Period 4		Waterlogged stem/root fragments	577 ± 24 yr BP	-32.5 ‰			1325–1353 cal. AD (49.3%) 1393–1405 cal. AD (19.0%)		
SK6400 Period 2	SUERC- 88058	Human Bone: Right Femur	1825±25 yr BP	-20.3‰	11.0‰	3.3	175–180 cal. AD (1.8%) 203–250 cal. AD (59.2%) 296–310 cal. AD (7.3%)		

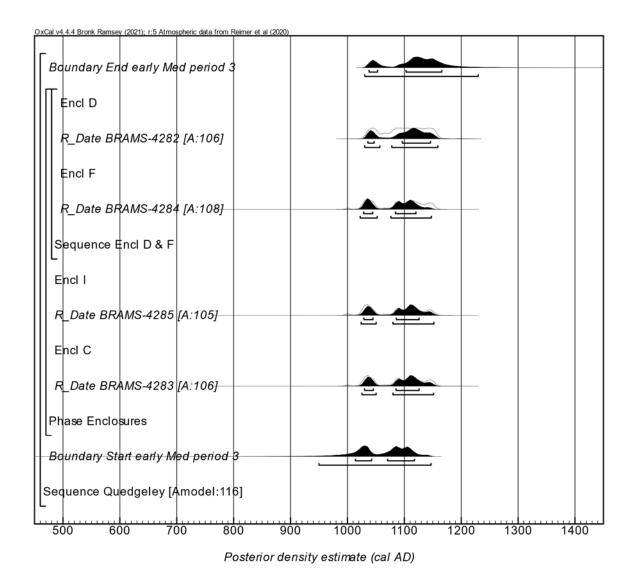


Fig. S1 Modelled radiocarbon dates for the Mediaeval enclosures. The structure of the model is defined by the brackets and key words on the left hand side. Each date has good individual agreement as does the model. Calibrated dates are indicated in outline and the modelled results (posterior density estimate) in solid black. The horizontal brackets indicate the 68% and 95% ranges.

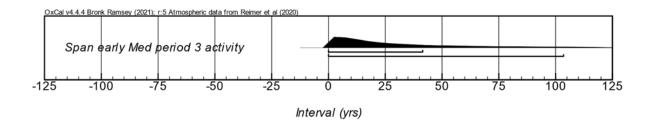


Fig. S2 Modelled duration for the Period 3 activity using the OxCal parameter 'Span'. Derived from the model presented in Fig.S1

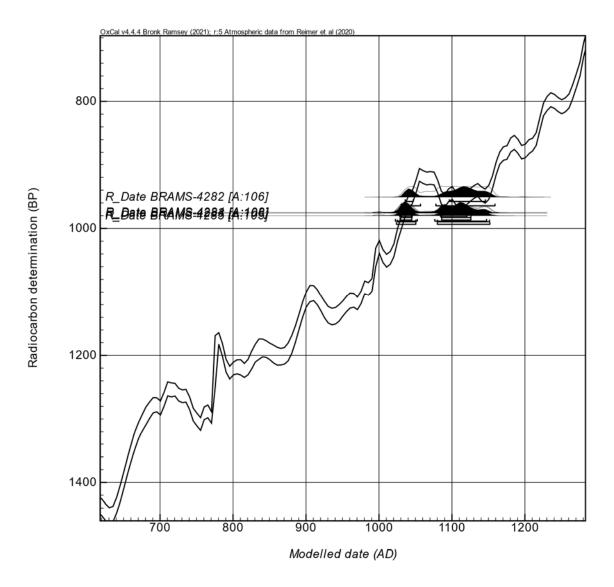


Fig. S3 Radiocarbon dates used in the model presented in Fig. 1 plotted against the calibration and illustrating the split in the distribution caused by the nature of the curve between 1030 to 1150 cal AD

#### **APPENDIX T: DOCUMENTARY EVIDENCE**

By Simon Draper

#### Introduction

The Quedgeley East site is situated within the historic parish of Haresfield, a parish of Anglo-Saxon or early Norman creation that included the three tithings of Parkend (in the west), Haresfield (in the centre) and Harescombe (in the east). The site is in the central Haresfield tithing close to its northern border with both Hardwicke parish to the west and Colethrop tithing (until 1885 a detached part of Standish parish) to the east (VCH Glos. X, 188; GA (Gloucester Archives) PC1812/93). By 1086 most of the parish was included in Whitstone hundred, the meeting-place of which is presumed to have been Whitstones field, *c.* 1km north-west of the site at the junction of the Gloucester–Bristol (A38) and Gloucester–Stonehouse (B4008) roads in Hardwicke (VCH Glos. X, 119–22). Harescombe tithing was in Dudstone hundred, reflecting its separate ownership as part of a Domesday estate comprising lands in Haresfield, Down Hatherley and Sandhurst (VCH Glos. X, 190; Williams and Martin 2003, 447).

This account is concerned primarily with the Haresfield and Parkend tithings of Haresfield parish in the period *c*. AD 900–*c*.1500 as revealed through documentary and cartographic sources, also taking into account linguistic evidence preserved in place- and field-names. No Anglo-Saxon charters survive for the immediate area (Electronic Sawyer 2021), so our earliest available document is Domesday Book of 1086 (Williams and Martin 2003). Other medieval sources consulted include published 'inquisitions *post mortem*', unpublished manorial accounts in The National Archives (TNA), the 'Great Register' (*Registrum Magnum*) of Llanthony priory (also in manuscript form in TNA) and both published and unpublished records of Gloucester abbey. Some documents have also been examined in Gloucestershire Archives (GA), including historic maps dating from 1699 (GA, D303/P1), 1813 (GA, D134/P4), 1831 (GA, Q/RI/74), and 1856 (GA, D878, map of 1856) (see Appendix). Frequent reference has been made to the *Victoria County History (VCH*) account for the parish (VCH Glos. X, 188–97).

#### Landownership and Chief Houses

Four medieval estates may be identified in Haresfield and Parkend tithings, full descents (list of owners) of which are detailed in the *VCH* account (VCH Glos. X, 190–4). The entire Quedgeley East site almost certainly belonged to Haresfield manor until the mid-12th century, after which parts of it may have been included in one or more of three separate landholdings. A fourth, that belonging to Gloucester abbey, probably lay just to the west, but is included in the following discussion owing to its proximity.

#### Haresfield Manor

Haresfield manor is first recorded in 1086 when it belonged to Durand, sheriff of Gloucester, having been held in 1066 as two separate estates by the brothers Godric and Eadric, Anglo-Saxons who would have lost their lands soon after the Norman Conquest. Comprising seven hides of land (Williams and Martin 2003, 466), it probably included all of the later Haresfield and Parkend tithings. That estate remained intact until 1165, when the manor was divided between the two daughters and coheirs of Durand's great-nephew Miles of Gloucester (d. 1143), earl of Hereford: Margaret, wife of Humphrey de Bohun, and Lucy, wife of Herbert FitzHerbert. The greater part of the manor passed to Margaret and descended in the de Bohun family, several of whom held the title earl of Hereford. The last de Bohun owner, Humphrey, earl of Hereford, died in 1373, after which the estate was generally held by successive dukes of Buckingham until after 1500. The lesser share of Haresfield manor (comprising a ploughland or *c*. 120 acres in 1357) remained in the FitzHerbert family until *c*.1401, when it passed to Thomas Brydges (d.

1408). He was succeeded in turn by his son Giles (d. 1467), and Giles's son Thomas (d. 1493), both Lord Chandos (*VCH Glos.* X, 190–3).

Haresfield manor house stood on a raised platform within the substantial moated enclosure known as The Mount which is still extant north of the parish church (VCH Glos. X, 191; GHER 388). Almost certainly it was standing by c. 1160, when a deer park on the manor was documented for the first time (see below, Landscape). In 1165 the manor house passed with the de Bohun share of the manor, and Margaret de Bohun (d. 1197), whilst retaining Caldicot castle in south Wales as her principal seat, seems to have made Haresfield her administrative centre: indeed, it became associated with a medieval barony held by her grandson Henry de Bohun (d. 1220) and his heirs (Pascual 2017, 36). In the 13th century, a junior branch of the family resided in Haresfield, John de Bohun (d. 1292) appearing in some documents as John of Haresfield, and his son and heir Henry (d. 1314) probably also living there too (ibid., 99, 187).

By 1318 the manor had reverted to the senior de Bohuns (earls of Hereford), who lived mainly elsewhere, although Earl John (d. 1336) obtained a licence for a private chapel on the manor in that year (Pearce 1930, 12), presumably located within the moated manorial site now known as The Mount, and his brother and heir Earl Humphrey (d. 1361) apparently maintained Haresfield as one of his demesne manors, together with nearby Wheatenhurst or Whitminster, where he obtained a licence to crenellate his manor house in 1347 (VCH Glos. X, 191, 291–4; Turville-Petre 1974). By 1363, however, the manor had been let to John de Burley for life, and later lords were most likely non-resident (VCH Glos. X, 191), the manor house being occupied by tenants or manorial officials. Certainly in 1460 it was leased to John Downe of Haresfield and his wife Elizabeth, who were obliged to thatch and repair certain buildings including the gatehouse (*le yatehous*) and 'high chamber' (*le highchambre*). The manorial site then also included two gardens, an orchard and a dovecot (TNA, SC 6/1117/10).

The location of a manor house for the FitzHerbert share of the manor is unknown. Whilst an association with Moat Place, the former name of Haresfield Court situated south of the parish church, cannot be ruled out (VCH Glos. X, 193), it seems more likely that Moat Place is identifiable with Llanthony priory's chief house (below), and any manor house for the FitzHerbert share must lie elsewhere. The only documentary evidence for one is the 'capital messuage' with two gardens worth 10s. a year belonging to the lord Reginald FitzHerbert in 1286 (Madge 1903, 133), and the fact that none of the lords of this part of the manor ever lived in Haresfield makes it unlikely that any substantial investment was made in one. The FitzHerbert manor house may, therefore, have been little more than a tenanted farmhouse.

#### Llanthony Priory's Estate

In the early 13th century the lord Henry de Bohun (d. 1220), earl of Hereford, through his steward Richard de Veyne, granted part of Haresfield manor to Gloucester's Llanthony (Secunda) priory, which it retained until dissolution in 1538. The priory already owned the rectory of Haresfield church which was gifted to it by the lord Henry of Hereford in 1161 (VCH Glos. X, 192, 195; Walker 1964, 47–8). Henry de Bohun's gift cannot be located with precision, but it evidently included arable and meadow lands scattered throughout Haresfield manor in several named locations, including on the Cotswold hills in the south and east of Haresfield tithing, where there was also woodland, pasture, and access to stone quarries. The arable lands covered five yardlands in total, including 2½ yardlands or 90 a. (suggesting a local yardland contained 36 a.) in demesne situated in seven named fields (TNA, C 115/77, charters 50–52; Ecclestone 2000, 54–5), of which *Totterac* may perhaps be associated with the later field-name 'Tatterhooks' (of unknown derivation, probably unrelated to tenterhooks), just to the south of the Quedgeley East site at NGR 3803 2107 (GA, D134/P4; D878, map of 1856).

A chief house associated with the estate is perhaps represented by the acre of land 'on which Margaret de Bohun built when the land was divided between the sisters Margaret and Lucy' included in Henry de Bohun's original grant (TNA, C 115/77, charter 50) – placing its origins before Margaret's death in 1197 (above). However, it was first explicitly mentioned in 1290, when the lord John de Bohun gave ½ a. of land in Haresfield to the priory 'for the augmentation of their court' (Maxwell Lyte 1893, 372). The VCH account expresses some uncertainty as to the location of this 'court' (VCH Glos. X, 193), but an earlier historian of the parish (the Revd J. M. Hall) was less equivocal, asserting that Moat Place 'was, we believe, the site of the manor house belonging to Llanthony priory' (Hall 1895, 320).

Moat Place is the former name for Haresfield Court (used until at least 1816), and 'old and massive foundations' were said to have been discovered under its lawn in 1890 (Hall 1895, 320–1; VCH Glos. X, 193). Despite the name Moat Place, however, no medieval moat has so far been identified with any certainty near Haresfield Court (GHER, 39204), but it does seem likely that the water of the adjacent Budge brook was utilised for one (VCH Glos. X, 189), thus making sense of the following undated entry in Llanthony's priory's 'Great Register'; that 'Humphrey de Bohun gave us the course of a running stream in Haresfield leading and running to our court house in the same vill each and every Sunday for ever, without any annoyance or hindrance on the part of himself or his heirs' (Hall 1887, 515). Perhaps any moat was refilled weekly in this way. By 1503 the house was let with the demesne to members of the Rolles or Rowles family (Rhodes 2002, 61–2), of whom Thomas Rowles purchased it in 1543 (VCH Glos. X, 192).

#### Gloucester Abbey's 'Beaurepair' Estate

Around 1160 the lord Walter of Hereford granted six yardlands in Haresfield to Gloucester abbey, of which four were in Harescombe tithing and the remaining two in Haresfield (Hart 1863, 88–9, 331; Walker 1964, 47). By the early 13th century the two-yardland estate was known as Beaurepair (*Belrepeir*) (Hart 1863, 209), a name of Norman French origin meaning 'beautiful retreat' (Smith 1964, 182) and paralleled in Bearpark (Co. Durham), which is a contraction of 'Beaurepair park'. That was 'an out-of-town residence of the priors of Durham emparked in 1267' (Watts 2004, 44), and the monastic context of the Haresfield name may perhaps suggest that it too was intended as a rural retreat for Gloucester's abbots. Nevertheless, the estate was soon granted away by the abbey to William of the Park (fl. c. 1220), lord of Park manor in neighbouring Hardwicke, with which it descended until at least 1453, and Beaurepair was subsequently described as merely a furlong or 30 a. of land (VCH Glos. X, 194).

Whilst its exact location is uncertain, the 12th-century grant describes the estate as 'along the road to Bristol next to the park' (Hart 1863, 331), placing it to the east of the modern A38 opposite the former Haresfield park (see below, *Landscape*; *Communications*). Here, a field with no name in 1813 (at NGR 3801 2113) was called 'Bushey Bearpast' in 1699 (GA, D303/P1), the latter word evidently corrupting 'Beaurepair'. Furthermore, the stream along the northern edge of the field, which also forms the parish boundary with Hardwicke, was presumably the 'watercourse called *Berepaire*' which Aumary Butler, lord of Park manor, was alleged to have diverted in the late 14th century (Flower 1915, 172). No chief house is associated with this estate.

#### Other Settlements and Structures

Apart from the chief houses described above, Haresfield and Parkend tithings both contained houses and cottages belonging to tenants throughout the Middle Ages, although almost none of them are named or detailed in documents, including the farmstead excavated at the Quedgeley East site. Haresfield manor had a total of 24 recorded tenants (roughly equating with households) in 1086 (Williams and Martin 2003, 466), and in the 13th century Llanthony priory's estate had eight tenants and the FitzHerbert estate seven (TNA, C 115/77, charters 50–2; Madge 1903, 132–4). Some 17 inhabitants (heads of household) were assessed for tax in Haresfield in 1327, when unnamed others were presumably too poor to pay (Franklin 1993, 118).

Overall, perhaps 20–30 houses stood in Haresfield before the Black Death, which presumably reduced the population significantly, although no taxation records survive from 1379–81 (Fenwick 1998), and no other documentary evidence for its impact in the parish has been found. One possible exception is the 'toft' or house-site formerly occupied by Walter Sale and called *Watteshall* on the duke of Buckingham's manor in 1457 (TNA, SC 6/1117/9), which was conceivably left vacant as a result of the plague (cf. Jones and Page 2006, 209–10). That can be located with reasonable confidence in the vicinity of Chestnut Farm on the northern edge of the village, where fields named 'Wattsheals' were mapped in the early 19th century (GA, PC1812/93; D878, terrier of 1813).

Two other field-names may also recall Anglo-Saxon house sites: 'Beavenworth' and 'Puddingworth' (GA, PC1812/93). Both contain the Old English element *worð* 'enclosure', which is frequently associated with enclosed farmsteads of Middle or Late Anglo-Saxon origin (Smith 1964, 184; Aston and Gerrard 2013, 147, 157). 'Beavenworth', situated just north of Haresfield Court, was *Bidlyngworth* in 1457, when it was a pasture close (TNA, SC 6/1117/9), and 'Puddingworth' (at NGR 3802 2104) was 'Puttingeworth' in 1641 (Phillimore and Fry 1895, 173), and may contain the same Anglo-Saxon personal name Putta found in Putloe (recorded from 1221) in Standish, just over a kilometre to the west (Smith 1964, 184, 191).

Regarding the Anglo-Saxon and medieval settlement pattern of Haresfield, that was presumably (as later) dispersed rather than nucleated. Although Haresfield as a place-name is Anglo-Saxon in origin (see below, *Landscape*), there is no documentary evidence that it ever corresponded with a 'village' as such, and it seems that houses within the manor were mostly spaced out irregularly along the lane from Chestnut Farm south past Haresfield Court, which probably formed the main route from Gloucester to Standish and Stonehouse before *c*. 1250, and where various small roadside greens survived until enclosure in the early 19th century (VCH Glos. X, 189; see below, *Communications*).

Further west, some houses may have lined the Bristol road (A38) at Parkend, although that name (presumably coined for a hamlet) has not been found on record before 1588, whilst the road itself probably formed the eastern boundary of Haresfield park, which contained a parker's lodge on the site of Parkend Lodge (VCH Glos. X, 190). That lodge was mentioned in 1457, when Robert Brugge was paid 6*d*. for digging a ditch around it 18 perches long and eight feet wide sufficient (when combined with fencing) to keep out beasts grazing in the park. The same document (TNA, SC 6/1117/9) records a tenement of Richard Gardener next to the warren of the manor on Crocker's Hill, indicating scattered medieval settlement too in the upland Cotswold part of the tithing (cf. Ecclestone 2000; see below, *Landscape*). Personal names also support a dispersed settlement pattern, with a significant number of 12th- to 14th-century inhabitants bearing bynames referencing the locations of their dwellings: 'of the ford' (*de Forde*) c. 1210 (TNA, C 115/77, charter 50); 'at the park' (*atte Parc*) in 1286 (TNA, C 133/45/2); and 'at the bridge' (*atte Brugg*), 'at the ford' (*atte Forde*) and 'at the enclosure' (*atte Hay*) in 1327 (Franklin 1993, 118).

Apart from dwellings, other medieval structures included those connected with agriculture and crafts. An undated entry in Llanthony priory's 'Great Register' records Humphrey de Bohun's gift of a piece of land in Haresfield 'six perches in length and four in breadth, lying near the highway, for the making of a granary' (Hall 1887, 515), whilst in 1457 a man was paid 12*d.* for repairing the fencing of the lord's pound or pinfold (for detaining stray or incorrectly-pastured livestock) (TNA, SC 6/1117/9): perhaps that stood in the later 'Pound Close' east of Haresfield Court (GA, D878, map of 1856). The dovecot associated with the manorial site at The Mount has already been mentioned above (see *Landownership*), and the place-name Crocon Hill, perhaps indicating a pottery workshop, will be discussed below (see *Communications*).

Another possible medieval structure hinted at in a Haresfield field-name is a look-out post or 'toot', from Old English  $t\bar{o}t$ , 'look-out' (Cavill 2018, 431). Such place-names are reasonably common in Gloucestershire – including 'The Toots' in Stinchcombe, which was *la Toote* in 1374 (Smith 1964, 253) – and have been the subject of a recent study which has placed them in the context of later Anglo-Saxon civil defence against the Viking threat, representing part of a system of look-out posts associated particularly with vantage points over key land or water routes and communicating with beacons (Baker and Brookes 2013, 185–91, 418–19). The relevant field in Haresfield is the one immediately to the east of the southern part of Area A at Quedgeley East, just beyond the site boundary. That is labelled 'The Toots' on the 1813 and 1856 maps (GA, D134/P4; D878, map of 1856), although an 1813 terrier confusingly calls it 'Foots' (GA, D878, terrier of 1813). Nevertheless, a 1764 deed mentions 'Toots' (Hall 1895, 321), but a lack of earlier forms means that its derivation from Old English *tōt* must be regarded as conjectural. The field in question (at *c*. 28m OD) has a good view over the Roman road (A38) *c*. 1.25km to the north-west at *c*. 18m OD, and there is a clear line of sight up to Haresfield Beacon *c*. 2.5km to the south-east.

Lastly, the question of milling in Haresfield must be addressed. The only medieval documentary reference to a mill so far discovered dates from 1275, but there is no mention of whether it was powered by water or wind (Maxwell Lyte 1900, 237). By 1813 there was a small watermill with a mill pond on the Budge brook just south of Haresfield Court (GA, D878, terrier of 1813), but it has not yet been possible to prove its earlier existence – except that a John 'at the mill' (atte Mille) was mentioned in 1457 (TNA, SC 6/1117/9). Nevertheless, its presence in the 13th century might help to make sense of the passage quoted above regarding Humphrey de Bohun's allowance of water on Sundays to refill Llanthony priory's moat (above, Landownership). The implication may be that on the other days of the week the head of water on the Budge brook was needed to power the adjacent manorial watermill.

What is more certain is that there must have been a medieval windmill in the close proximity of the Quedgeley East site. The name 'Windmill field' (*Wyndemyllefeld*) is recorded from 1457 for a medieval open field containing arable strips (TNA, SC 6/1117/9; see below, *Landscape*) which, judging by later field-name evidence, included all of Area A of the Quedgeley East site. The field to the north of the excavated field boundary (Ditch A37) was labelled as 'Windmill Field' on the earliest available map from 1813 (GA, D134/P4), whilst in the 1831 enclosure award it was the 46th allotment awarded to Daniel Niblett, known as 'Windmill Leaze' (GA, Q/RI/74), 'leaze' denoting enclosed grassland or pasture (Cavill 2018, 249). On the 1856 map the fields to the north and south of Ditch A37 had different names, respectively 'Windmill Lease' and 'Windmill Tump' (GA, D878, map of 1856), 'tump' denoting an earthen mound such as one on which a windmill was often sited (Cavill 2018, 435; Rynne 2018, 503–6).

#### Landscape and Agriculture

A sense of Haresfield's later Anglo-Saxon landscape may be discerned from place- and field-names preserving Old English elements. Haresfield is an Anglo-Saxon place-name recorded from 1086 meaning 'Heresa's open country', and is named in opposition to neighbouring Harescombe, 'Heresa's valley', also first recorded in

Domesday Book and seemingly named from the same Anglo-Saxon man called Heresa (Smith 1964, 164, 182; Watts 2004, 279). The second element, Old English *feld*, 'open country', is used in the sense of a 'contrast between *feld* and areas which are difficult of access or passage. The contrast most often recorded is that with woodland, but contrast with hills is also well evidenced ...' (Gelling and Cole 2000, 270).

Certainly, a contrast between the wide, open landscape of the Vale of Gloucester and the narrow, deeply-incised valleys of the adjoining Cotswolds is stark, but the contrast at Haresfield may equally be with woodland, since the second element of neighbouring Putloe in Standish is Old English *lēah* 'wood, clearing' (Smith 1964, 191), and several of Haresfield's own medieval field-names also contain the element: *Morleg* and *Brodleg c*. 1210 (TNA, C 115/77, charter 50) and *Moreley*, *Leyfeld*, *Walley* and *Totesley* in 1460 (TNA, SC 6/1117/10), of which *Leyfeld* must be identical with the later 'Leigh Field' just east of Haresfield itself (GA, D134/P4). *Feld* and *lēah* names are often found in tandem, including further north in the Vale of Gloucester, where Hasfield adjoins Tirley (Hooke 2006, 56), and in the Chilterns Ann Cole has concluded that both terms 'indicate early clearance of woodland' (Gelling and Cole 2000, 312). It would appear, therefore, that woodland was once more extensive throughout the parish.

Nevertheless, much of the Domesday woodland recorded on Haresfield manor, half a league long by three furlongs broad (Williams and Martin 2003, 466), was probably situated on the Cotswold slopes (some too steep to plough) in the south of Haresfield tithing. It was here that some of Haresfield's Domesday potters may have worked, who needed a ready supply of wood as fuel for their kilns (see below, *Communications*), and it was here that the lord Henry de Bohun gave a part of his wood to Llanthony priory *c.* 1210 (TNA, C 115/77, charters 50–2; Ecclestone 2000, 54). In 1457 the remaining demesne wood on the duke of Buckingham's manor was called Highwood (*Highwode*), which in 1460 yielded 10s. in sales of beech timber, but no income from pannage due to a lack of beech mast. Nearby (also in the hills) was a demesne warren, overseen by a warrener, which was let in two parts to tenants with rights to take rabbits, partridges and pheasants (TNA, SC 6/1117/9–10).

Other woodland was located in Haresfield park, west of the A38, which was first mentioned *c*. 1160 (see above, *Landownership*) and belonged to Humphrey de Bohun in 1251, when he was given sixteen deer to increase its stock (Stamp 1927, 12). The course of its curving western fence or pale can still be discerned in field boundaries north and west of Parkend Lodge, and in 1503 an oak wood within the park was known as *le hurst* (TNA, SC 6/HENVII/1075), from Old English *hyrst* 'wooded hill', perhaps implying Anglo-Saxon origins for that woodland (Smith 1964, 185; Gelling and Cole 2000, 234–6). Arable and meadow immediately outside the park to its north was by 1457 (as later) called 'Wood field' (*le Wodefeld*) (TNA, SC 6/1117/9; GA, PC1812/93). A pond by the lodge (still extant) was also mentioned in 1457, when a man was paid for scouring the ditch refilling it from *Mortonrever* (presumably the Severn, or a watercourse running into it), and the same document also describes a payment to Walter Herberd for ploughing furrows called *waterforowes* with his own plough to drain floodwater from the park (TNA, SC 6/1117/9).

Flooding from the Severn also affected land in the parish west of the park, which was the main area of common meadow for Haresfield manor and its tenants (VCH Glos. X, 194). *Rodemore* and *le Rix* were mentioned there in 1457 (TNA, SC 6/1117/9), those names suggesting that both reeds and rushes could also be obtained (Smith 1964, 184): indeed, in 1460 the demesne farmers John Downe and his wife Elizabeth were allowed reeds from an acre in *Rodemore* for thatching the roofs of buildings at the manorial site. The same document also mentions a 'bondsman's meadow' (*Bondmanmede*) at the northern end of which was *la cokshete* (TNA, SC 6/1117/10), a word which translates as 'place where nets are set to trap woodcock' (Cavill 2018, 84), attesting the taking of game birds presumably for both meat and feathers. Another meadow was called *Longdole*, presumably because it was

allocated to tenants annually in strips by lots or doles (TNA, SC 6/1117/9–10; Cavill 2018, 115). Some meadow was also available along the streams in the parish: a field adjoining the brook forming the parish boundary with Hardwicke north of the Quedgeley East site was called 'The Ham' (from Old English *hamm* 'river meadow') in the 19th century (GA, D878, map of 1856; Gelling and Cole 2000, 46–55).

Apart from common pasture at Broadbarrow Green on Haresfield Hill (VCH Glos. X, 194), demesne pasture on Haresfield manor was mostly located near the manor house (The Mount) in a number of hedged and/or ditched private closes or 'crofts', some of which probably also contained orchards, arable and meadow. Here, *Oxlese, Edicroft* and *Chirchecroft* of 1457–60 survived into the 19th century as 'Ox Leaze', 'Heddy or Lady Croft' and 'Church Croft' (GA, PC1812/93). Perhaps (as at Shapwick in Somerset) the crofts are relics of a landscape predating the advent of open-field farming, cleared and subdivided in the Anglo-Saxon period (Aston and Gerrard 2013, 157). Some medieval (pre-Black Death) conversion of grassland in these crofts to arable is suggested by the field-name 'Bratches' ('Breache' in 1624: Hall 1895, 366; see GA, PC1812/93), which denotes 'newly broken or cultivated land' (Cavill 2018, 41–2). In 1319 a document settling a dispute between Llanthony priory and the vicar stipulated that the tithes of any orchards or gardens converted to arable should henceforth be paid to the vicar (Hall 1887, 516).

By 1460 arable land was principally located in eight open fields named *Leyfeld*, *Downhillefeld*, *Brodefeld*, *Wyndemyllefeld*, *Wodefeld*, *Caldewelfeld*, *Eylefeld* and *Okefeld*, where a three-course crop rotation (including one year fallow) was being followed (TNA, SC 6/1117/10). Some of those open fields, including Leigh field, Downhill field, Broad field and Windmill field, survived in a reduced form (having suffered piecemeal enclosure) until parliamentary enclosure in 1831 (GA, D303/P1; D134/P4; Q/RI/74). Based on cartographic and documentary evidence it seems likely that the entire Quedgeley East site was included in Windmill field by 1460, but the discovery by archaeology of the medieval farmstead in Area A with an end-date for occupation in the mid to late 12th century strongly suggests that this open field was either created from scratch or greatly expanded at some point after 1150, coinciding with the period of population growth and increased demand for arable which preceded the crises of the early 14th century culminating in the Black Death of 1348–9 (Dyer 2002, 155–78). In the Cotswold part of Haresfield tithing this extra demand for arable is manifested in the process of assarting – converting rough pasture or woods to ploughland. A 'high assart' (alta brecca) and an 'assart of Roger son of Alan' were both mentioned *c*. 1210 in Henry de Bohun's grant to Llanthony priory (TNA, C 115/77, charter 51; Ecclestone 2000, 54).

Documents and medieval field-names are unusually silent on the range of crops grown, although (as later) it was probably mainly wheat, barley and beans (*VCH Glos.* X, 194). In 1319 a dispute over tithes mentioned 'seed of the plains' as well as apples and pears for cider (Hall 1887, 516), and in 1503 Llanthony priory leased out tithes of 'corn, flax, hemp, pasturage and fruit' belonging to the rectory, except within Haresfield park (Rhodes 2002, 61). In terms of animals kept, the *c.* 1210 grant to Llanthony priory included pasture for eight oxen and a bull (TNA, C 115/77, charter 51; Ecclestone 2000, 54), whilst the 1319 document discusses tithes on cheeses, cows' milk, and ewes' milk (Hall 1887, 516). Customary payments for grazing pigs appear in the 1460 manorial accounts (TNA, SC 6/1117/10), and a new sheephouse and stable were intended to be built on the demesne farm of the chief manor in 1502 (TNA, SC 6/HENVII/1075). Villeins on the FitzHerbert share of the manor in 1286 owed hens at Christmas and hens and eggs at Easter as part of their rents (Madge 1903, 133).

### **Communications, Crafts and Trades**

In the Middle Ages Haresfield was well connected by roads and tracks to local towns and villages. The principal north/south route was that perpetuating the Roman road from Gloucester south towards both Sea Mills (*Abonae*)

and Bath (Holbrook 2006, 98), which is broadly followed by the modern A38. In the parish, it was referred to in the late 12th century as 'the road to Bristol' (Hart 1863, 331), whilst the 'king's highway which leads to Gloucester' in an undated record of Llanthony priory (Hall 1887, 515) may also refer to it, unless that was the road from Standish to Gloucester (the modern B4008), which was apparently built or rebuilt between Little Haresfield (in Standish) and the Gloucester–Bristol road at Hardwicke in the mid-13th century by Gloucester abbey with the blessing of the de Bohuns (VCH Glos. X, 189). Before then, the principal route from Gloucester to Standish, Stonehouse and Stroud may have been the minor road (Haresfield Lane) passing through Haresfield itself, which presumably connected with the lane to Colethrop, Harescombe and Painswick from an early date, since a medieval stone cross marked the road junction east of the church until its remains were used for road repairs in the 19th century (VCH Glos. X, 189).

The connecting lane between Haresfield Lane and the B4008, which runs along the southern edge of the Quedgeley East site, appears on all historic maps from 1813 (GA, D134/P4) onwards and is probably of medieval origin, although no specific evidence can be adduced. The minor metalled lane running south-east from Haresfield up onto Haresfield Hill was presumably the principal route connecting the Vale and Cotswold parts of Haresfield tithing and manor throughout the Late Anglo-Saxon and medieval periods. This has been identified with the way called *limederudinge* (perhaps 'clearing treated with lime', possibly to reduce muddiness) mentioned *c*. 1210, when the 'high road from *la Windwey* through the middle of Harescombe' was almost certainly the minor lane still connecting Haresfield Hill with Harescombe (TNA, C 115/77, charter 51; Ecclestone 2000, 54).

Haresfield's nearest town and market was Gloucester and, given the strong connections between Haresfield's landowners (lay and ecclesiastical) and the town, it would be surprising if parishioners looked elsewhere to buy and sell goods. Gloucester abbey in particular is known to have cultivated links between its Gloucestershire estates and the Gloucester market, and Llanthony priory presumably did likewise (VCH Glos. IV, 24). Haresfield was well within Gloucester's known market area *c*.1400 (VCH Glos. IV, 46). Medieval evidence for crafts and trades (other than potting, discussed below) comes from the bynames of parishioners, who included Walter the carpenter *c*. 1210 (TNA, C 115/77, charter 51; Ecclestone 2000, 54) and another Walter the carpenter and Robert the tailor in 1327 (Franklin 1993, 118). Robert had acquired a property in Gloucester's Longsmith Street in 1320 (Rhodes 2016, 99), suggesting a close connection with the town.

The only documentary evidence for medieval pottery production in Haresfield comes from the 1086 Domesday Book, where the entry for Haresfield contains the record that five potters on the manor paid 44*d*., presumably in rent (Williams and Martin 2003, 466). No other relevant records have been found, and no documented medieval inhabitants bore a related byname such as *crokkere* 'potter' (Hanks *et al.* 2016, *s.v.* Crocker). Only one related place- or field-name has been found, that of Crokers Hill, which Martin Ecclestone (2000, 49) has traced back in the records to 1442, when it was called *Crokereshull*, as it was in 1457 and 1460 (TNA, SC 6/1117/9–10). This appears to have formed part of Downhill (or Danehill) open field and can be identified with a hillock on the Cotswold escarpment south of Haresfield, east of Caudle Covert on modern maps. It evidently derives from Middle English *crokkere* 'potter', whilst an alternative form of the place-name Crocon Hill, recorded from 1612 onwards, probably represents Old English *crocc-æm*, 'pottery workshop' (Ecclestone 2000, 48–9), a compound also found in Devon and Kent place-names and paralleled in Potterne (Wilts.), from Old English *pott-ærn* with the same meaning (Watts 2004, 169, 480). The use of Old English rather than Middle English in the second form (Crocon) would tend to suggest an Anglo-Saxon or very early Norman origin for the name. Ecclestone (2000, 53), therefore, concludes that Crokers or Crocon Hill was the likeliest place of manufacture for Haresfield's Domesday potters, although of

course there is no evidence to say whether all five worked there, or whether other sites in the parish were also used.

#### **Social Structure and Relations**

In the absence of any surviving manorial or estate surveys, social structure in Haresfield in the medieval period is difficult to reconstruct fully, although certain sources cast some light. Domesday Book of 1086 reveals that Haresfield manor had nine *villani*, eleven *bordarii* and four *servi* (Williams and Martin 2003, 466), of whom the *villani* and *bordarii* would have held their houses and land from the lord in return for a combination of labour services and rents (in cash or kind). The *villani* were a large and disparate group of peasant farmers with varying degrees of personal freedom and burden of labour services. They generally held more land (a yardland or two) than the *bordarii*, who were lower-status servants and/or smallholders, often with heavy labour services and only a few acres of land. Of a lower status still were the *servi*, who were mostly landless slaves working directly for the lord on his own (demesne) farm (Faith 1997, 59–75, 85–8). It is highly likely that the medieval farmstead discovered at Quedgeley East was occupied by one of the *villani*.

By the mid-13th century, the Haresfield manor estate had been broken up into at least four separate landholdings (see above, *Landownership*). Nothing is known about any tenants on Gloucester abbey's 'Beaurepair' estate, but Llanthony priory's tenants *c*. 1210 comprised mainly smallholders, two each holding a half-yardland and six each holding a fardel (quarter-yardland), perhaps in addition to a much wealthier tenant renting and farming the 2½-yardland demesne and occupying a moated house on or close to the site of the later Haresfield Court (TNA, C 115/77, charter 51; Ecclestone 2000, 54; above, Landownership). The FitzHerbert share of the manor in 1286 had a demesne farmer (with a chief house, 109 a. of arable, 10 a. of meadow, and two pasture closes) and lesser tenants comprising villeins (*nativi*) holding 3¼ yardlands between them, as well as three mondaymen or bondmen (*lundinarii*) and four cottagers (*cotarii*) with unknown amounts of land. All these lesser tenants owed labour services including ploughing, harrowing, reaping and mowing hay (TNA, C 133/45/2; Madge 1903, 132–4).

Little information on social structure can be adduced from the 14th and 15th centuries, except that the principal (Duke of Buckingham's) manor in the period 1441–1502 on average derived income of *c*. £10 a year from customary tenants (i.e. tenants renting houses and lands directly from the lord according to the customs of the manor) and a further *c*. £1 10*s*. from rents of free tenants (owning their own property by freehold but still owing a nominal cash rent to the lord and suit to the manor court). A chief tenant or bailiff of the manor, for an annual rent (£15 7*s*. 1*d*. in 1502), occupied the manor house at The Mount and worked the greater part of the demesne lands, the rest of which were rented out separately to a number of local men (Ecclestone 2000, 35; TNA, SC 6/1117/9–10; SC 6/HENVII/1075; see above, *Landownership*).

Social relations and social life are difficult to reconstruct from scant evidence. The parish church presumably formed a focus for the community, but no other reference to communal buildings has been found. The only evidence for strife comes from a dispute over tithes in 1319 (Hall 1887, 516–17), and wider national events seem to have had little impact, except perhaps for the Second Barons' War of 1264–7, during which Gloucester was besieged in 1263 and 1265, having a detrimental effect on both the town and surrounding countryside (VCH Glos. IV, 20), and the Black Death of 1348–9, the local effects of which are unclear (see above, *Other Settlements*).

#### Conclusion: What are the implications for Quedgeley East?

The site at Quedgeley East formed part of a rural agricultural landscape throughout the later Anglo-Saxon and medieval periods with good links to Gloucester only 8km (5 miles) to the north, as well as Bristol and Bath via the

Roman road (A38) and both the Stroud valley and the market town of Painswick by lanes. Extensive woodland both on the Cotswold escarpment and in the Vale in the later Anglo-Saxon period enabled the brief flowering of a local pottery industry documented in 1086, by which date landholdings had emerged to take advantage of the wide array of natural resources. Quedgeley East lay within Haresfield manor and parish, which extended both east of the site to include rough pasture, woods and quarries in the Cotswold hills and west of the site to take in low-lying meadows, woods and pasture in the Severn floodplain, some of which were enclosed into a deer park for the lord of Haresfield in the 12th century. A mixture of arable, meadow and pasture lay in the Vale of Gloucester in between. By 1250 the manor had been split up into at least four separate landholdings, two of which belonged to religious houses in Gloucester, reinforcing links with the town.

The medieval farmstead excavated at Quedgeley East, with a probable lifespan between the 10th/11th and mid to late 12th centuries, was evidently one of a number of contemporary dispersed farmsteads which existed in the parish, the locations of two of which are suggested by the field-names 'Beavenworth' and 'Puddingworth'. Domesday Book records nine *villani* on the manor in 1086, and it seems likely that one of those tenants occupied the Quedgeley East farmstead with perhaps two others living at 'Beavenworth' and 'Puddingworth'.

Some of the earliest fields in the parish may have been the closes or 'crofts' which appear in documents and on maps close to the church. Judging by field-name evidence, several of those seem to have been carved from Anglo-Saxon woodland, which was undoubtedly more extensive than at present in the Vale. At some point before 1460 some of those closes were expanded and reorganised into eight open fields, each containing strips worked by different farmers but following an agreed crop rotation. The date of this reorganisation is uncertain, but it could have been in the 12th or 13th century, a period of population growth and 'very clear arable expansion' (O'Donnell 2018, 95), and part of the wider period in which open field systems nationally are currently thought to have developed, particularly outside the core 'Midland zone' of their distribution, where field numbers, sizes and cropping tend to be more irregular (Oosthuizen 2011; Williamson 2013, 177–82; O'Donnell 2018). Haresfield lies within the 'Midland zone' or 'Central Province', but almost on its western edge (Roberts and Wrathmell 2002, 10, 144), and its eight small open fields, as opposed to two or three large ones, would tend to suggest irregular and later rather than regular and earlier development.

Elsewhere in England, it has been suggested that dispersed or outlying farmsteads may have been cleared away to make way for open fields, whether by lordly command or popular consensus (Lewis *et al.* 2001, 170–9, 199–201), especially where they are located on good arable land (as at Quedgeley East, where surrounding fields are still ploughed and sown). Perhaps the Quedgeley East farmstead was cleared in the 12th century to make way for Windmill field, which was one of the eight open fields recorded in 1460, and which cartographic evidence strongly suggests once included most of the Quedgeley East site. Furthermore, the name Windmill field (*Wyndemyllefeld*) strongly suggests the presence of a medieval windmill in the immediate vicinity, and the field-name evidence supports the interpretation of Ring-ditch B as a windmill site, particularly in light of the correlation between the 1856 field-name 'Windmill Tump' and the ring-ditch site. The dating would also fit, with the vast majority of windmills constructed after 1200 (Rynne 2018, 503–6). The presence of a circular 'moat' may perhaps be explained in terms of it offering protection to a windmill inside from cattle grazing in the adjacent open field after harvest, whilst also preventing people from getting too close to the turning windmill sails. The digging of a moat around the lodge of Haresfield park in 1457 also appears to have been largely for keeping out deer and other grazing animals.

#### **Select Glossary**

**assart:** a piece of often marginal land converted to arable use from woodland or pasture. As a verb, the process by which this was achieved.

barony: a group of manors held or administered together by a major lord or by the Crown. Also known as an honor.

**byname:** a nickname devised to distinguish one person from another, particularly if they have the same given name. In England, non-hereditary bynames were the forerunners of hereditary surnames.

(licence to) crenellate: a royal licence granted to a lord giving permission to fortify a house, often creating a castle.

**demesne:** originally the land on a manor (q.v.) directly exploited by the lord rather than granted to tenants, although by the later Middle Ages lords often leased out demesne lands too, particularly if they were non-resident.

**dispersed (settlement):** a pattern of settlement comprising scattered houses and isolated farmsteads distributed over a wide area. The opposite of nucleated settlement (q.v.).

enclosure: the process whereby the open fields (q.v.) were parcelled up into privately owned fields or closes. From the 18th century this was usually achieved by an Act of Parliament (parliamentary enclosure) obtained by the dominant landowners, but earlier it was more commonly carried out by informal private agreement (piecemeal enclosure).

furlong: 1) a block of strips in the open fields (q.v.); 2) a unit of length equivalent to 40 perches (q.v.).

**hide:** a unit of land measurement in the Anglo-Saxon period representing a family farm, but by 1086 forming the basic taxation unit. By the 13th century it nominally contained 4 yardlands (q.v.) or around 120 acres.

**hundred:** a subdivision of the county or shire, established in the Anglo-Saxon period and nominally containing 100 hides (q.v.). Hundreds had their own courts which met regularly at a designated meeting place within the hundred, usually in the open air.

league: a unit of length equivalent to 12 furlongs (q.v.).

**manor:** a landed estate originally held by feudal tenure by a lord, who had certain rights over the land and his tenants. The manor was governed at regular courts which all tenants were expected to attend.

**nucleated (settlement):** a pattern of settlement characterised by clusters of houses grouped around one or more focal points. The opposite of dispersed settlement (q.v.).

**open field:** a system of communal agriculture in which an individual's farmland was scattered amongst two or more large fields in strips intermingled with those of other tenants. Crop rotations, fallow land and grazing of livestock were decided and regulated communally in the manor court (q.v.).

pannage: the right to pasture pigs in woodland, or a payment for such.

**parish:** the area attached to, and served by, a parish church, and owing tithes (q.v.) to it. Many parishes derived their boundaries from those of Anglo-Saxon estates.

perch: a unit of length equivalent to 5½ yards or 16½ feet.

**ploughland:** a unit of land measurement nominally containing 4 yardlands (q.v.) or around 120 acres. Also known as a carucate.

**pound:** a fenced or walled enclosure used to detain stray or incorrectly pastured livestock, which could only be released on payment of a fine. Also known as a pinfold.

**rectory:** the property or endowment of a parish church originally intended to support its priest (a rector), who would receive the whole income. In the Middle Ages some or all of the rectory estate, including tithes (q.v.), could be granted to a religious house, leaving the church to be served instead by a vicar or curate, who would either be allocated a share of the rectory income or paid an annual stipend.

sheriff: a royal official ('shire reeve') charged with keeping the peace in a shire or county on behalf of the king.

suit of court: a tenant's obligation to attend manor courts (q.v.).

**tithes:** payments owed by inhabitants of a parish (q.v.) to a rector or vicar (see rectory) originally in return for serving the church and nominally representing a tenth of someone's annual income. These were originally paid in kind in various agricultural produce, but were later commuted to cash sums.

**tithing:** a subdivision of a parish (q.v.) represented in parochial government by a tithingman.

**villein:** a medieval peasant farmer who held a house and land from the lord of the manor (q.v.) in return for labour services on the lord's demesne (q.v.) as well as rent.

warren: an area of land (often rough pasture) set aside by the lord of the manor (q.v.) for breeding game such as pheasants and rabbits.

yardland: the conventional holding of a medieval peasant, usually measuring between 15 and 40 acres depending on local custom and nominally representing a quarter of a ploughland (q.v.). Also known as a virgate.

### **Documentary and Cartographic Sources**

#### Gloucestershire Archives (GA)

D134/P4: Plan of an Estate in the Parish of Haresfield in the County of Gloucester belonging to Daniel John Niblett, Esq, 1813.

D303/P1: Map of land in Hardwicke and Haresfield belonging to William Trye, 1699.

D878, terrier of 1813: Heywood and Niblett families of Haresfield (uncatalogued collection), terrier of Daniel Niblett's estate, 1813.

- D878, map of 1856: Heywood and Niblett families of Haresfield (uncatalogued collection), map of Haresfield parish, 1856.
- PC1812/93: Copy of tithe map for Harescombe, 1838; and Haresfield, 1816, drawn by Geoff Gwatkin, cartographer, *c.* 1994.
- Q/RI/74: Haresfield enclosure map with award, 1831. Map also available online at Know Your Place website (<a href="http://www.kypwest.org.uk/">http://www.kypwest.org.uk/</a>, accessed June 2021).

#### The National Archives (TNA):

- C 115/77: 'Registrum Magnum': General Cartulary of Llanthony Priory by Gloucester, c. 1350. Microfilm copy at GA, MF1104.
- C 133/45/2: Inquisition Post Mortem of Reginald son of Peter, 14 Edw I [1286].
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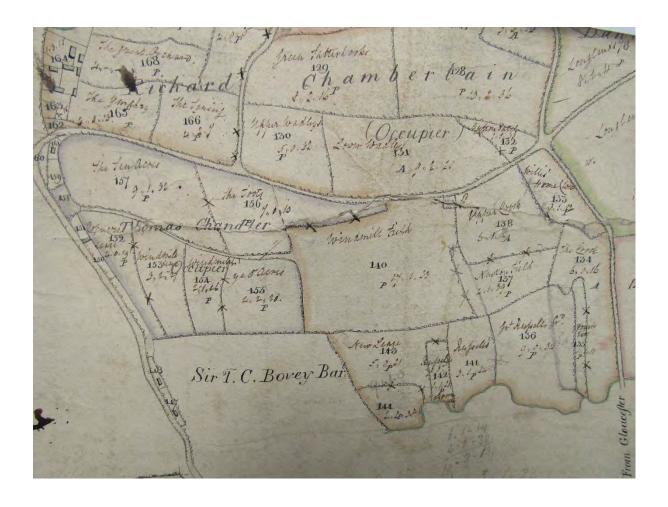
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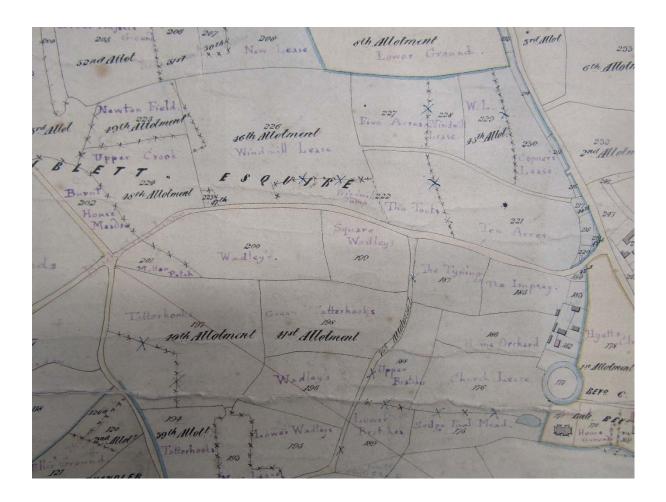
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#### Extracts from cartographic sources

GA, D134/P4: Plan of an Estate in the Parish of Haresfield in the County of Gloucester belonging to Daniel John Niblett, Esq, 1813. (south at top).



D878, map of 1856: Heywood and Niblett families of Haresfield (uncatalogued collection), map of Haresfield parish, 1856.

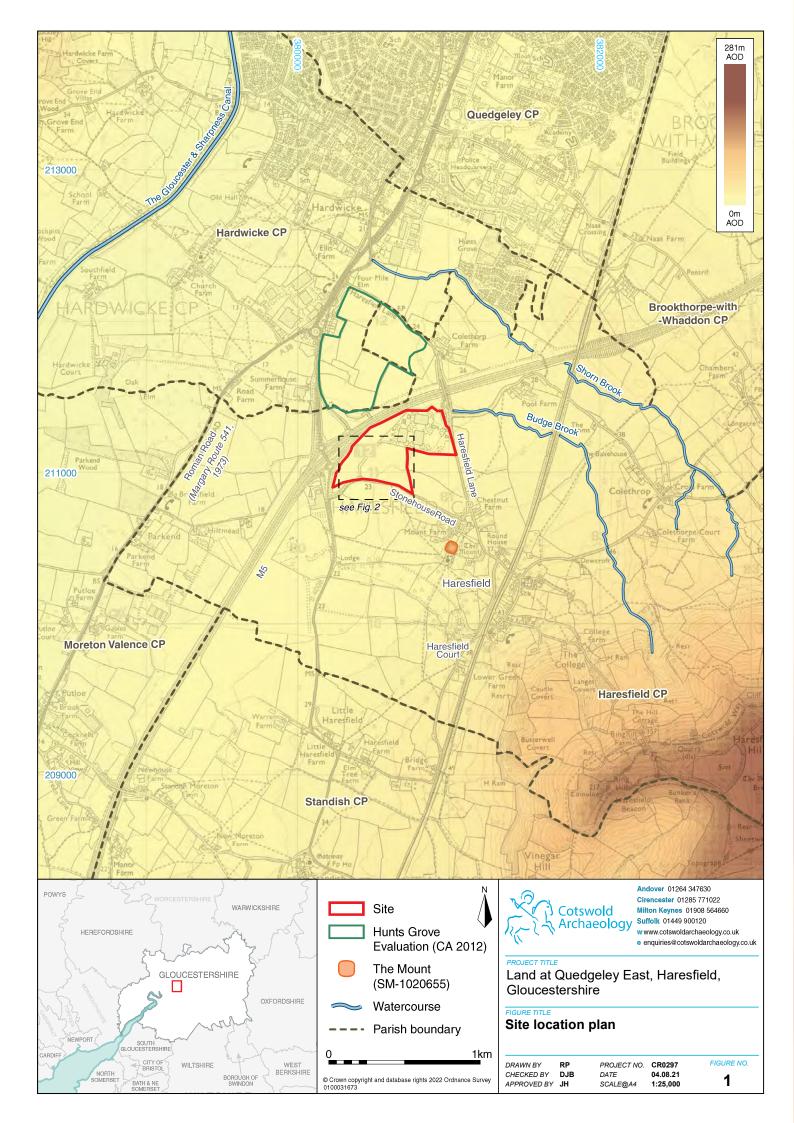


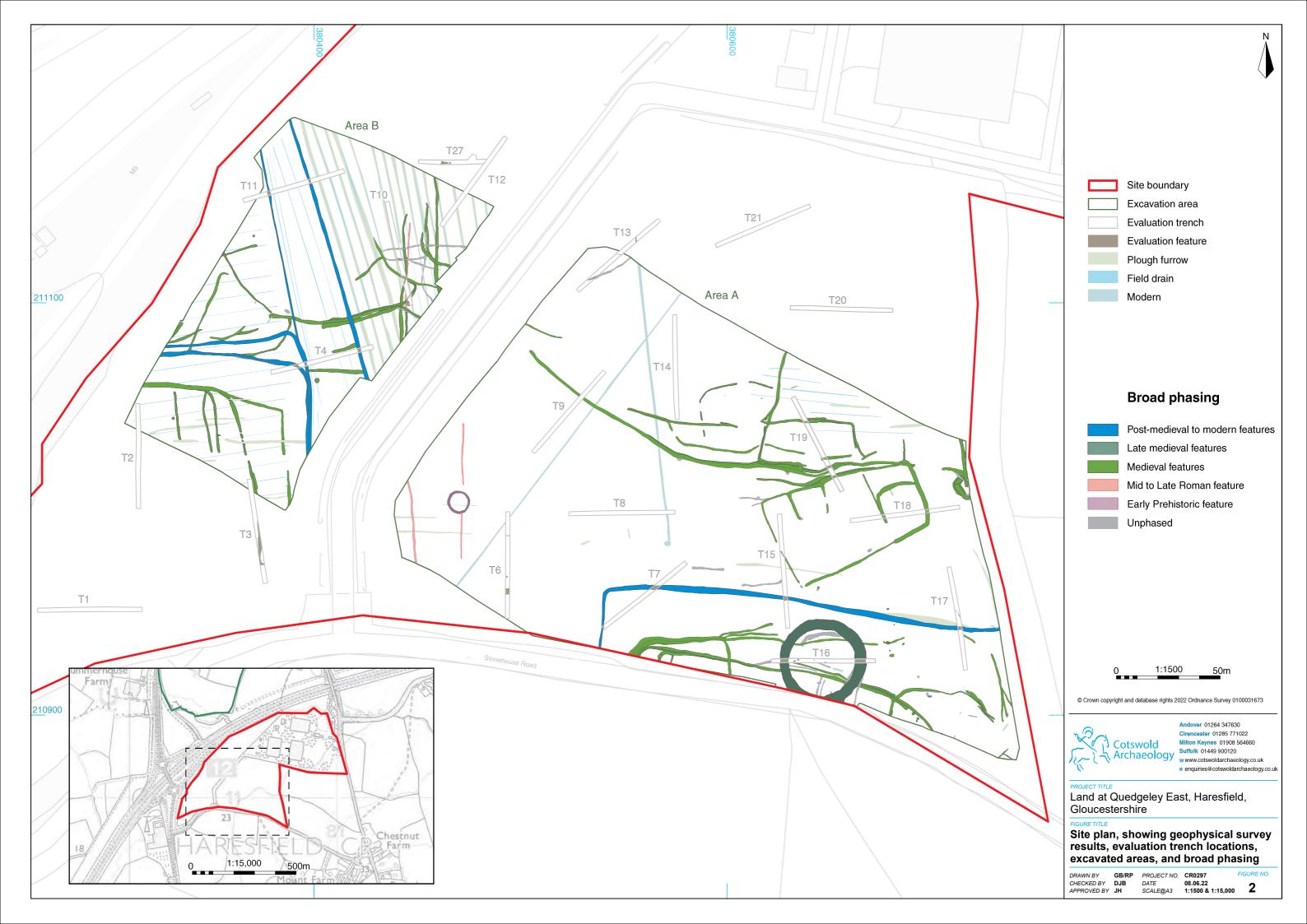
### APPENDIX U: OASIS REPORT FORM

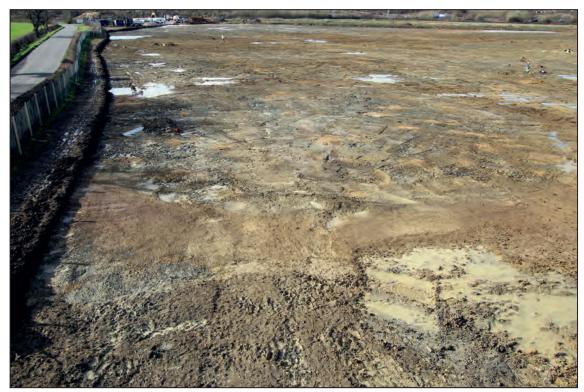
PROJECT DETAILS	
Project Name	Land at Quedgeley East, Haresfield, Gloucestershire: Archaeological Excavation
Short description	An archaeological excavation was undertaken by Cotswold Archaeology between January and May 2019 at the request of St Modwen Ltd on land at Quedgeley East, Haresfield, Gloucestershire. The excavation comprised two areas, which together amounted to an area of 6.6ha.
	The earliest remains comprised two flints, both residual within later deposits. One is only broadly datable as prehistoric, whilst the other is a Mesolithic or Early Neolithic blade. A small ring-ditch is undated but may be the remains of a prehistoric barrow, and there was also a sherd of Early to Middle Bronze Age pottery and a small assemblage of later prehistoric pottery, all residual within later deposits.
	A single Roman inhumation burial was found. The bones were in very poor condition, but radiocarbon assay produced a determination of cal. AD 130–320 (SUERC-88058; 95.4% probability). The grave may have been laid along what was probably a Roman droveway and within site of the possible barrow. A small assemblage of late prehistoric and Roman pottery reflects the site's location south of extensive Iron Age and Roman enclosures identified at Hunt's Grove.
	The majority of the remains date to the medieval period and relate to an enclosed farmstead. Pottery from the site, radiocarbon dating, and the settlement form, together suggest that this farmstead was in use from <i>c</i> . AD 1000 to 1150/1200 and, as such, is one of only a very few such dispersed settlements to have been excavated. Additional significance arises from the fact that most of the recovered pottery, fabric TF41B in the Gloucester type series, seems to have been unused or wasters, suggesting that this pottery was produced on site. Haresfield is one of only three locations mentioned in Domesday Book as having potters, and so the identification of the site as having included one of the five potters mentioned in the Haresfield entry is significant. The occupants were primarily farmers, most probably engaging in dairying on the wood-pasture of the vale, and perhaps also having a sheep flock which was grazed on the nearby Cotswold uplands, where the animals would also have manured arable fields. The farm may have had late pre-Conquest origins, in which case it survived the Norman invasion and the occupants seem to have taken advantage of the new market opportunities this provided, adapting the pots they produced to suit Norman tastes.
	Although the farmers adapted to the new regime, its effects eventually caused the abandonment and probable deliberate demolition of the farm during the mid to late 12th century when it was replaced by an open field system, along with what seems to have been a moated windmill. This was perhaps part of a wider landscape reorganisation, which, beyond the excavated area, saw the creation of a deer park within Haresfield, along with the construction of the church (extant) and at least one moated manor house — an exercise in Norman power expressed through a formalisation of the landscape which also maximised its capacity to produce and process food and allow for the leisure, domestic and religious pursuits of the new elite. The discovery of a moated windmill is unusual but sits comfortably within a wider trend towards moated sites, which was adopted by the more prosperous peasants through to the higher elites. The moated windmill seems to have been abandoned no later than c. 1500, and although the causes for this are unclear, social, political and economic

		uncertainties of the 15th century may have contributed. Later remains were of field boundaries which can be seen on historic mapping.				
	submitted to Medieval Archaeolog	A synthetic article on the finding complementing this report will be submitted to <i>Medieval Archaeology</i> and the archive will be deposited with The Museum in the Park, Stroud.				
Project dates	January-May 2019					
Project type	Archaeological excavation	Archaeological excavation				
Previous work	Field evaluation; post-excavation ass	Field evaluation; post-excavation assessment				
Future work	Unknown	Unknown				
PROJECT LOCATION						
Site Location	Land at Quedgeley East, Haresfield,	Land at Quedgeley East, Haresfield, Gloucestershire				
Study area (M²/ha)	14ha	14ha				
Site co-ordinates	380501 211080	380501 211080				
PROJECT CREATORS						
Name of organisation	Cotswold Archaeology	Cotswold Archaeology				
Project Brief originator	n/a	n/a				
Project Design (WSI) originator	Cotswold Archaeology	Cotswold Archaeology				
Project Manager	Clifford Bateman, Jonathan Hart	Clifford Bateman, Jonathan Hart				
Project Supervisor	Mark Brett					
MONUMENT TYPE		Prehistoric ring-ditch, Roman burial, medieval farmstead, medieval ring-ditch				
SIGNIFICANT FINDS	Possible medieval pottery kiln debris					
PROJECT ARCHIVES	Intended final location of archive	Content				
Physical	The Museum in the Park, Stroud	ceramics, animal bone residues, lithics				
Paper	The Museum in the Park, Stroud	Context sheets, drawings, registers				
Digital	The Museum in the Park, Stroud	Database, digital photos, site survey, reports				
BIBLIOGRAPHY		• •				
CA (Catawald Archaeology) 2020 /	and at Ouedgeley East Haresfield Glo	ucostorshiro: Archaeological				

CA (Cotswold Archaeology) 2020 Land at Quedgeley East, Haresfield, Gloucestershire: Archaeological Excavation. CA report CR0297\_1 https://reports.cotswoldarchaeology.co.uk/







The site, looking north-west alongside Stonehouse Road



The site, looking south-east towards Haresfield, with the Cotswold uplands beyond



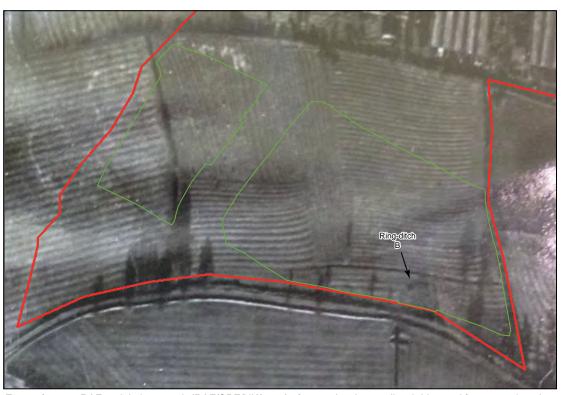
PROJECT TITLE

Land at Quedgeley East, Haresfield, Gloucestershire

## FIGURE TITLE Photographs

DRAWN BY RP
CHECKED BY DJB
APPROVED BY JH PROJECT NO. CR0297 DATE 07.05.21 SCALE@A4 N/A FIGURE NO.

3 & 4



Extract from an RAF aerial photograph (RAF/CPE/UK/2098) of 1947 showing medieval ridge and furrow earthworks and the crop mark of Ring-ditch B



PROJECT TITLE

Land at Quedgeley East, Haresfield, Gloucestershire

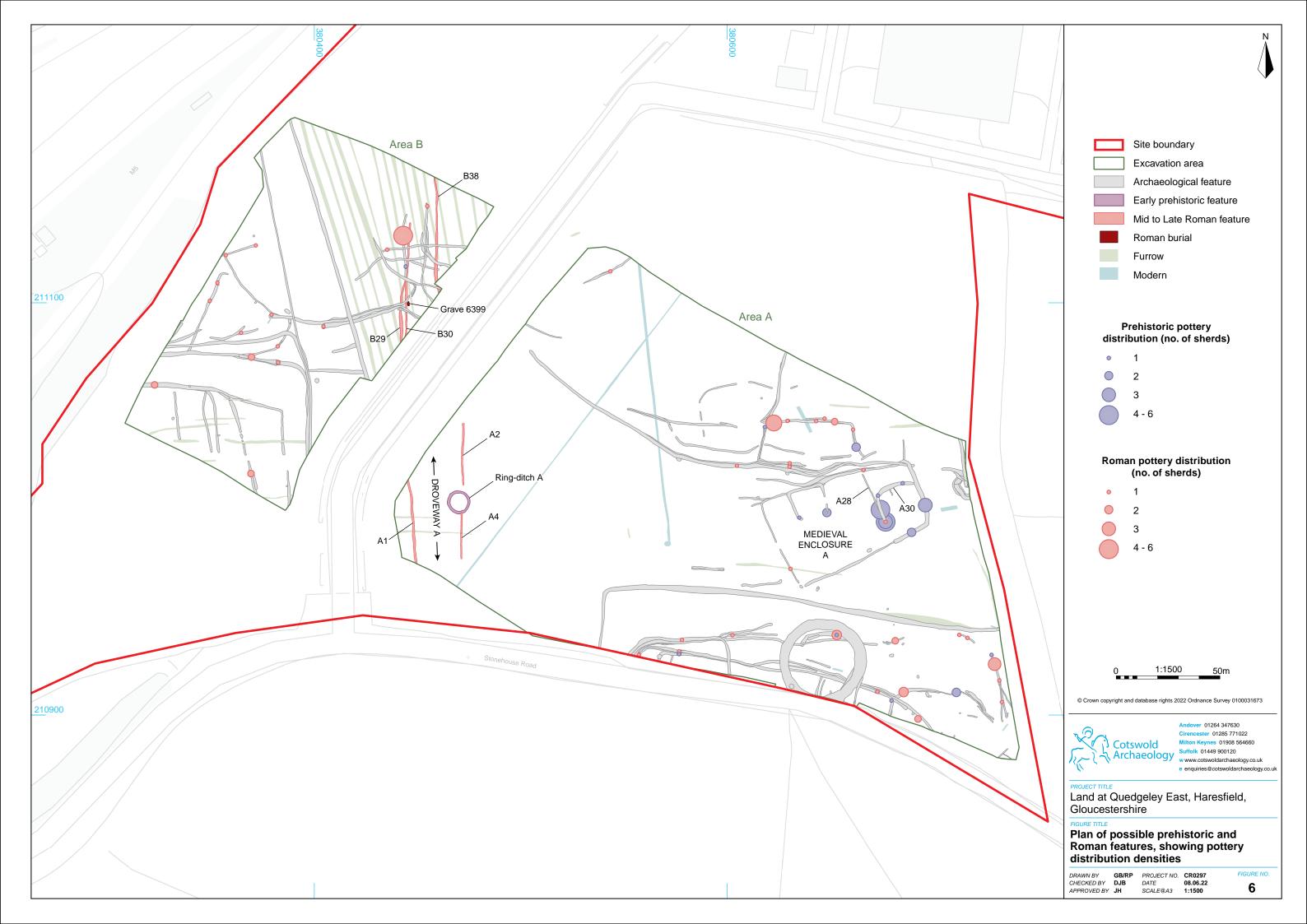
FIGURE TITLE

### **Aerial photograph**

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APPROVED BY JH 
 PROJECT NO.
 CR0297

 DATE
 07.05.21

 SCALE@A4
 N/A
 FIGURE NO.







Possible prehistoric Ring-ditch A, looking north (1m scales)



Roman skeleton SK6400 in grave 6399, looking west (1m scale)



PROJECT TITLE

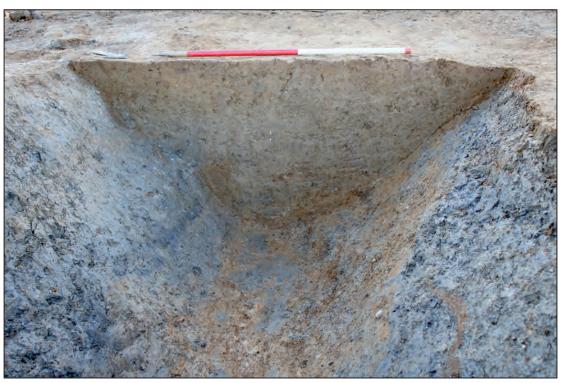
Land at Quedgeley East, Haresfield, Gloucestershire

## FIGURE TITLE Photographs

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APPROVED BY JH PROJECT NO. CR0297 DATE 07.05.21 SCALE@A4 N/A FIGURE NO.

7 & 8





Section through south-eastern corner of Period 3.1 Ditch A22 of Enclosure A, looking south-west (1m scale)



PROJECT TITLE

Land at Quedgeley East, Haresfield, Gloucestershire

# FIGURE TITLE Photograph

DRAWN BY RP
CHECKED BY DJB
APPROVED BY JH 
 PROJECT NO.
 CR0297

 DATE
 07.05.21

 SCALE@A4
 N/A
 FIGURE NO.





Dump of medieval pottery within Period 3.2 ditch B19, looking north-east (0.5m scale)



PROJECT TITLE

Land at Quedgeley East, Haresfield, Gloucestershire

# FIGURE TITLE Photograph

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APPROVED BY JH

 PROJECT NO.
 CR0297

 DATE
 07.05.21

 SCALE@A4
 N/A

FIGURE NO.



Dump of medieval pottery within Period 3.2 ditch B19, looking north-west (0.5m scale)



PROJECT TITLE

Land at Quedgeley East, Haresfield, Gloucestershire

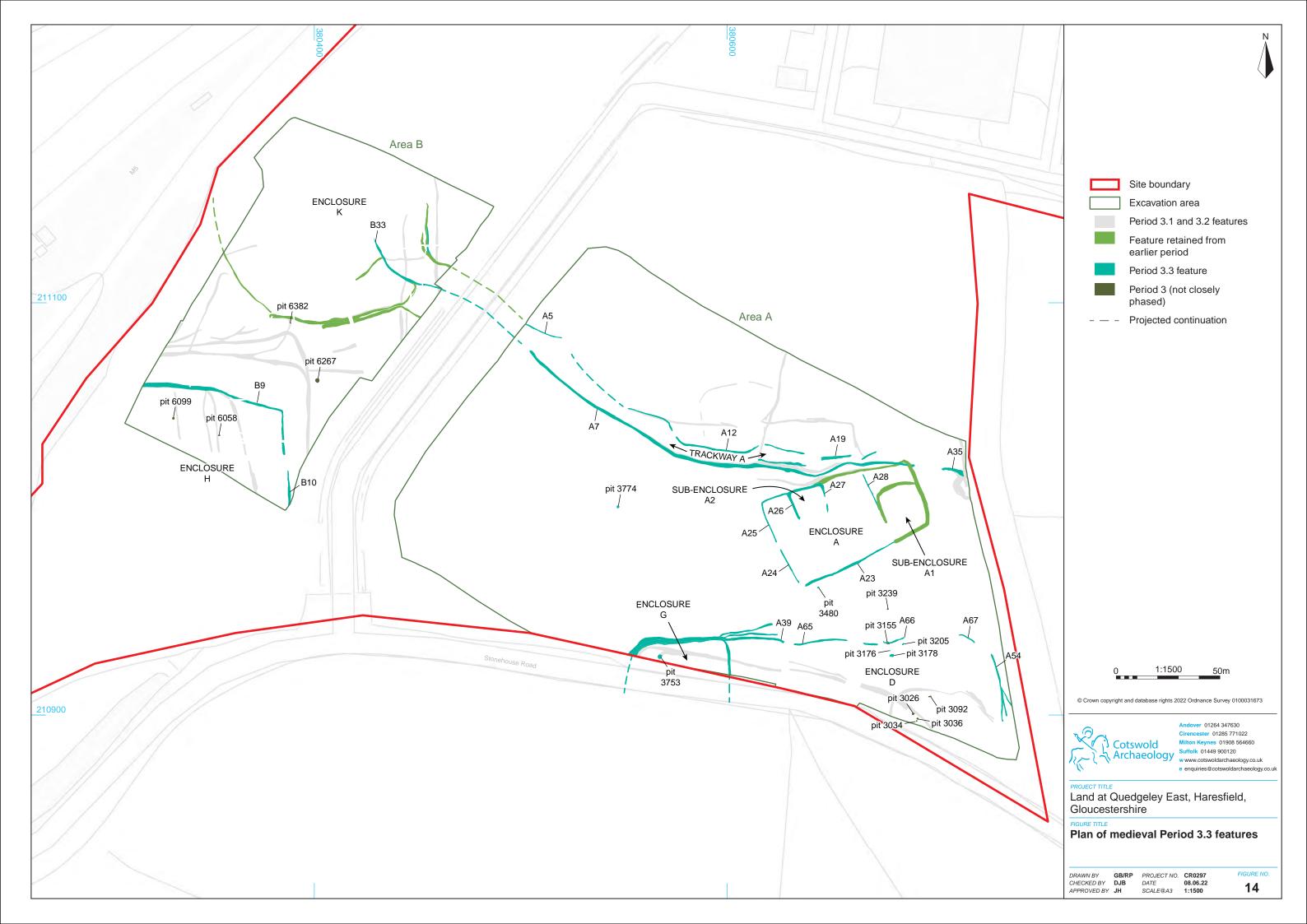
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 CR0297

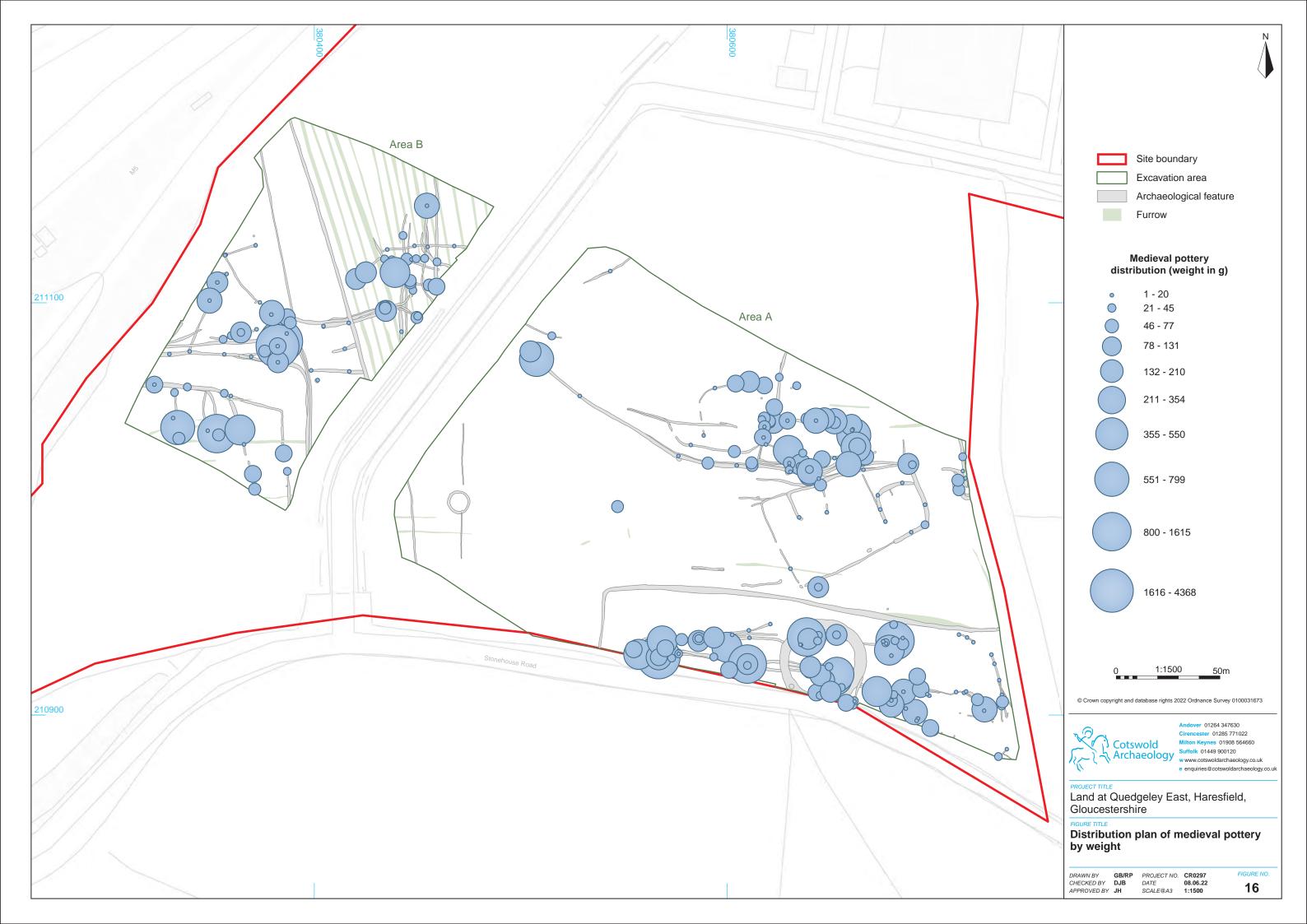
 DATE
 07.05.21

 SCALE@A4
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 FIGURE NO.

13















22



Period 4 Ring-ditch B following excavation, looking south-east towards Haresfield



Period 4 Ring-ditch B following excavation, looking south towards Stonehouse Road



ver 01264 347630 Cirencester 01285 771022 Milton Keynes 01908 564660 Suffolk 01449 900120 e enquiries@cotswoldarchaeology.co.uk

PROJECT TITLE

Land at Quedgeley East, Haresfield, Gloucestershire

# FIGURE TITLE Photographs

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APPROVED BY JH PROJECT NO. CR0297 DATE 19.05.21 SCALE@A4 N/A

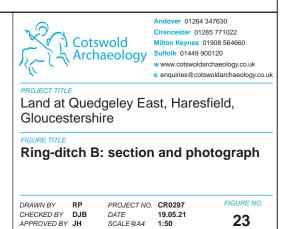
21 & 22

# Section AA S Ν 25.6m | AOD 4013 field drain 4012 4010 level of section step 4011 4017 4016 4014 4015 Monolith sample 1:50 2m

a) East facing section through Ring-ditch B (sondages 4010/4014), showing location of monolith samples



b) Recovering monolith samples from Ring-ditch B (sondages 4010/4014), looking north-west



23

25



Period 4 Ring-ditch B (sondage 4027) under excavation, looking west



Period 4 Ring-ditch B (sondage 4027) under excavation showing fill deposits and profile, looking south-west



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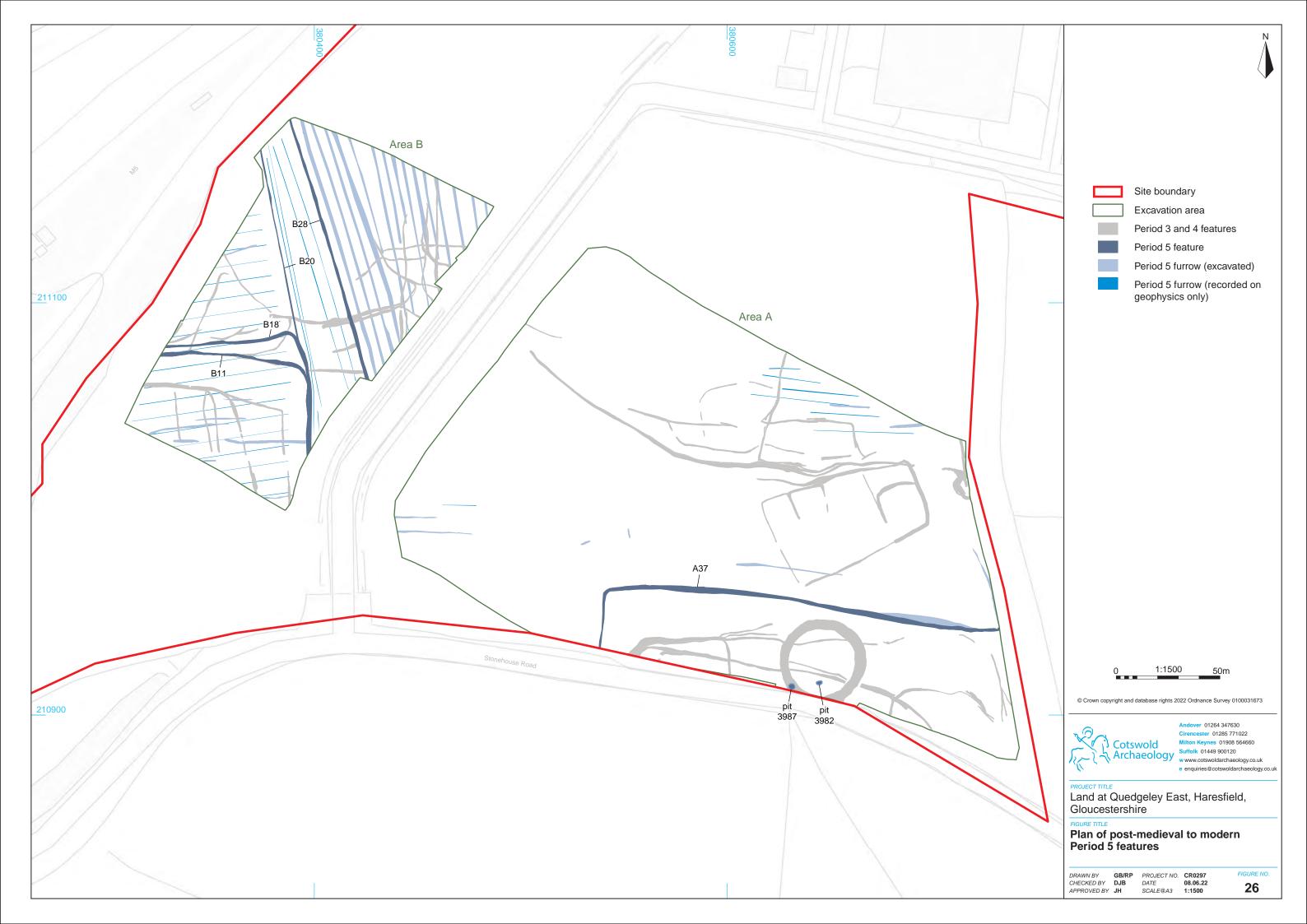
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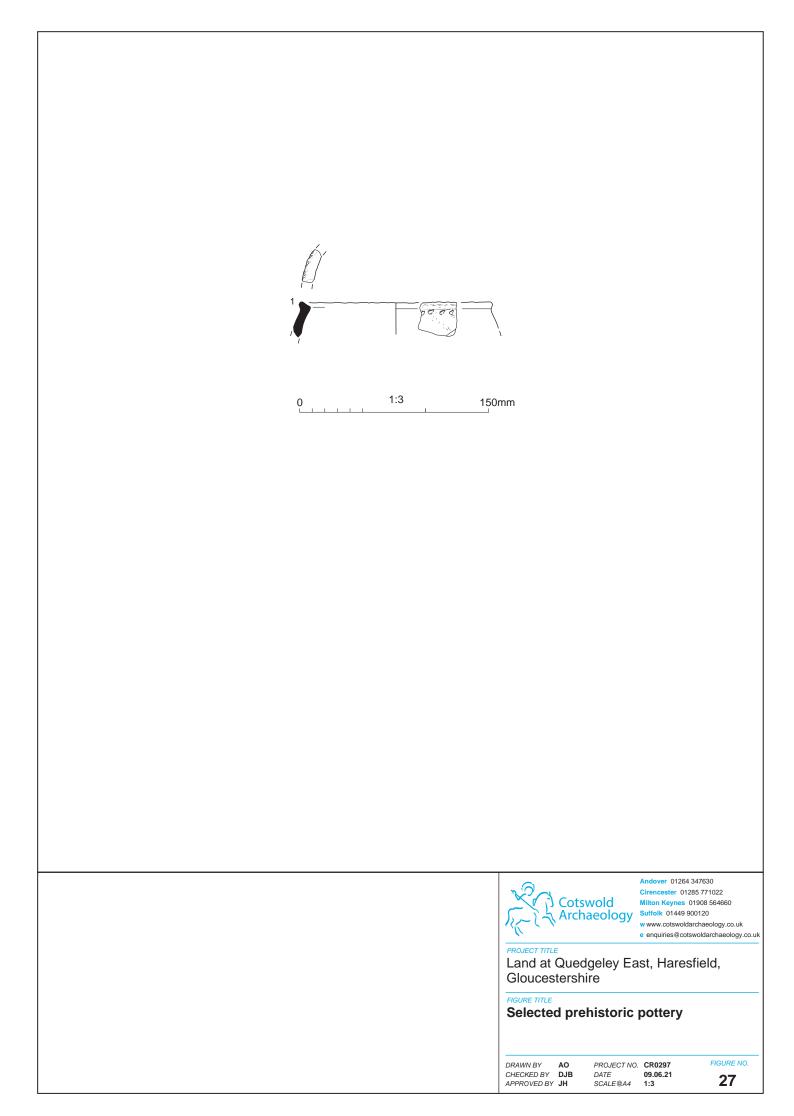
Land at Quedgeley East, Haresfield, Gloucestershire

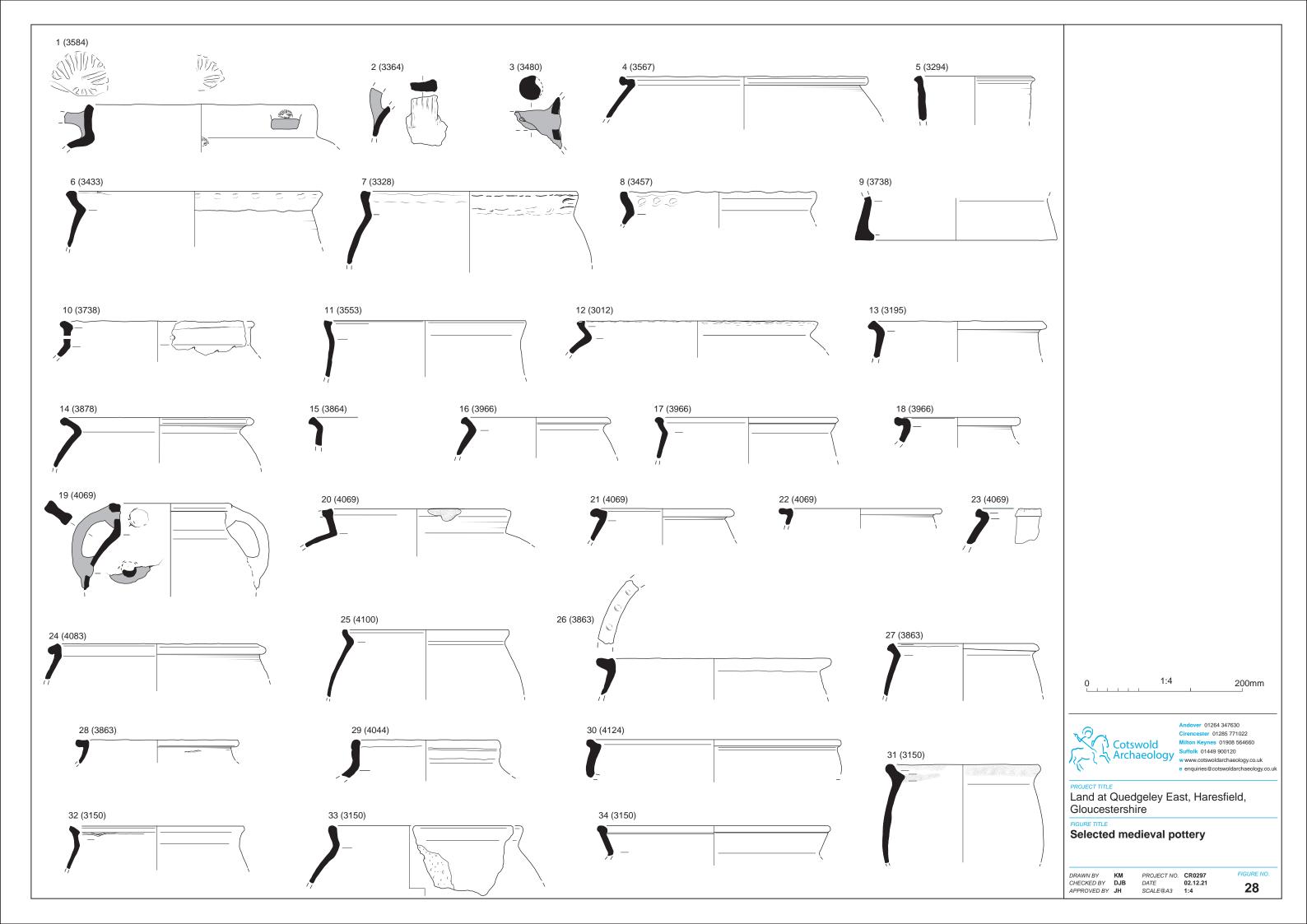
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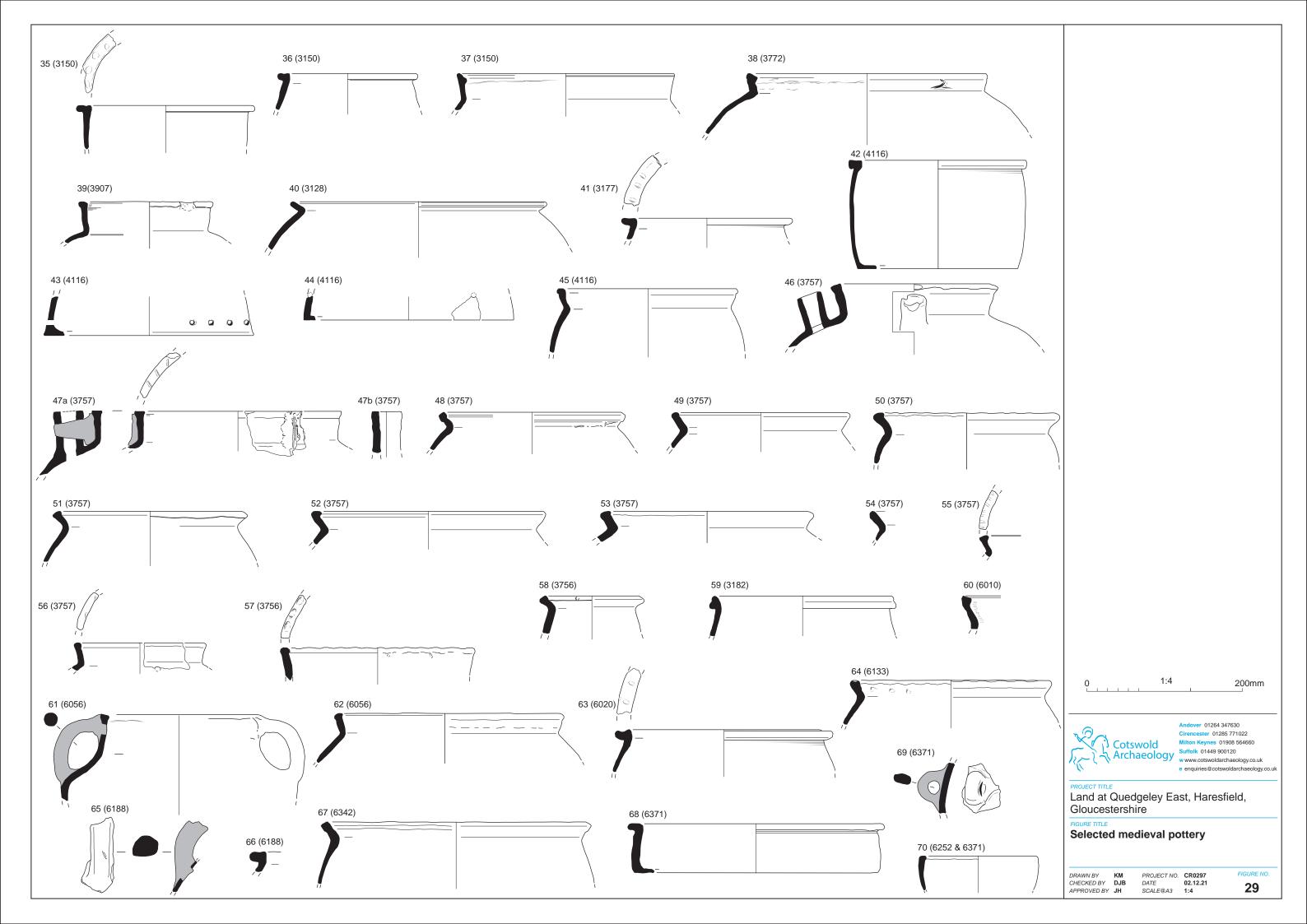
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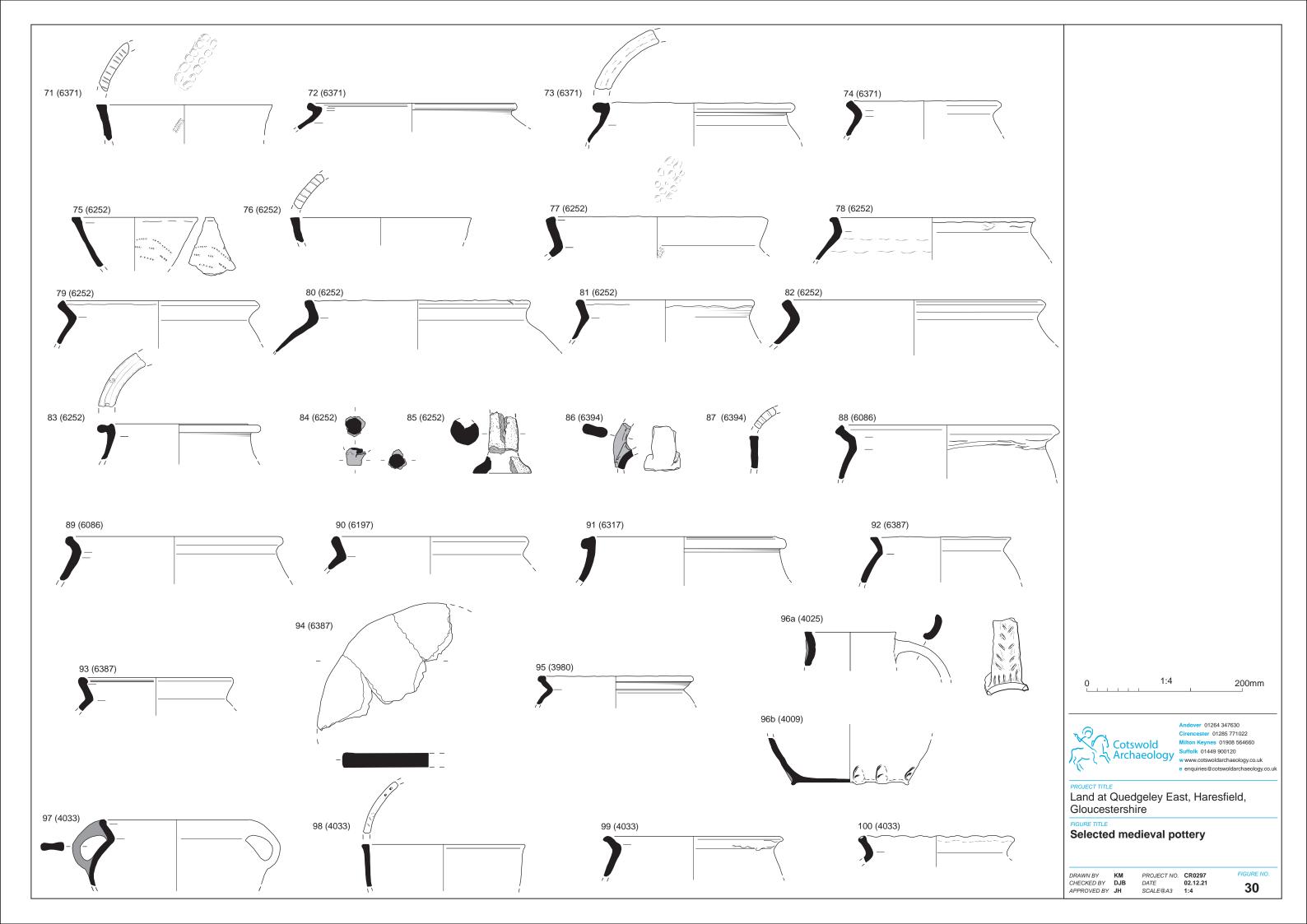
24 & 25

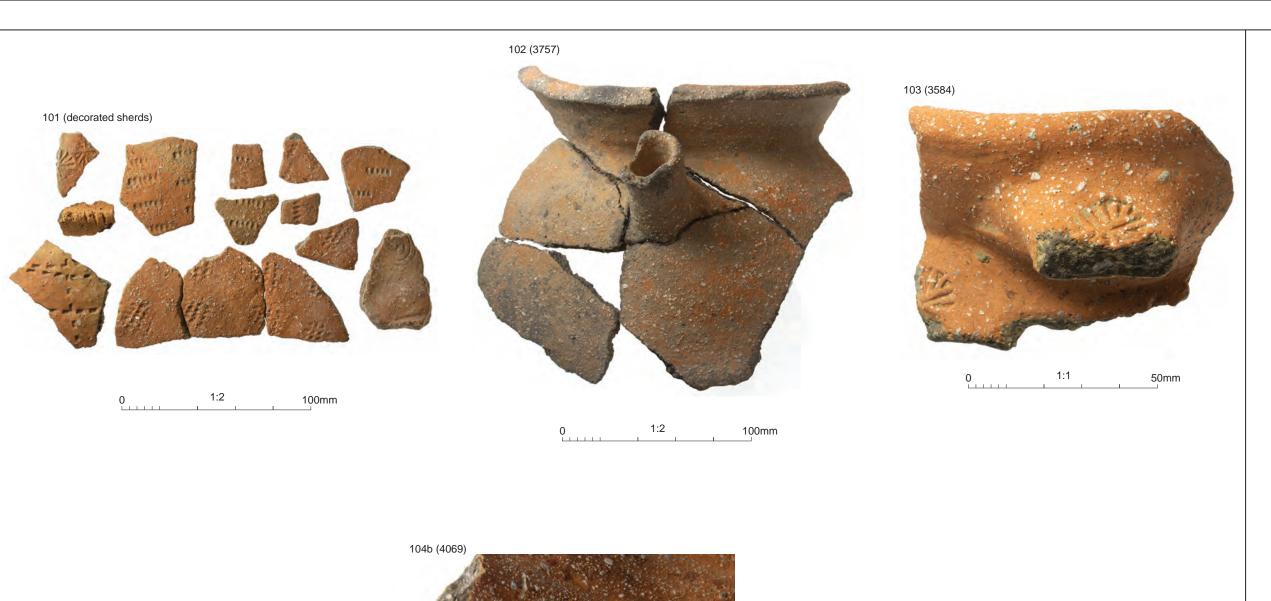


















0 1:2 100mm



Andover 01264 347630 Cirencester 01285 771022 Milton Keynes 01908 564660

Land at Quedgeley East, Haresfield, Gloucestershire

Selected medieval pottery: photographs

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CHECKED BY DJB
APPROVED BY JH PROJECT NO. CR0297 DATE 02.12.21 SCALE@A3 1:1 & 1:2

FIGURE NO. 31





Land at Quedgeley East, Haresfield, Gloucestershire

Selected medieval pottery: photographs

DRAWN BY KM
CHECKED BY DJB
APPROVED BY JH PROJECT NO. CR0297 DATE 02.12.21 SCALE@A3 1:1 & 1:2

FIGURE NO. 32



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