

Prehistoric and Roman remains at Beaulieu Park, Chelmsford.



Archaeological Evaluation Report



November 2011

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Prehistoric and Roman remains at Beaulieu Park, Chelmsford.

Archaeological Evaluation

By Jonathan House

*With contributions by Edward Biddulph BA MA MIFA, Chris Faine BA MSc BABAO,
Rachel Fosberry HNC AIFA, Steve Wadeson.*

Editors: Richard Mortimer MIFA

Illustrator: Steve Morgan Msc, Lucy Offord BA

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Checked by: Richard Mortimer
Position: Project Manager
Date:
Signed:



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Oxford Archaeology East,
15 Trafalgar Way,
Bar Hill,
Cambridge,
CB23 8SQ

t: 01223 850500
f: 01223 850599
e: oeast@thehumanjourney.net
w: <http://thehumanjourney.net/oeast>

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Summary

An Evaluation was carried out at Beaulieu Park, Chelmsford, Grid ref TL 73081 10779, the fieldwork took place from the 26/9/11 to 7/10/11.

A total of thirty seven trenches were excavated across four separate fields within the proposed development area. The evaluation showed a concentration of archaeological remains in the eastern part of the study area. These remains indicated settlement and/or industrial activities from the Late Bronze Age through to the end of the Roman period. Metal detecting of the plough soil revealed several early Roman coins and fragments of early Roman brooches within the main area of activity.

1 INTRODUCTION

1.1 Location and scope of work

- 1.1.1 An archaeological evaluation was conducted on fields to the west of General's Lane.
- 1.1.2 This archaeological evaluation was undertaken in accordance with a Brief issued by Richard Havis of Historic Environment Branch, Essex County Council, supplemented by a Specification prepared by OA East.
- 1.1.3 The work was designed to assist in defining the character and extent of any archaeological remains within the proposed redevelopment area, in accordance with the guidelines set out in *Planning Policy Statement 5: Planning for the Historic Environment* (Department for Communities and Local Government 2010). The results will enable decisions to be made by ECC, on behalf of the Local Planning Authority, with regard to the treatment of any archaeological remains found.
- 1.1.4 The site archive is currently held by OA East and will be deposited with the appropriate county stores in due course.

1.2 Geology and topography

- 1.2.1 The site is centred on NGR TL TL 73081 10779, approximately 4.5km to the north-east of Chelmsford, Essex. The route of the Chelmer river runs southwards to the west of the development area before turning to head eastwards to the south. The site is situated on a gradual rise from the shallow valley onto a wide ridge. Little variation was seen in the topography of the site, the highest point lay in the north western extremity of the area at 54.24m AOD, sloping away gradually to the south east to 49.36m AOD.
- 1.2.2 The superficial geology consists of Lowestoft Till, underlain by London clay. The glacial till lead in parts of the study areas of highly variable geology of clays, gravels and sands.

1.3 Archaeological and historical background

- 1.3.1 The following archaeological and historical background is drawn from Historic Environment Baseline Assessment Report, and summarises known archaeological remains both within the application site and also within a 1km study area around the development area.

Palaeolithic and Mesolithic (c. 500,000– 4,000 BC)

- 1.3.2 No remains of Palaeolithic (500, 000 – 10,000 BC) or Mesolithic (10,000 – 4,000 BC) date have been recorded within the study area.
- 1.3.3 The presence of palaeochannels to the east and south of the study area suggest that there may be some potential for the survival of early prehistoric and palaeo-environmental remains.
- 1.3.4 The nearest recorded Mesolithic activity to the study area comprises a pit containing Mesolithic remains excavated on Orchard Street in Chelmsford (approximately 4.8km to the south-west of the application site) and several pits containing Mesolithic flints excavated at Chignall St James. (5.2km to the west of the application site).

Neolithic (4,000 – 2,200 BC)

- 1.3.5 During the Neolithic, widespread deforestation for agriculture transformed the temperate deciduous woodland that covered large areas of the Essex landscape.
- 1.3.6 There are no archaeological remains of Neolithic date recorded within either the application site or the 1km study area. However, Neolithic remains are known in the wider Chelmsford area. To the south of the study area excavations prior to construction of the existing 'Lesser Beaulieu Park' development at Springfield revealed a small number of features, including a curvilinear ditch containing fragments of Neolithic pottery and a small assemblage of flint work. These ephemeral remains may represent evidence for a Neolithic settlement.
- 1.3.7 At Springfield Lyons, 2.5km to the south of the application site, a large cursus monument and oval barrow or mortuary enclosure is recorded and this is believed to represent a focus for social and ceremonial gatherings. The cursus was overlooked by a Neolithic causewayed camp situated on a gravel spur in a loop of the River Chelmer. This site, overlooking the Chelmer valley (Hunter, 1999: 46), would have had a prominent position in the landscape.

Bronze Age (2,200 – 700 BC)

- 1.3.8 No archaeological remains of Bronze Age date are recorded within the 1km study area, however the historic environment baseline assessment prepared for the Beaulieu Park Mixed Use Scheme (Scott Wilson 2007) identified a number of significant Bronze Age sites in the wider Chelmsford area.
- 1.3.9 Approximately 2.2km to the north-east of the application site, Early and Late Bronze Age features including a ring ditch or barrow and a small number of Late Bronze Age pits was recorded by excavations at Great Holts Farm. To the east of the application site, archaeological investigations at Boreham airfield have also recorded evidence for Bronze Age settlement in the form of ditches and gullies, pits and post holes, from which fragments of two probable cylindrical loom weights and an urned cremation were recovered, all of which suggests possible domestic occupation.
- 1.3.10 Late Bronze Age pottery has been recovered from residual contexts during excavations carried out at Bulls Lodge Farm Dairy to the east of the site. At Springfield Lyons, c. 2.5km to the south-west of the application site, occupation of the site of the Neolithic causewayed camp continued through the Bronze Age in the form of a circular enclosure. Evidence of Early Bronze Age settlement, comprising pits containing a small amount of pottery and flint artefacts including barbed and tanged arrowheads, scrapers and waste flakes (Buckley & Hedges 1987) was also recorded. A Late Bronze Age enclosure containing at least three roundhouses and other structures has also been excavated at the site. Late Bronze Age artefacts recovered included pottery, perforated clay 'slabs', worked flint and an important collection of clay metal working moulds. To the south of New Hall school a small assemblage of worked and burnt flint was recorded during archaeological investigations.

Iron Age (700 BC – AD 43)

- 1.3.11 The regional resource assessment (East Anglian Archaeology 1997) has identified extensive evidence for Iron Age arable and pastoral landscapes on the gravel terraces of the Chelmer and Blackwater valleys with settlement expanding onto the plateau by the Late Iron Age.

- 1.3.12 No archaeological remains of Iron Age date are recorded within the application site, however, evidence for Iron Age occupation has been identified at two sites within the 1km study area during archaeological investigations undertaken to inform the Beaulieu Park Mixed Use Scheme Environmental Statement.
- 1.3.13 To the south of the application site evidence for Middle and Late Iron Age settlement was identified. The evidence for Middle Iron Age occupation was limited to residual material found in later features but does suggest that a settlement of Middle Iron Age date may have existed nearby as a precursor to the later settlement. The Late Iron Age settlement comprised three large enclosures surrounded by ditches, two with evidence that they were accompanied by external banks; and one re-cut during the Early Roman period. Smaller ditches, gullies, a pit and a small area of gravel surfacing were also identified. The excavated evidence suggests that rural settlement activity originated in the Middle Iron Age, with continuity throughout the Late Iron Age and into the Early Roman period.
- 1.3.14 At the extreme western edge of the 1km study area geophysical survey and a subsequent archaeological trial trench evaluation identified a large Late Prehistoric ditch. The upper fills of the ditch contained a high density of late prehistoric finds including Late Iron Age grog tempered pottery (ECC FAU 2009, p. 15). The ditch may represent part of a late prehistoric enclosure associated with nearby settlement.
- 1.3.15 In the wider area north-east of Chelmsford the historic environment baseline assessment prepared for the Beaulieu Park Mixed Use Scheme identified a number of Iron Age occupation sites. A settlement has been excavated at Little Waltham approximately 2.2km to the north-east of the application site, and Iron Age activity has also been documented within the study area at Bulls Lodge Farm and Boreham Airfield.

Roman (AD 43 to 410)

- 1.3.16 During the Roman period the site would have lain within the agricultural hinterland of the Roman market town of *Caesaromagus* located in the Moulsham area of Chelmsford approximately 5km to the south-west. *Caesaromagus* lay approximately half way along the route of the London to Colchester Roman Road, which is largely shadowed by the modern B1137 to the south of the application site.
- 1.3.17 Evidence for Romano-British activity within the study area has been recorded to the south of the application site during archaeological investigations to support the Beaulieu Park Mixed Use Scheme Environmental Statement. Geophysical survey identified a number of boundary and field ditches which were confirmed by trial trench evaluation as being of early Romano-British date. The ditches appear to follow a co-axial alignment approximately north-north-east and south-south-west. A large amount of pottery dating from the mid 1st to 2nd century was recovered from the ditches suggesting domestic occupation, although no clear settlement focus was identified within the trenches (ECC FAU 2009).
- 1.3.18 Beyond the 1km study area, evidence for Roman occupation within the rural hinterland of *Caesaromagus* includes the remains of a Roman villa complex, Great Holts Farm, approximately 2.3km to the north-east of the application site. The villa complex was situated within a square compound linked to a structured network of fields by a ditched trackway (EHER Refs. 6048; 18646; 14127; 14128 and 14129).
- 1.3.19 A second significant complex of Roman buildings has been excavated to the south-east of the application site at the Bulls Lodge Farm Dairy. Two buildings with substantial masonry foundations (one, an aisled hall with an apsidal west end) dating to the late

3rd or early 4th century were investigated following the discovery of a large concentration of Roman domestic debris including Roman brick and tile (EHER Ref. 18648). The building with an apsidal end has been interpreted as a *principia* (administrative building) or possibly a religious building.

Anglo-Saxon (AD 410 to 1066)

- 1.3.20 In the immediate post-Roman period, the Roman town at Chelmsford was abandoned and much of the surrounding landscape reverted to rough pasture or woodland (Hunter, 2003). No known remains of Anglo-Saxon date are recorded within the application site although this is more likely to reflect the relatively poor archaeological visibility of Anglo-Saxon settlement sites rather than a lack of activity during the period.
- 1.3.21 Two records dating to the Anglo-Saxon period are held by the EHER; both of which are documentary records for Late Saxon manors. The earliest record (c.AD1062) is for a manor in the vicinity of New Hall. A second manor, Belestedam (Belstead Hall) is recorded in the Domesday survey of AD1086 to the south-west of the application site (P.H Reaney 1935).
- 1.3.22 To the south-east of the 1km study area, evidence for several phases of Saxon rural settlement spanning the 10th to 12th centuries have been recorded at Springfield Lyons. The settlement has been interpreted as a farmstead with outbuildings and an associated cemetery. One building may have had a religious function and as such has been interpreted as a church (Tyler & Major 2005).

Medieval (AD1066 to 1540)

- 1.3.23 The medieval town of Chelmsford was founded to the north of the earlier Roman settlement at Moulsham at the end of the 12th century, by the Bishop of London. Throughout the medieval period the application site was located within the rural hinterland of Chelmsford in a landscape populated by scattered farmsteads and manors.
- 1.3.24 There are no remains of medieval date recorded within the red line boundary of the application site and this is probably the result of relatively restricted development of the landscape whilst it formed part of the medieval deer park.
- 1.3.25 To the south of the application site lay the manor of New Hall on the site of the current New Hall School. It is first mentioned by name (as 'Nova Aula') in documents dating to AD1301 when the site formed part of the lands owned by the Canons of Waltham Abbey and was used as the summer residence of the Abbott. It was later transferred to the Regular Canons under Henry II (Burgess & Rance, 1988).
- 1.3.26 The first deer park surrounding New Hall was created during the medieval period with the manor at its centre (Tuckwell, 2006). Under Henry VII, New Hall was granted to Thomas Boteler, Earl of Ormond, who received a licence to crenellate (fortify) it in AD1481 (E41/420) and who, in all likelihood, rebuilt or remodelled the original medieval hall in the latest architectural style. The new structure came to the attention of Henry VIII who visited New Hall in 1510 and 1515, shortly before Ormond's death. Subsequently, the property passed to Thomas' daughter and thus into the Boleyn family through her husband Sir Thomas Boleyn, from whom Henry VIII acquired the hall in 1516, changing its name to the 'Palace of Beaulieu'. Shortly after 1518 he rebuilt the Ormond's medieval hall on a quadrangular plan with gatehouse in the south range, great hall in the east and chapel in the west ranges.

- 1.3.27 Mary Tudor took residency at New Hall intermittently between 1532 and her ascendancy to the crown in 1553.
- 1.3.28 The moated manor at Belstead Hall continued to be occupied throughout the medieval period. By 1325 it was called Belestede, in 1354 it was recorded as Belestede Hall and by 1504 it was known as Belested Hall. The name is thought to derive from 'the site of the bell house' (P.H Reaney 1935).
- 1.3.29 Evidence for medieval occupation within the wider study area was recorded within the area in the Beaulieu Park Mixed Use Scheme Environmental Statement. Analysis of aerial photographs and geophysical survey identified a number of features which, when investigated by trial trench evaluation, were found to comprise a possible enclosure ditch or moat. A cobbled surface (possibly representing a house platform or yard surface), pit and several further ditches were recorded within the enclosure. Pottery recovered from the features suggests an occupation date of the 12-13th century (ECC FAU 2009). These remains have been interpreted as a medieval farmstead or manor, possibly the precursor to the later manorial site at Belstead Hall c.160m to the north east of Site 7.
- 1.3.30 Elsewhere within the study area, geophysical survey identified a large anomaly (possibly a pond) and several linear features forming an enclosure on the line of the later post-medieval deer park pale immediately south of the application site. The area designated as Site 10 was evaluated by trial trenching, revealing at least one medieval building, and its Tudor replacement. The building appears to have been constructed within a ditched enclosure, also of medieval origin. Several medieval pits and gravel floor surfaces were excavated and these yielded pottery dating from the 10th to 14th century and other finds including bone, shell, tile and brick fragments (ECC FAU 2009, p. 21).
- 1.3.31 The archaeological surveys undertaken to inform the historic environment baseline assessment for the Beaulieu Park Mixed Use Scheme identified several other assets which date to the medieval period. The VSA identified a hedge laid on an earthen bank with associated ditch to the south of the application site. This boundary is likely to have formed part of the deer park pale.
- 1.3.32 To the south-west of the application site analysis of Lidar survey data identified a set of four ditches representing the remains of former field boundaries. Several of the ditches appeared to cross each other following north to south and east to west alignments.

Post-medieval (AD 1540 to 1901)

- 1.3.33 The development of New Hall and its deer park dominated the landscape of the application site and the surrounding area until the park contracted in size and the fields were enclosed for agriculture in early 18th century. As the deer park was reduced in size the former medieval manors or lodges developed into farms, creating an essentially agricultural landscape.
- 1.3.34 As noted above, since the medieval period, New Hall had been set within the largest deer park in Essex; once totalling approximately 1,500 acres. The EHER records that the empaled area actually comprised four separate parks surrounding New Hall and its gardens. The application site is located within the Great or Old Park located to the north of New Hall. The remaining parks were known as the Red Deer Park located to east of New Hall, the Dukes Park (located further east beyond the study area; EHER 47226) and the New or Little Park situated to the south and west of New Hall.

- 1.3.35 Within the application site are three assets which are attributed to the post-medieval period.
- 1.3.36 The first is a pond located within a small wooded copse in the south-east corner of the application site which was identified during a site walkover survey. The pond either represents a landscape feature of the early post-medieval deer park or a later agricultural feature, possibly for the watering of deer or livestock.
- 1.3.37 The second asset, a hedge and bank, was identified during previous assessment and confirmed by the site walkover. The hedge bank forms the surviving section of one of the 18th park pales, constructed for the smaller post-medieval deer park, possibly that depicted on Chapman and Andre's map of 1777.
- 1.3.38 The western boundary of the application site comprises the third asset. This boundary is formed by a dense and well-established hedgerow containing several mature oak trees. This hedgerow is thought to represent one of the post-medieval park pales dating to the 17th century although this is as yet unconfirmed.
- 1.3.39 Further evidence for the layout of the post-medieval deer park has been recorded during trial trench evaluation immediately south of the application site (ECC FAU, 2009). Here the remains of a possible medieval park lodge was superseded by a Tudor building constructed within the same ditched enclosure. Evidence for this structure comprised a series of compacted clay floor surfaces associated with a hearth. The floors and hearth partially overlay a large 16th century pit. The enclosure ditch began to be infilled with domestic refuse during the Tudor period, numerous artefacts were recovered including significant quantities of Tudor pottery, oyster shell, brick, tile, animal bone, baked clay, window glass and lead window comes. An iron rowel spur, iron knife blade, and horseshoe fragment were also recovered from the site (ECC FAU, 2009).
- 1.3.40 The trial trench evaluation also excavated several large linear features, possibly extraction pits that post-dated the occupation features. This appears to suggest that the lodge went out of use when the deer park was remodelled in the late 17th century to create a smaller park. The existing hedge line is suggested as being the boundary of that smaller deer park.
- 1.3.41 A geophysical survey of the field to the west of Old Lodge Farm identified post-medieval remains possibly associated with the deer park. These comprised a large anomaly of possible archaeological origin was visible within the enclosure formed by an extant ditch/moat.
- 1.3.42 The area was subsequently investigated by trial trenching which revealed a gravel surface, dated to the post-medieval period, interpreted as part of a track or yard, and an undated gully.
- 1.3.43 Earthworks extending northwards from the possible ditch/moated site may represent a pattern of small fields or deer park enclosures. These features are clearly visible as surviving earthworks and are likely to relate to the later medieval or early post-medieval deer park.
- 1.3.44 Further evidence for the layout of the post-medieval landscape was recorded during the trial trench evaluation for the Beaulieu Park Mixed Use Scheme. This evidence comprised several boundary ditches and a number of circular pits from which post-medieval clay pipe, tile, brick and glass fragments were recovered.
- 1.3.45 In the wider study area further evidence for post-medieval occupation and land-use has been recorded with New Hall always being the dominant residence. Queen Elizabeth I

granted the manor to Sir Thomas Ratcliffe, Earl of Sussex in 1572, who immediately started to restore the Hall (Colvin 1982). His death in 1583 halted building works, and left New Hall an incomplete but extensive residence (T/Z 13/98).

- 1.3.46 Over the next 150 years New Hall had a number of owners, and slowly fell into disrepair. In 1622 the manor was sold by the Ratcliffes to George Villiers, Duke of Buckingham, whose son fought for the Royalists cause. Following the defeat of Charles I the Buckingham estates were surrendered to Parliament and New Hall was sold to Oliver Cromwell. Cromwell probably never lived at New Hall and in 1653 he exchanged it for Hampton Court Palace, a more suitable residence for the Lord Protector (Scott Wilson 2007).
- 1.3.47 In 1713 the New Hall estate was sold to Sir Richard Hoare, who had to wait until the death of the resident widow of George Monck in 1734 to take possession. In the intervening years Hoare built a new residence to the south of New Hall at Boreham Hall. His new house was embellished with materials taken from New Hall, leaving the old house vacant and ruinous.
- 1.3.48 A year later the hall was sold to John Olminus, who restored New Hall to create a suitable residence. His remodelling involved the demolition of a large part of the building, including the gatehouse, chapel and great hall, while retaining and restoring the north range to create a fashionable range of apartments (Scott Wilson 2007).
- 1.3.49 In 1799 the estate was purchased by Michael McEvoy who gifted the hall to the Convent of the Holy Sepulchre. The EHER records several archaeological assets associated with New Hall. Archaeological trial trench evaluation in advance of construction of a new classroom block revealed a pit and path of post-medieval date, although no remains associated with the Tudor 'palace' or medieval manor were identified. The earliest feature recorded was a pit dated to the 17th century. In the centre of the trench the base of a substantial path was recorded. The path was constructed from reused Tudor bricks and was sealed by a compact clayey gravel layer. The re-use of Tudor bricks suggests the path was of mid 18th-century date and was in use after the demolition of much of the Tudor building complex in 1737. Two parallel features were observed cutting the base of the path and were interpreted as planting pits or robbed out structures.
- 1.3.50 To the east of the application site structural remains thought to form part of the former water supply system to New Hall have been recorded. The structure is described as a well, partially constructed from Tudor bricks and measuring 2.5m square.
- 1.3.51 Alongside the development of the house, the gardens and park of New Hall have similarly undergone a number of changes. The formal Tudor gardens, designed in conjunction with the Henry VIII's palace, comprised an enclosed area, a banqueting house, a private walled garden, a green in front of the house and empaled parkland (Bisgrove 1992). The Duke of Buckingham 'beautified' the park and gardens, employing the Tradescants to import many plants and trees, including limes for the avenue. James I gifted 1000 oaks to improve the park and a further 500 oaks were gifted by Charles I. In c.1760 the gardens were restyled for John Olmius.

Modern (AD 1901 to Present)

- 1.3.52 During the modern period the agricultural landscape of the study area has undergone limited new development, with only a single feature, a 'removed' hedgerow, recorded to the south-east of the application site.

- 1.3.53 Beyond the study area to the north-east, is the site of the Second World War Boreham Airfield, which was opened in 1944 and closed in 1945. The airfield was used by the United States Strategic Air Force 394th Bomber Group and the 9th United States Army Air Force's 315th Troop Carrier Group. The airfield had the standard pattern of three concrete and tarmac runways, with 50 "spectacle" shaped hard standings and two T-2 aircraft hangars. The airfield's presence meant that the surrounding area was subject to numerous bombing raids from enemy aircraft and one such raid damaged New Hall.
- 1.3.54 Further changes to the rural landscape have been brought about by mineral extraction, including Boreham Airfield/Bull Lodge quarry to the north and east of the 1km study area, and the urban expansion of Chelmsford's Springfield suburb.

1.4 Acknowledgements

- 1.4.1 The author would like thank Annie Calder of URS Scott Wilson and Countryside Zest who respectively commissioned and funded the archaeological work. Iain Williamson of URS Scott Wilson monitored the evaluation and provided background information. The project was managed by Richard Mortimer and the illustrator was Steve Morgan. Jon House directed and supervised the fieldwork with the assistance of Kate Clover, Michael Webster, and Thomas Lyons. The project was monitored by Richard Havis of Essex County Council. The machining was undertaken by Nick Richardson of LOC Ltd, who also provided assistance with the metal detector survey.

2 AIMS AND METHODOLOGY

2.1 Aims

- 2.1.1 The objective of this evaluation was to determine as far as reasonably possible the presence/absence, location, nature, extent, date, quality, condition and significance of any surviving archaeological deposits within the development area.

2.2 Methodology

- 2.2.1 The Brief required that all archaeological deposits should be investigated, and recorded.
- 2.2.2 Machine excavation was carried out under constant archaeological supervision with a tracked 360 excavator using a 2.5m wide toothless ditching bucket.
- 2.2.3 The site survey was carried out by Rachel Clarke using a Leica GPS.
- 2.2.4 Spoil, trench locations and features were scanned with a metal detector. All metal-detected and hand-collected finds were retained for inspection, other than those which were obviously modern.
- 2.2.5 All archaeological features and deposits were recorded using OA East's *pro-forma* sheets. Trench locations, plans and sections were recorded at appropriate scales and colour and monochrome photographs were taken of all relevant features and deposits.
- 2.2.6 A total of 8 samples were taken, from deposits considered most appropriate for environmental sampling, while also considering feature type and period.
- 2.2.7 Site conditions were extremely dry, making hand excavation and finds retrieval very difficult. Machine movements were limited so as to prevent crop damage, this did not affect trench excavation. Trench excavations were however limited in particular within Field 4, due to field set aside and overhead power lines. Trenches were adjusted and where appropriate shortened, measures were taken to maintain sample size.

3 RESULTS

3.1 Introduction

3.1.1 The trenches are described below in numeric order within their respective fields.

3.2 Field 1

3.2.1 Five trenches (29 - 33) were excavated in Field 1. A very thin sub-soil, less than 0.05m thick was recorded underlying a top soil deposit measuring approximately 0.35m thick.

Trench 30

3.2.2 A single undated pit (4) was recorded within this trench.

Trench 31

3.2.3 Two features were identified in Trench 31. These comprised, a shallow ditch (8), measuring 1.4m in width and 0.22m in depth and a small posthole (6) whose single fill contained evidence for burning in the form of charcoal.

Trench 32

3.2.4 A total of four features were recorded within this trench. Ditch 12 entered the southern part of the trench on a north to south alignment and terminated within the trench. Towards the northern limit of the trench, a possible pit or ditch (10) was recorded. Feature 10 was only partially exposed within the trench but a relatively large assemblage of early Roman pottery was recovered from its fill (9).

Trench 33

3.2.5 A relatively high density of features were recorded in Trench 33 and many of these were found to date to the Roman period. There was however some evidence for prehistoric activity in the form of ditch 18 (Plate 2). Ditch 18 terminated within the trench and was 0.3m wide by 0.24m deep, it was filled by a very dark greyish brown, silty clay deposit (17) that contained burnt material and Middle Iron Age pottery (App. B1).

3.2.6 At the western end of the trench a small ditch (26) was recorded on a northwest to southeast alignment. Ditch 26 measured 0.45m in width and 0.13m in depth, and contained a mid grey brown silty clay fill. To the east, a small gully (24) was recorded that entered the trench from its northern side and terminated less than 1m to the south, it measured 0.35m in width and 0.15m in depth, and contained a mid yellowish brown silty clay fill. Two small post holes (22 & 20) a further post hole (30) and two pits (28 & 29) were also recorded.

3.2.7 Two large ditches (14 & 16) were recorded on the same north-northeast to south-southwest alignment in the eastern half of the trench. Ditch 16 was 1.75m wide with a mid yellowish brown silty clay fill. A linear arrangement of Ceramic Building Material (CBM) and worked masonry was recorded at a depth of 0.1m. The function of this material was unclear and excavation was stopped at this level. The second ditch (14) (fig. 6, section 21) was 3m wide and 1.33m in depth, although it should be noted that the exceptionally dry ground conditions meant that the edges were very uncertain. Ditch 14 contained 3 fills, (13, 81 & 82). The tertiary fill (13) contained Roman pottery dating to the 3rd and 4th centuries, the earliest datable fill containing 1st century pottery (App. B1).

- 3.2.8 An early Roman coin (SF No 9.) and fragments of a Roman glass vessel (SF No.10) were also recovered from the primary fill (82) of ditch **14**. Seven Roman coins were recovered by metal detecting of the topsoil around trenches 32 and 33, these included a copper alloy sestertius of Antoninus Pius. (138-161) (App B3).

3.3 Field 2

- 3.3.1 Four trenches (34 to 37) were excavated in Field 2. As with Field 1, a very thin sub-soil layer, approximately 0.08m thick, was recorded. The top soil deposit measured approximately 0.26m in thickness.

Trench 34

- 3.3.2 A total of nine features were recorded in Trench 34. These included a group of four post holes (**45**, **48**, **52** & **53**) identified close to the centre of the trench. These measured between 0.45m to 0.5m in width and 0.28 to 0.4m in depth (Fig. 7, section 14). Two of the postholes were excavated (**45** & **48**) and pottery dating to the Late Bronze Age (App. B1) was recovered from posthole **45**. Large quantities of charcoal were recorded within the fills of this group .
- 3.3.3 At the north-western end of the trench a further post hole (**39**) and possible linear feature or post hole (**41**) were recorded. No finds were recovered from either of these features but the composition of their fills was very similar to that of the post hole group, which may suggest a broadly contemporary date. A pit of probable Roman date was observed at the very end of the trench, this feature was not excavated as it was only partially uncovered.
- 3.3.4 A narrow curvilinear ditch (**51**) was investigated within the trench (fig. 7, section 15). It was distinguishable only by the presence of brick fragments lying within its fill, these inclusions were not arranged in any discernible order and date to between the 16th to 18th centuries (App. B2).
- 3.3.5 A large feature (**43**) was recorded that extended across much of the north-western part of the trench. It measured 18m in width and a machine slot was excavated through it to a depth of 1.4m. It was not clear whether this feature was man-made or a natural depression, however post-medieval CBM was recovered from its fill and it seems likely that it, or at least its infilling, was post- medieval in date. A similar feature was excavated and recorded in Trench 15, Field 3.

Trench 35

- 3.3.6 Six features were recorded in Trench 35. Ditch **50** lay at the west end of the trench. It was very similar in size to ditch **51**, described above, but was straight in plan, rather than curvilinear and aligned northwest to southeast. A large amorphous pit or ditch (**31**) was also recorded. It was no more than 0.17m deep with diffuse edges.
- 3.3.7 Two undated features were excavated, their fills comprised light yellowish brown deposits, with a high frequency of manganese inclusions and they are thought to represent tree throws Two further narrow linear features also excavated within this trench which had very similar fills and these too are interpreted as natural, geological variations in the underlying natural subsoil.

Trench 36

- 3.3.8 A single ditch (**35**) and a pit were recorded within this trench. Ditch **35** was aligned north to south and a total of 9m were exposed within the trench. Two sections were

excavated through the ditch, revealing it to be 0.7m wide by 0.25m deep with a light reddish, grey-brown, silty clay fill from which no finds were recovered. Pit **37** measured 0.35m wide, and 0.18m in depth and contained a light reddish brown, silty clay fill, no finds were recovered from the feature.

Trench 37

- 3.3.9 Two ditches were recorded in Trench 37, one of which was aligned north to south, the other northeast to southwest. The natural deposits in the base of the trench were very mixed and as a result, upon excavation a number of other potential features were revealed to be no more than geological variations (fig 4). The diffuse nature of the deposits made distinguishing between archaeological and natural features problematic throughout the trenches within Field 2, and this situation was exacerbated by the very dry conditions.

3.4 Field 3

- 3.4.1 Trenches 15 to 28 were located in Field 3. A thin sub-soil, measuring between 0.05m and 0.12m was recorded throughout the field. This was overlain by a top soil layer that measured between 0.25m to 0.32m.

Trench 15

- 3.4.2 Trench 15 was extended into a T-shape in order to investigate a large depression located in the southwest corner of the field, whose deepest point was located to the northwest of Trench 15. A machine slot was excavated through this anomaly and the light yellowish brown, silty clays deposits recorded infilling it were found to contain brick fragments. This feature is likely to be a natural depression, in-filled as a result of agricultural activity, and resembles feature 43 recorded in Trench 34.

Trench 16

- 3.4.3 This trench was also extended, this time into an L-shape, to incorporate a crop mark observed from Google Earth. Upon investigation it was determined that this feature was most likely a natural anomaly derived from a seam of gravels within the clay geology and of no archaeological significance.

Trench 20

- 3.4.4 Two small post holes were recorded in the central part of Trench 20, both contained a high frequency of charcoal inclusions. Further to the southeast, a north to south aligned ditch was recorded that continued into Trench 21. There, a 1m slot was excavated in the ditch (**73**).

Trench 21

- 3.4.5 A relatively high frequency of archaeological features were recorded in Trench 21. Not all the features within the trench were excavated, however surface finds were recovered and two of the features (**75 & 77**) were dated in this way. Gully **75** contained pottery dated to the Middle Iron Age, whilst pit **77** was dated to the Late Iron Age from pottery sherds recovered from its fill.
- 3.4.6 Ditch **73**, which was also recorded in Trench 20, was found to contain Middle Iron Age pottery. It measured 1.4m in width by 0.24m in depth and was filled by a mid greyish brown, silty clay deposit. Pit **69**, which lay to the east was half sectioned (Fig. 8, section 18) and found to contain evidence of burning, in the form of broken up pot boilers and

charcoal (Plate 5.) The pottery from the pit **69**, dated to the Late Bronze age. Five other features recorded within this trench, are likely to be of prehistoric date, due to the similarity of the fills, mid greyish brown, clayey silts, with charcoal flecks.

Trench 25

- 3.4.7 The underlying geology within this trench was very mixed and a number of possible features investigated within this trench were subsequently attributed to natural variations. However, a north to south aligned ditch was recorded in the western end of the trench along with a number of unexcavated, putative postholes (Fig. 4).

Trench 26

- 3.4.8 A north to south aligned ditch (**63**) was excavated within the north-western part of the trench. Ditch **63** measured 1.05m in width and 0.2m in depth and contained a mid yellowish brown, silty clay fill. At the south-eastern limit of the trench a feature (**67**) was partially exposed. Feature **67** continued beyond the trench limit, which precluded full interpretation of its function but the finds recovered from its surface suggested a broad Roman date. Two further pits were also partially seen within the trench but no dating evidence was recovered from either feature.

Trench 28

- 3.4.9 At the eastern end of Trench 28 a small pit or post hole (**61**) was recorded that contained a single sherd of Middle Iron Age pottery. Immediately to the south of feature **61** was another small pit or post hole (**58**), from which no finds were recovered. Further to the west a third pit (**65**) was recorded that continued beyond the southern edge of the trench. Pit **65** (plate 6) measured 0.91m in width by 0.31m in depth. It contained two fills, the upper fill was a dark brownish grey, clayey silt that contained large quantities of slag, and evidence of burning. The basal fill, was a relatively clean deposit of light brownish yellow clay, dated to the mid to late 1st century.
- 3.4.10 The remaining features within the trench were not excavated as a result of the dry ground conditions, but it is suggested that they were likely to be pits of similar date.

Blank Trenches

- 3.4.11 Trenches 17 to 19, and Trenches, 22, 23, 24, 27, and 29, contained no archaeological features, with the only intrusions relating to field drainage, and modern agriculture.

3.5 Field 4

- 3.5.1 No significant archaeological features or deposits were recorded in Field 4. Trenches 1 and 2 were each found to contain single tree throws that upon excavation were revealed to be relatively modern and possibly burnt out. A single northwest to southeast aligned post-Medieval ditch was recorded in Trench 13.

3.6 Finds Summary

- 3.6.1 A small assemblage of finds were recovered during the evaluation by surface collection, these included twelve struck flints and a fragment of medieval glazed floor tile. Small quantities of Roman pottery and CBM, including a piece of box flue tile, and a fragment of *Tegular* were also recovered.
- 3.6.2 A fragment of Lava quern sealed below the subsoil in Trench 34 is likely to be of Late Iron Age or Roman date.

Pottery Assemblage (App. B.1)

- 3.6.3 The pottery assemblage comprised sherds spanning the Late Bronze Age to medieval periods. Preservation was generally poor with the Roman pottery in particular displaying considerable abrasion and degradation indicative of post depositional movement. Conversely, the Prehistoric pottery appeared to be less abraded, which suggests that they were recovered *in situ*.

Metal work (App. B.3)

- 3.6.4 The metal work assemblage comprised seven coins, six of which were dated to the Roman period, and two Roman brooch fragments. The remaining coin was dated to the late medieval period. Preservation of metal objects on site was generally fairly good, although many of the coins showed signs of degradation.

3.7 Environmental Summary

Faunal remains

- 3.7.1 The finds assemblage contained very little animal bone. This may be the result of unfavourable soil conditions, or perhaps representative of the fact that neither animal butchery or consumption took place on the site.

Environmental remains (App C.1)

- 3.7.2 A total of 8 bulk samples were taken, all of which contained evidence for burning - exclusively in the form of charcoal and burnt flint. A single sample (from pit **65**) provided evidence for metalworking, in the form of hammerscale flakes. This pit also contained slag.
- 3.7.3 No plant remains were recovered from the samples, which may reflect taphonomic processes and poor preservation.

4 DISCUSSION AND CONCLUSIONS

4.1 Late Bronze Age/Early Iron Age

4.1.1 Evidence for activity during this period was sparse, although there did appear to be a concentration of activity centred around Trenches 21 and 34. The group of four post holes arranged in a rough square within Trench 34 indicates the presence of a structure. Although it was not possible to determine the structure's size or function the relative size of the postholes is indicative of a well established building. The relatively unabraded nature of the pottery from this period is a further indicator that it had not been subject to post depositional movement and therefore might be considered *in situ* and indicative of proximity to a settlement. Many of the features attributed to this period displayed evidence of burning, for instance pit 69, and this too may be indicative of settlement within the development area. Two smaller postholes in Trench 20 to the north contained conspicuous charcoal flecks within pale, leached fills, and may mark further Late Bronze Age activity in Field 3.

4.2 Middle to Late Iron Age

4.2.1 The Middle to Late Iron Age remains were concentrated in a northeast to southeast band spanning the eastern portion of the development area. It is suggested that some of the undated features recorded during the evaluation may also date to this period. The faunal and environmental assemblages recovered from the site were not particularly enlightening and their relative paucity may be an indicator of poor preservation as a result of adverse soil conditions (App. C.1). However, it may be that the absence of animal bone, plant remains and crop processing waste is indicative a specific function for the site, perhaps of a more craft industrial nature.

4.2.2 It is possible that the activity on the site related to the Middle Iron Age settlement recorded to the south of the study area, where contemporary domestic settlement was in evidence (Pocock, 2009). Whilst the activity recorded by this evaluation appears in the first instance to be distinct from that site it may be that it is representative of differing land-use within the wider landscape during the period.

4.3 Roman

4.3.1 During the Roman period there does not appear to have been any marked increase in activity in comparison with the the prehistoric remains. If anything it would appear that the Roman remains did not extend as far to the northeast. The Roman deposits also differed from the prehistoric remains in that there was little or no evidence for burning or concentrations of charcoal. The only exception being the evidence for metal working from pit 65, in Trench 28.

4.3.2 The highest density of Roman finds and features were seen towards the east side of Field 1 in Trenches 32 and 33. Six of the coins and the two brooch fragments, were also recovered from the topsoil in this locality. The seventh coin was recovered from Ditch 14 in Trench 32.

4.3.3 As with the Prehistoric finds assemblage, animal bone was completely absent. There was, however, a significantly larger assemblage of domestic pottery types, albeit very fragmentary and abraded. The state of preservation of the Roman pottery was particularly poor (App. B1) and it was evident that the material had undergone high levels of post-depositional disturbance, perhaps as a result of middening. This would suggest that the site lay in the hinterland associated with *Caesaromagus*; the complete

lack of any Samian sherds within the pottery assemblage, which for the size of assemblage is certainly noteworthy, is perhaps a further indicator of its marginal status.

4.4 Conclusion

4.4.1 The evaluation recorded activity spanning the Late Bronze Age to Medieval periods. It is clear that the preservation of finds, particularly the environmental remains, was poor and this has possibly resulted in uneven representation within the finds assemblages that make interpretation of the site's function difficult. However, it is possible to tentatively suggest that during the later prehistoric and Early Roman period the locality was at least in part given over to a craft industrial function, as evidenced by the metalworking waste recovered from pit **65**.

4.4.2 The long term use of the site as park lands, in particular during the Medieval period, appears to have limited the use of the land for cultivation and this may explain the lack of any depth of subsoil. This lack of earlier ploughing has resulted in some modern plough damage and scarring at the archaeological level, however, the hardness of the underlying natural has precluded modern ploughing from truncating the archaeological levels, resulting in good feature preservation, particularly within the earlier periods.

4.5 Recommendations

4.5.1 Recommendations for any future work based upon this report will be made by the County Archaeology Office.

APPENDIX A. TRENCH DESCRIPTIONS AND CONTEXT INVENTORY

Trench No.	Field No.	Avg. Depth (m)	Archaeology Present	Length (m)
1	4	0.35	N/A	50
2	4	0.34	N/A	50
3	4	0.32	None	44
4	4	0.36	None	43
5	4	0.4	None	50
6	4	0.41	None	50
7	4	0.43	None	50
8	4	0.43	None	40
9	4	0.39	None	50
10	4	0.38	None	50
11	4	0.41	None	44
12	4	0.41	None	39
13	4	0.37	N/A	50
14	4	0.36	None	45
15	3	0.4	N/A	50
16	3	0.37	None	70
17	3	0.36	None	50
18	3	0.45	None	50
19	3	0.49	None	50
20	3	0.4	3 Features	50
21	3	0.37	9 Features	50
22	3	0.38	None	50
23	3	0.38	None	50
24	3	0.35	None	50
25	3	0.36	9 Features	50
26	3	0.33	4 Features	50
27	3	0.35	None	50
28	3	0.34	9 Features	50
29	1	0.4	None	50
30	1	0.38	1 Feature	50
31	1	0.39	2 Features	50
32	1	0.4	4 Features	50
33	1	0.39	9 Features	50
34	2	0.33	8 Features	50
35	2	0.41	6 Features	50
36	2	0.37	2 Features	50
37	2	0.3	8 Features	50

Table 1. Trench summary.

<i>Context</i>	<i>Cut</i>	<i>Trench</i>	<i>Category</i>	<i>Feature Type</i>	<i>Length</i>	<i>Breadth</i>	<i>Depth</i>
1	0	0	layer	top soil	0		0.3
2	0	0	layer	sub soil	0		0.09
3	4	30	fill	post hole	0	0.24	0.1
4	0	30	cut	post hole	0	0.24	0.1
5	6	31	fill	post hole	0	0.23	0.1
6	0	31	cut	post hole	0	0.23	0.1
7	8	31	fill	ditch	0	1.4	0.25
8	0	31	cut	ditch	0	1.4	0.25
9	10	32	fill	pit	0	0	0.22
10	0	32	cut	pit	0	0	0.22
11	12	32	fill	ditch	0	0.35	0.14
12	0	32	cut	ditch	0	0.35	0.14
13	0	33	fill	ditch	0	1.9	0.3
14	0	33	cut	ditch	0	2.5	0.55
15	16	33	fill	ditch	0	1.75	0.09
16	0	33	cut	ditch	0	1.75	
17	18	33	fill	gully	2	0.48	0.25
18	0	33	cut	gully	2	0.48	0.25
19	20	33	fill	post hole	0	0.1	
20	0	33	cut	post hole	0	0.1	
21	22	33	fill	post hole	0	0.15	
22	0	33	cut	post hole	0	0.15	
23	24	33	fill	gully	0	0.35	0.15
24	0	33	cut	gully	0	0.35	0.15
25	26	33	fill	ditch	0	0.45	0.13
26	0	33	cut	ditch	0	0.43	0.13
27	28	33	fill	pit	0	1.4	
28	0	33	cut	fill	0	1.4	
29	30	33	fill	pit	0	1.1	
30	0	33	cut	pit	0	1.1	
31	0	35	cut	pit	5	1.4	0.08
32	31	35	fill	pit	5	1.4	0.08
33	0	35	layer	top soil	0		0.3
34	0	35	layer	sub soil	0		0.06
35	0	36	cut	ditch	9	0.7	0.25
36	35	36	fill	ditch	9	0.7	0.25
37	0	36	cut	tree throw	0	0.35	0.18
38	37	36	fill	tree throw	0	0.35	0.18
39	0	34	cut	pit	0	0.5	0.07
40	39	34	fill	pit	0	0.5	0.07
41	0	34	cut	ditch	0.75	0.65	0.16
42	41	34	fill	ditch	0.75	0.65	0.16

Context	Cut	Trench	Category	Feature Type	Length	Breadth	Depth
43	0	34	cut	pit	18	2.5	1.05
44	43	34	fill	pit	18	2.5	1.05
45	0	34	cut	post hole	0	0.45	0.28
46	45	34	fill	post hole	0	0.45	0.1
47	45	34	fill	post hole	0	0.38	0.2
48	0	34	cut	post hole	0	0.5	0.4
49	48	34	fill	post hole	0	0.5	0.15
50	0	35	cut	gully	0	0.2	0.1
51	0	34	cut	gully	0	0.25	0.1
52	0	34	cut	post hole	0	0.55	
53	0	34	cut	post hole	0	0.4	
54	48	34	fill	post hole	0	0.35	0.25
55	60	34	fill	pit	0	1	
56	0		layer	top soil	0		0.32
57	0		layer	sub soil	0		0.08
58	0	28	cut	post hole	0	0.34	0.13
59	58	28	fill	post hole	0	0.34	0.13
60	0	34	cut	pit	0	1	
61	0	28	cut	post hole	0	0.55	0.17
62	61	28	fill	post hole	0	0.55	0.17
63	0	26	cut	ditch	0	1.05	0.2
64	63	26	fill	ditch	0	1.05	0.2
65	0	21	cut	pit	0	0.9	0.31
66	65	21	fill	pit	0	0.9	0.31
67	0	21	cut	pit	0	2	
68	67	28	fill	pit	0	2	
69	0	21	cut	pit	0	0.52	0.27
70	69	21	fill	pit	0	0.52	0.11
71	69	21	fill	pit	0	0.44	0.16
72	65	28	fill	pit	0	0.65	0.1
73	0	21	cut	ditch	0	1.4	0.25
74	73	21	fill	ditch	0	1.4	0.25
75	0	21	cut	gully	0	0.35	
76	75	21	fill	gully	0	0.35	
77	0	21	cut	pit	0	1.75	
78	77	21	fill	pit	0	1.75	
81	14	33	fill	ditch	0	1.25	0.15
82	14	33	fill	ditch	0	2.4	0.24
83	14	33	fill	ditch	0	0.2	

Table 2. Context Inventory.

APPENDIX B. FINDS REPORTS

B.1 Pottery

By Edward Biddulph with Stephen Wadeson.

Introduction

B.1.1 A total of 290 sherds of pottery, weighing 1.723 kg, were recovered from the investigation. Within each context-group, the assemblage was sorted into fabrics, or individual vessels where rims were present. The fabric or vessel groups were quantified by sherd count and weight (Table 3). The late Iron Age and Roman fabrics were assigned standard fabric codes employed widely in Essex by Essex County Council Field Archaeology Unit (eg Martin 2003), while the medieval fabric is part of Cunningham's Essex series (Cunningham 1985). The prehistoric fabrics have been identified using their principal fillers.

Fabric	Description	Sherds	Weight (kg)
Prehistoric			
FLINT	Flint-tempered pottery	20	0.12
SAND	Sand-tempered pottery	18	0.163
Late Iron Age/Roman			
BSW	Black-surfaced ware	37	0.313
BUF	Miscellaneous buff ware	1	0.003
ESH	Early shell-tempered ware	8	0.045
GRF	Fine grey ware	3	0.014
GROG	Grog-tempered ware	62	0.346
GRS	Sandy grey ware	54	0.315
HAWO	White-slipped oxidised Hadham ware	3	0.023
HAX	Oxidised Hadham ware	1	0.002
NKG	North Kent fine grey ware	7	0.006
OXRC	Oxford red colour-coated ware	2	0.013
RED	Miscellaneous oxidised wares	35	0.13
RET	Rettendon-type ware	28	0.126
STOR	Storage jar fabric	3	0.172
UWW	Unidentified white ware	1	0.001
Medieval and miscellaneous			
Fabric 20	Medieval sandy grey fabric	6	0.033
UPOT	Unidentified pottery	3	0.002
Total		292	1.823

Table 3: Quantification of fabrics

Assemblage composition

- B.1.2 The earliest pottery was dated to the late Bronze Age (or possibly the early Iron Age). This comprised coarse flint-tempered pottery, and was recovered from contexts 9, 23, 47 and 70. No forms were recognised. Eleven sherds of flint-tempered pottery from contexts 9, 62, 76 and 78 are more likely to carry a middle Iron Age date. Such pottery is rare in the region, though is known at Iron Age sites such as Little Waltham (Drury 1978, 56). One rim was recorded – a slack-shouldered jar (context 76). Most of the middle Iron Age pottery at Beaulieu Park was, however, sand-tempered (SAND). This was collected from context 9, 17 and 24. No forms were recognised.
- B.1.3 Pottery dating to the late Iron Age, possibly extending into third quarter of the 1st century AD, was identified in the form of grog-tempered ware (GROG). The fabric was variable; fine and coarse or lumpy fabrics were recorded. Three forms were present – a barrel-shaped jar and two jars whose precise shape could not be determined. Grog-tempered ware was collected from contexts 1, 13, 56, 78, 81 and 83. Use of grog-tempered pottery ceased in the region by c AD 70/80, although grog continued to be used in coarse storage jars (STOR) throughout the Roman period. Context 83 also contained a lid-seated jar (Going 1987, type G5.1) in a shelly fabric (ESH), which dates to the 1st century AD.
- B.1.4 Roman-period reduced wares were dominated by two fabrics. Black-surfaced ware (BSW) – termed by Going (1987, 9) as Romanising grey wares – was recovered from contexts 1, 9, 13 and 81. The fabric was sand-tempered, though occasionally included grog, which potentially gives a date for manufacture in the second half of the 1st century AD. No forms were identified. Sandy grey wares (GRS) were more important in terms of quantity and were found in more deposits (1, 9, 13, 25, 33, 56, 66, 68 and 81). The fabric was variable, probably reflecting a range of (local) sources. Two forms were identified, a bead-rimmed dish (Going 1987, type B2) dating to the mid 2nd to mid 3rd century, and a lid-seated jar (closest to Going 1987, type G5.2), which has a late 1st century date. Another bead-rimmed dish, in a fine grey ware (GRF), was collected from context 9. The deposit also contained fine ware from north Kent (NKG). The small fragments could not be identified to form with certainty, but appeared to represent a flagon. Late Roman Rettendon-type ware was another distinctive fabric. The fabric, dating to the late 3rd and 4th centuries, marks a return of flint-tempering to central Essex pottery. One of the nearest kiln sites producing the fabric is at Moulsham Street, Chelmsford (Going 1987, 73-8).
- B.1.5 Oxidised wares made a relatively minor contribution to the assemblage. Miscellaneous oxidised wares (RED) took the largest share of this group. Sherds were usually medium-coarse and sand-tempered, and are best regarded as oxidised ware versions of sandy grey wares. Fine fabrics were recognised, though, including a probable later 1st-century globular beaker (Going 1987, type H1) from context 25. A buff-ware (BUF) ring-necked flagon (Going 1987, type J3) was recovered from context 81. The form typically dates to the late 1st and 2nd centuries AD. A single sherd of white ware (UWW) was collected from context 1. The fragment was small and undiagnostic and could not be identified to source. A flagon handle in a white-slipped oxidised ware and found in context 9 was a Hadham product (HAWO). The vessel is likely to have reached the site during the 2nd or 3rd century. Another Hadham product, Hadham oxidised ware (HAX) arrived a little later. The piece, from context 1, could not be identified to form. At Chelmsford, Hadham oxidised ware has widespread distribution only after c AD 270 (Going 1987, 3). A late Roman or later date appears to be appropriate for the fragment from context 1, as it was found with a sherd of Oxford red colour-coated ware (OXRC), which is rare in Central Essex before the mid 4th century AD (Going 1987, 3).

- B.1.6 A single vessel in a sand-tempered grey ware (Essex fabric 20) belonged to the medieval period. The form – a necked jar with an everted rim – dates between c 1200 and 1400.

Chronology

Period	Sherds
Late Bronze Age/Early Iron Age	8
Middle Iron Age	20
Late Iron Age/early Roman	17
Early Roman	63
Mid Roman	58
Late Roman	115
Roman	4
Medieval	7
Total	292

Table 4: Chronology of the pottery

- B.1.7 Three per cent of pottery by sherd count was recovered from context-groups dated to the late Bronze Age or early Iron Age. The middle Iron Age, however, was a more significant period of activity, with 7% of the assemblage belonging to groups assigned to that period. Late Iron Age (or early Roman) groups – identified on the basis of their containing grog-tempered pottery only – contributed a similar proportion, 6%. Deposition increased in the early Roman period (Chelmsford ceramic phases 1-2; (AD 40/60-125), whose groups were characterised by the appearance together of grog-tempered and sandy wares; pottery assigned to groups of this period accounted for 22% of the assemblage. Mid Roman (Chelmsford ceramic phases 3-5; c AD 125-260) groups took a 20% share of the assemblage, but late Roman groups (Chelmsford ceramic phases 6-8; AD 260-400+) made the largest contribution; pottery from late Roman groups accounted for 40% of the assemblage. That said, a large proportion of this pottery – some 40% by sherd count – is grog-tempered and therefore residual. It is possible that some of the Roman-period material is also residual.

Condition and affinities

- B.1.8 The condition of the pottery was poor overall. The assemblage largely comprised abraded body sherds that could not be identified to form. The average sherd weight was a relatively small 6g, and the high degree of residuality in late Roman groups has been noted. These factors hint at an assemblage that has been subject to several episodes of deposition and disturbance before final deposition, perhaps on the edges of settlement. As a result, the pottery has become very fragmented and chronologically mixed. Nevertheless, the pottery is broadly consistent with regional supply patterns. All the material can be paralleled in terms of fabric, and to a lesser extent form, in Chelmsford and sites like Little Waltham.
- B.1.9 Though a small assemblage, the absence of even tiny fragments of samian is unusual; Willis (1998, 116) remarks that samian 'is rarely absent from excavated [rural]

assemblages where these are of some size (ie 30-100 sherds)'. The absence is all the more notable given the site's proximity to the town of *Caesaromagus*. The reason for this is unclear, but it is likely to provide another indication of the site's marginal location or function.

B.2 Brick

By Rob Atkins

B.2.1 There are two part bricks (1.65kg) recovered from structure 51. They are 4½" (110mm) wide and 2" (50mm) thick and are in a dark red sandy fabric. They have been made in a one hand mould and display sunken margins. Overall, they are fairly well made with steep arises. They are not closely dated and could be any date from the early 16th to 18th century although more likely to be pre-1700.

B.2.2

B.3 Metalwork

By Chris Faine

B.3.1 Below are listed the small finds recovered from the site.

SF 1: A copper alloy brooch fragment. Portion of foot. "Colchester" type. 1st century AD.

SF 2: A copper alloy brooch fragment. Lower portion of bow and catch-plate. "Colchester" type. Mid to late 1st century AD.

SF 3: A copper alloy sestertius of Antoninus Pius. (138-161 AD). Obverse: ANTONINVS AVG PIVS P P TR P COS III. Reverse: MARTI VLTORI SC, Mars, helmeted, standing right with spear, resting left hand on shield. RIC 609

SF 4: Illegible copper alloy coin. Roman

SF 5: Illegible copper alloy coin. Roman

SF 6: A copper alloy radiate of Herennia Etruscilla (Trajan Decius) (249-251 AD) Reverse: FECVNDITAS AVG. RIC IV (Trajan Decius 55b)

SF 7: An extremely worn copper alloy sestertius. Possibly of Antoninus Pius (138-161 AD). Inscriptions and obverse illegible. Reverse: Seated female figure facing left.

SF 8: An extremely worn silver "long cross" penny. Obverse illegible. Possible "Sovereign" type. Henry VII (1485-1509 AD)

SF 9: Context 82 Illegible Copper alloy coin. Roman.

APPENDIX C. ENVIRONMENTAL REPORTS

C.1 Environmental samples

By Rachel Fosberry

Introduction and methodology

- C.1.1 Eight bulk samples were taken from features within the excavated area of the site in order to assess the quality of preservation of plant remains, bones and artefacts in order to provide further information.
- C.1.2 Ten litres of each sample (less if sample size was smaller) were processed by tank flotation for the recovery of charred plant remains, dating evidence and any other artefactual evidence that might be present. The flot was collected in a 0.3mm nylon mesh and the residue was washed through a 0.5mm sieve. Both flot and residue were allowed to air dry. The dried residue was passed through 5mm and 2mm sieves and a magnet was dragged through each resulting fraction prior to sorting for artefacts. Any artefacts present were noted and reintegrated with the hand-excavated finds. The flot was examined under a binocular microscope at x16 magnification.

Results

Sample No.	Context No.	Cut No.	Feature Type	Comments	Contents
1	17	18	flue	sample from slot/flue with burning deposits	Charcoal only
2	9	10	pit	possible pit with burning deposits	Charcoal only
3	54	48	post hole	post hole with industrial waste	Charcoal only
4	47	45	post hole	post hole with industrial waste	Charcoal, burnt flint
5	40	39	pit	contains cinder?	Charcoal only
6	66	65	pit	IA pit showing signs of metalworking – lots of burnt material	Charcoal, flake hammerscale
7	71	69	pit	IA pit , lots of burning suggesting industrial activity	Charcoal, burnt flint
8	81	14	ditch	Roman ditch- plenty of pot	Charcoal only

Table 5. Environmental samples

- C.1.3 All of the samples contain wood charcoal only. Burnt flint was noted in the residues of Samples 4 (fill 47 of post hole **45**) and Sample 7 (fill 71 of pit **69**) and two flakes of hammerscale were recovered from the residue of Sample 6. (fill 66 of pit **65**.)

Discussion

- C.1.4 The environmental samples from Beaulieu Park do not contain any plant remains other than charcoal implying that there is no surviving evidence of any nearby settlement or of any agricultural practices such as crop processing. The presence of hammerscale in Sample 6 is indicative of metalworking activities, specifically smithing.

Methods Statements and Further Work

C.1.5 No further work on this assemblage is required.

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APPENDIX E. OASIS REPORT FORM

All fields are required unless they are not applicable.

Project Details

OASIS Number	oxfordar3-112010			
Project Name	Pre-Historic and Roman remains at Beaulieu Park, Chelmsford.			
Project Dates (fieldwork)	Start	26-09-2011	Finish	07-10-2011
Previous Work (by OA East)	No		Future Work	Unknown

Project Reference Codes

Site Code	SPBP11	Planning App. No.	no.P828343 27/06/11
HER No.	TBC	Related HER/OASIS No.	

Type of Project/Techniques Used

Prompt	Direction from Local Planning Authority - PPS 5
Development Type	Mineral Extraction

Please select all techniques used:

<input type="checkbox"/> Aerial Photography - interpretation	<input type="checkbox"/> Grab-Sampling	<input type="checkbox"/> Remote Operated Vehicle Survey
<input type="checkbox"/> Aerial Photography - new	<input type="checkbox"/> Gravity-Core	<input checked="" type="checkbox"/> Sample Trenches
<input type="checkbox"/> Annotated Sketch	<input type="checkbox"/> Laser Scanning	<input type="checkbox"/> Survey/Recording Of Fabric/Structure
<input type="checkbox"/> Augering	<input type="checkbox"/> Measured Survey	<input type="checkbox"/> Targeted Trenches
<input type="checkbox"/> Dendrochronological Survey	<input checked="" type="checkbox"/> Metal Detectors	<input type="checkbox"/> Test Pits
<input type="checkbox"/> Documentary Search	<input type="checkbox"/> Phosphate Survey	<input type="checkbox"/> Topographic Survey
<input type="checkbox"/> Environmental Sampling	<input type="checkbox"/> Photogrammetric Survey	<input type="checkbox"/> Vibro-core
<input type="checkbox"/> Fieldwalking	<input type="checkbox"/> Photographic Survey	<input type="checkbox"/> Visual Inspection (Initial Site Visit)
<input type="checkbox"/> Geophysical Survey	<input type="checkbox"/> Rectified Photography	

Monument Types/Significant Finds & Their Periods

List feature types using the [NMR Monument Type Thesaurus](#) and significant finds using the [MDA Object type Thesaurus](#) together with their respective periods. If no features/finds were found, please state "none".

Monument	Period	Object	Period
Ditch	Iron Age -800 to 43	Ceramics	Iron Age -800 to 43
Ditch	Roman 43 to 410	Coin	Roman 43 to 410
	Select period...		Select period...

Project Location

County	Essex	Site Address (including postcode if possible)	
District	Chelmsford	Generals Lane, Chelmsford, Essex, CM3 3HS	
Parish	Chelmsford		
HER	EEC		
Study Area	136300m2	National Grid Reference	TL 73081 10779

Project Originators

Organisation	OA EAST
Project Brief Originator	Richard Havis
Project Design Originator	URS Scott Wilson
Project Manager	Richard Mortimer
Supervisor	Jonathan House

Project Archives

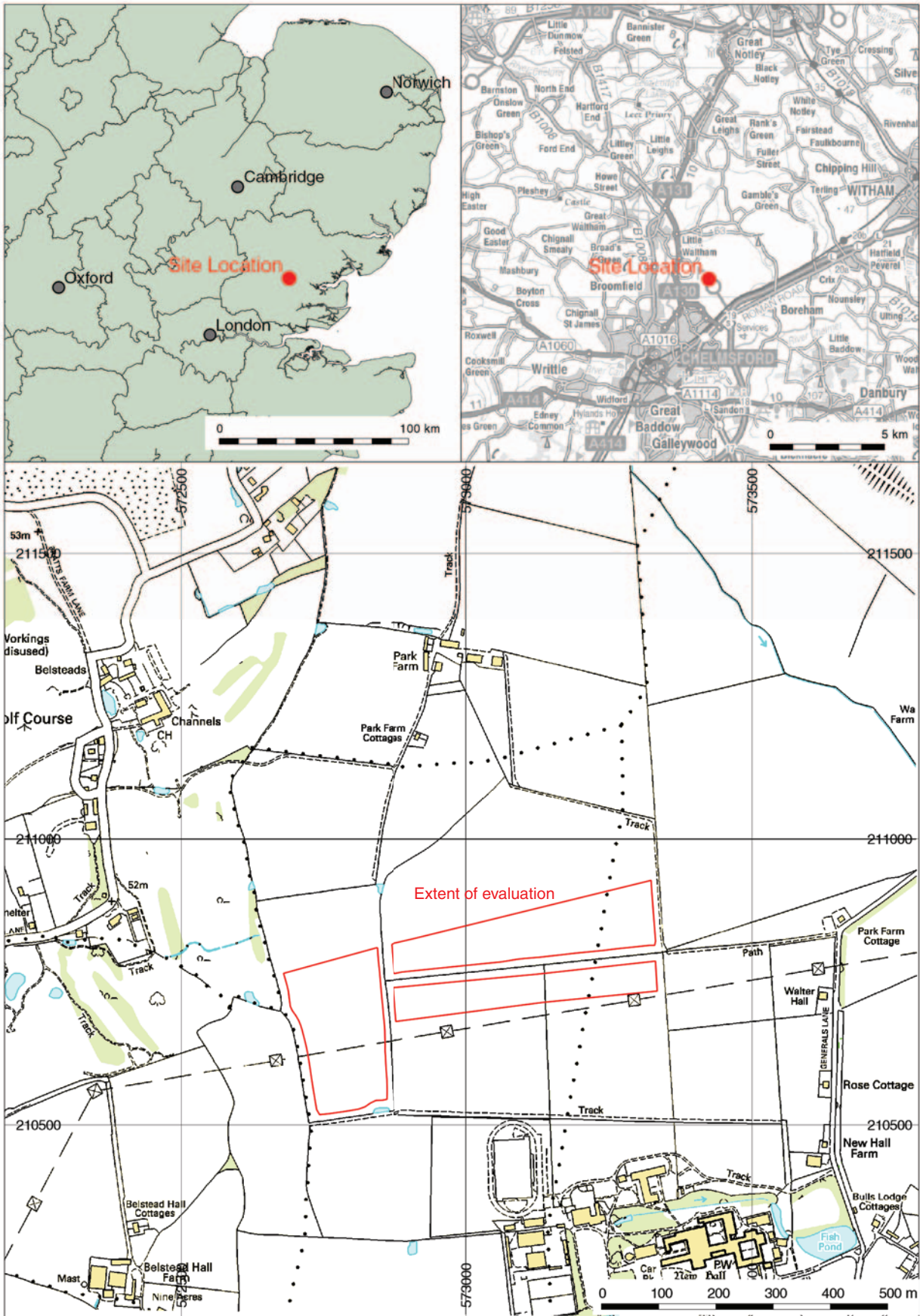
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SPBP11	XEXBEP11	SPBP11
Essex County stores	OA East (Bar Hill)	Essex County stores

Archive Contents/Media

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Ceramics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Glass	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Human Bones	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Industrial	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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	<input checked="" type="checkbox"/> Plans
	<input checked="" type="checkbox"/> Report
	<input checked="" type="checkbox"/> Sections
	<input type="checkbox"/> Survey

Notes:



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Figure 1: Site location



Figure 2: Trench plan showing archaeology within development area. Scale 1:2000

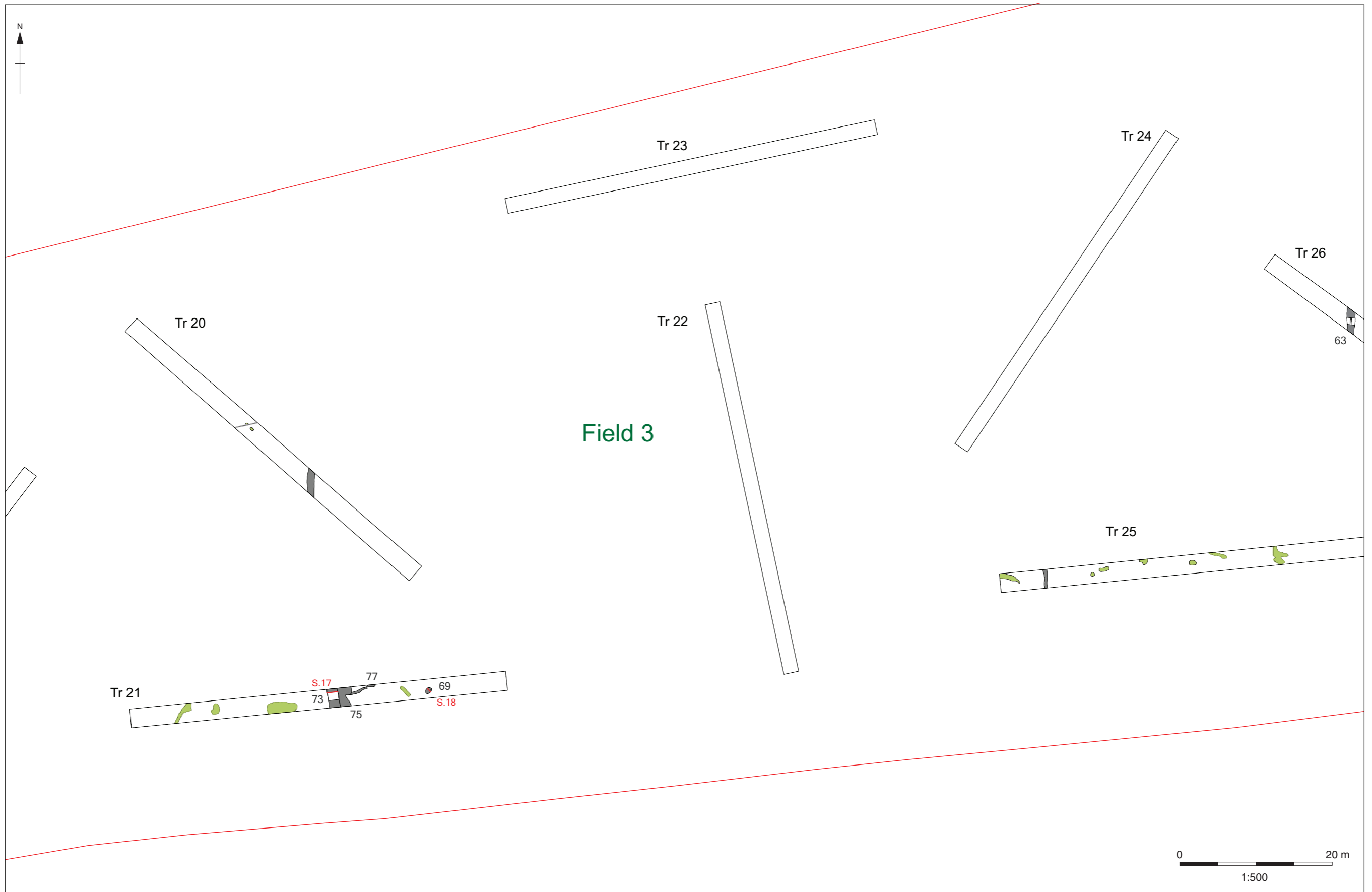


Figure 3: Trenches in Field 3 containing archaeology. Scale 1:500

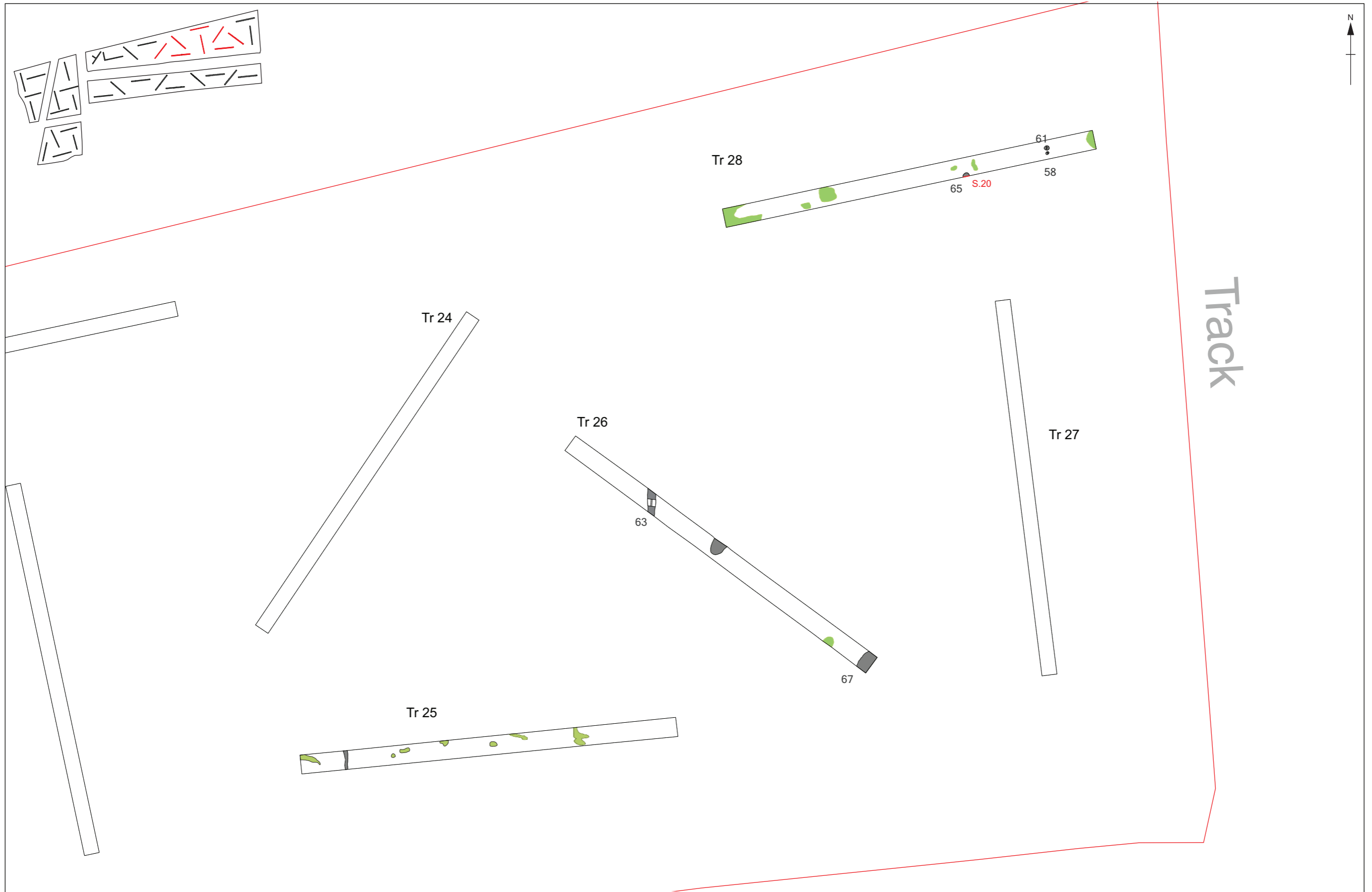


Figure 4: Trenches in Field 3 containing archaeology. Scale 1:500

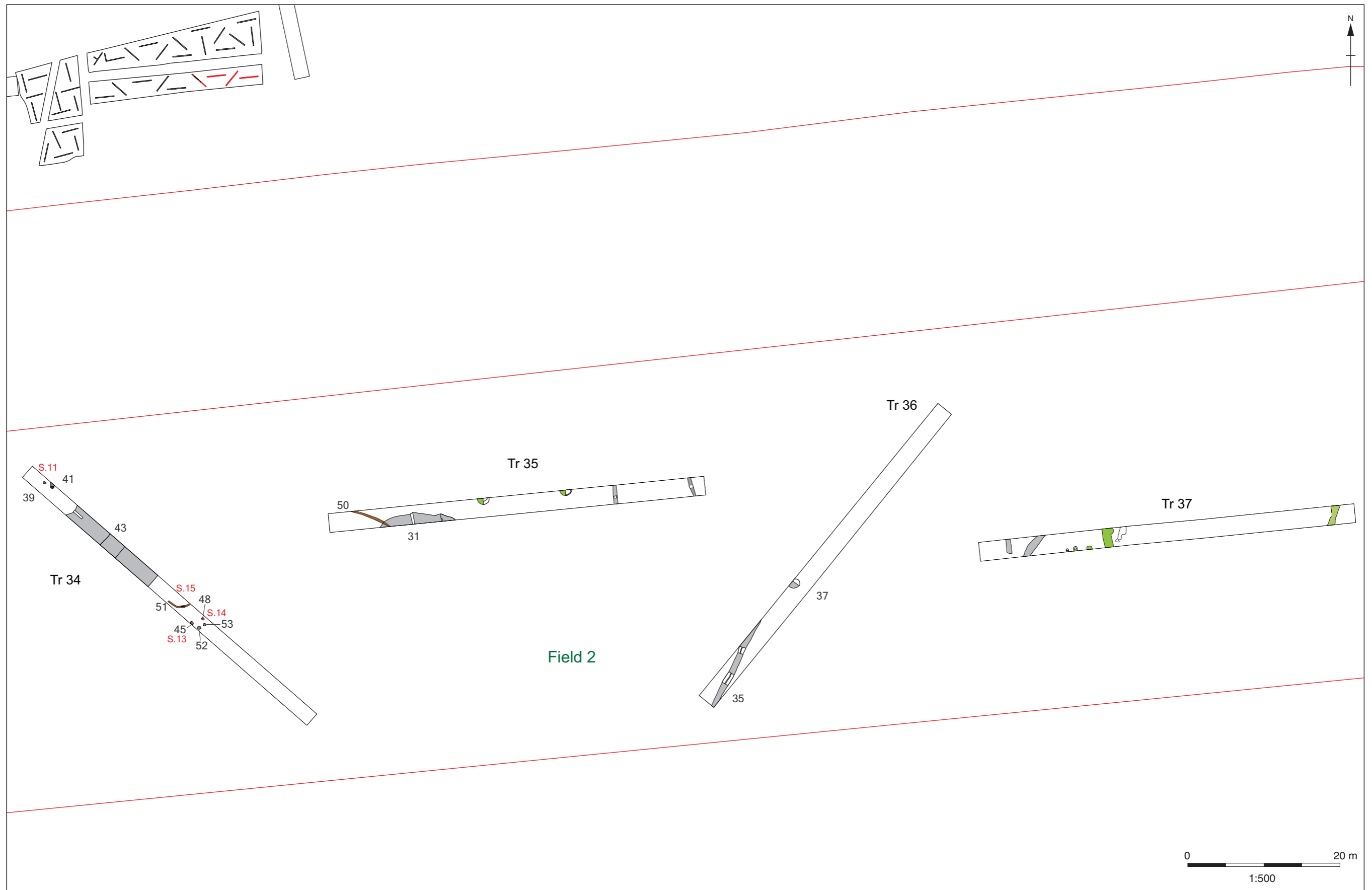


Figure 5: Trenches in Field 2 containing archaeology. Scale 1:500

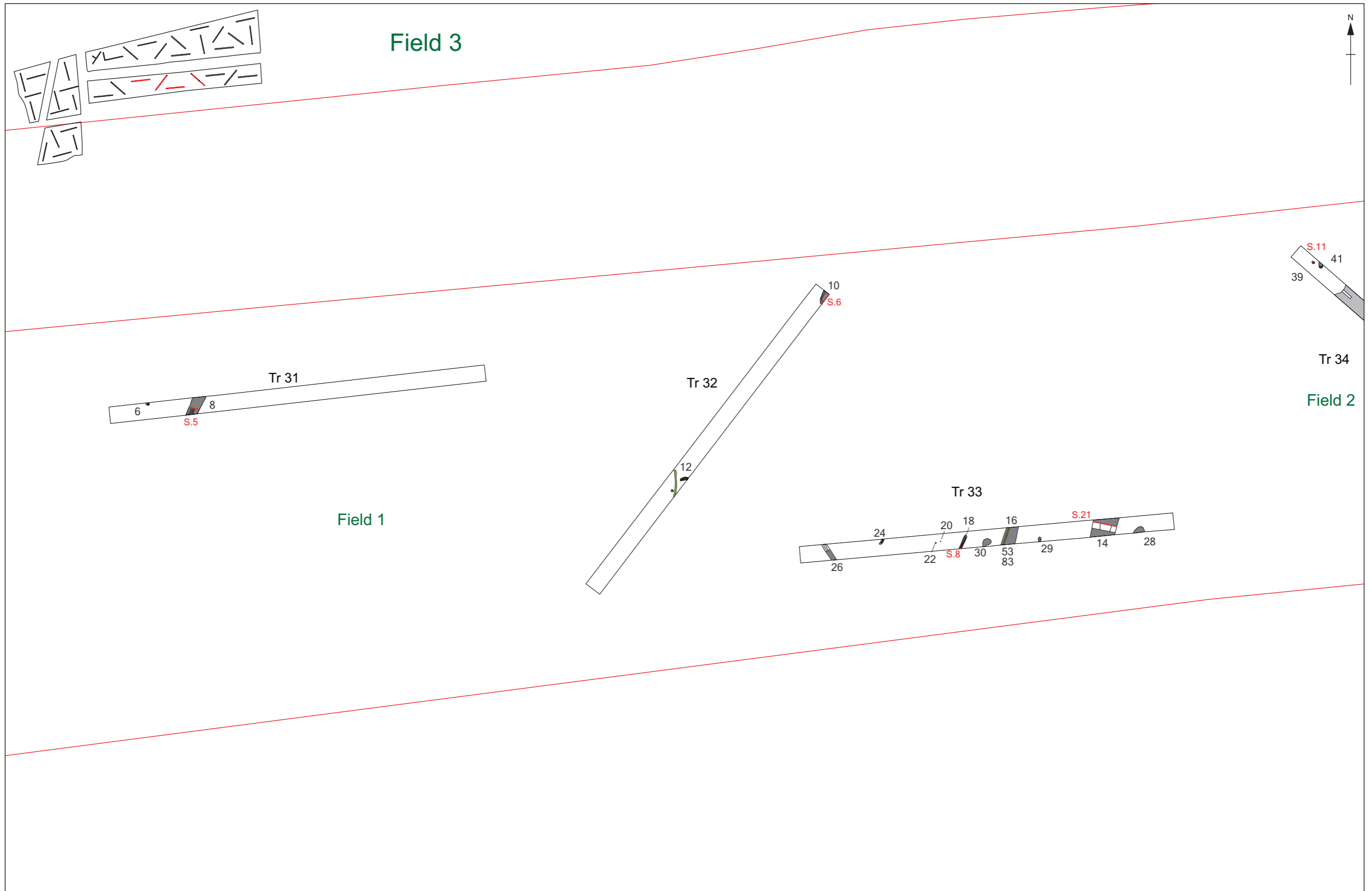


Figure 6: Trenches in Field 1 containing archaeology. Scale 1:500

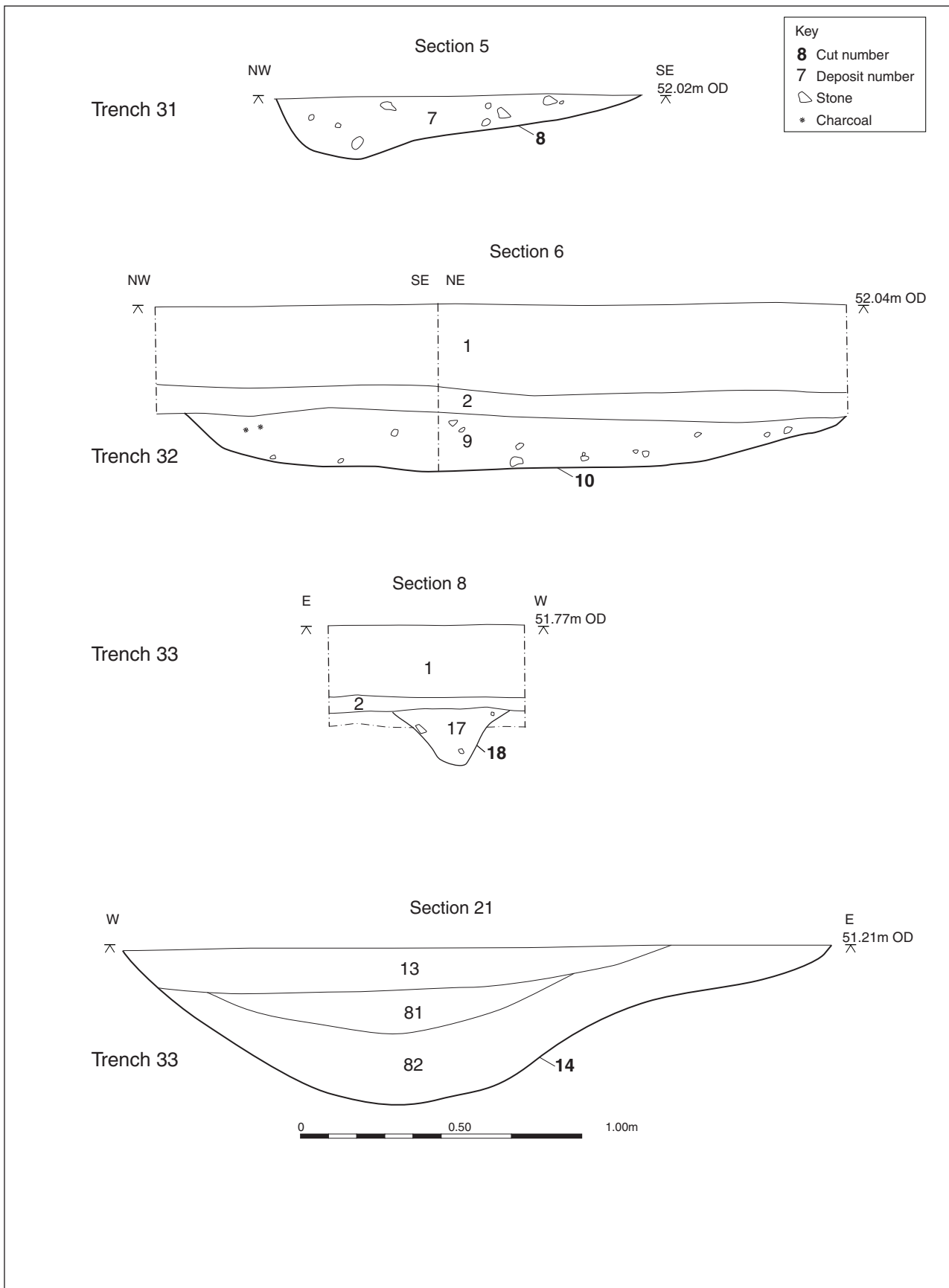


Figure 7: Sections from features recorded in Field 1

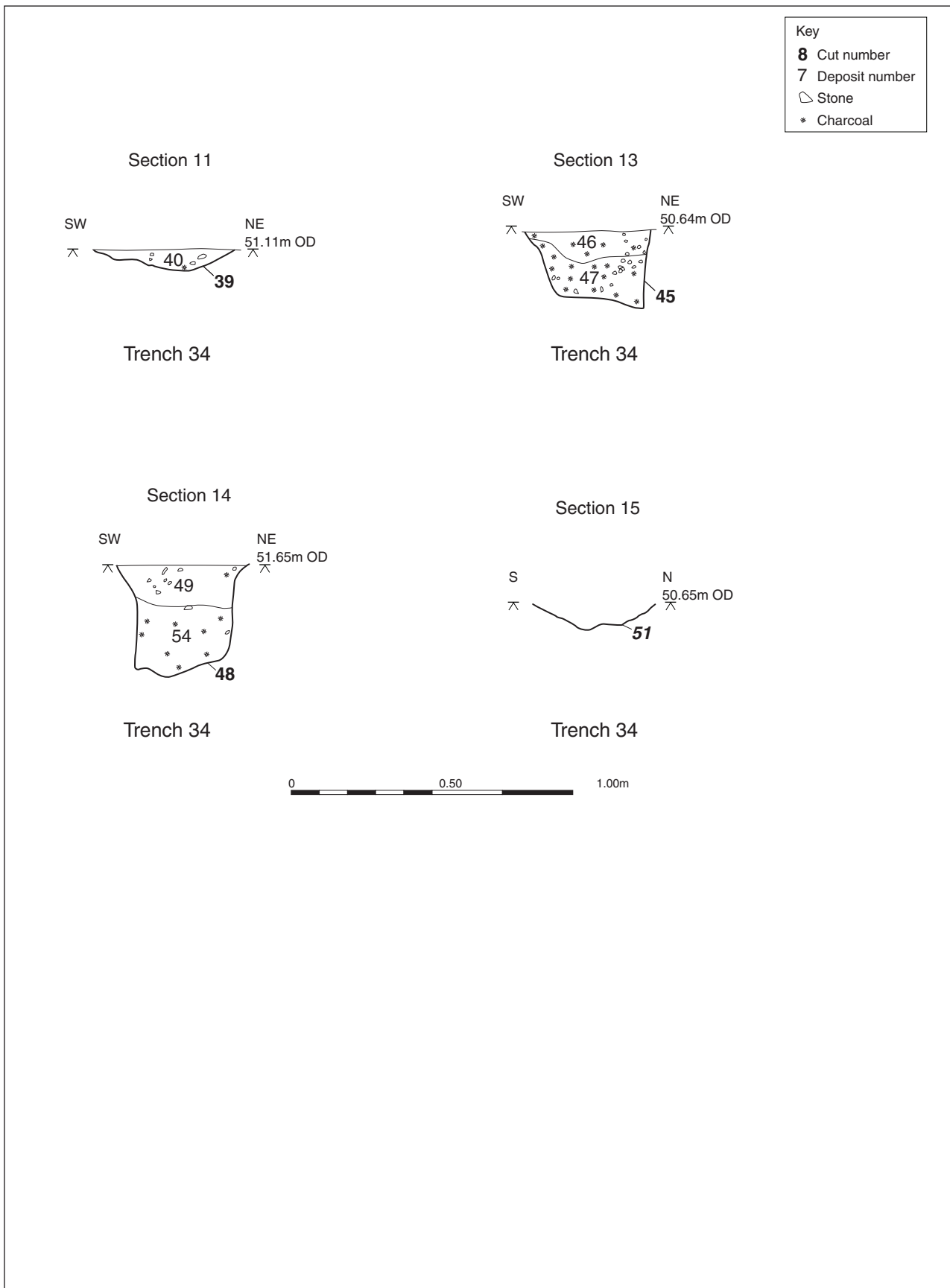


Figure 8: Sections from Trench 34, Field 2

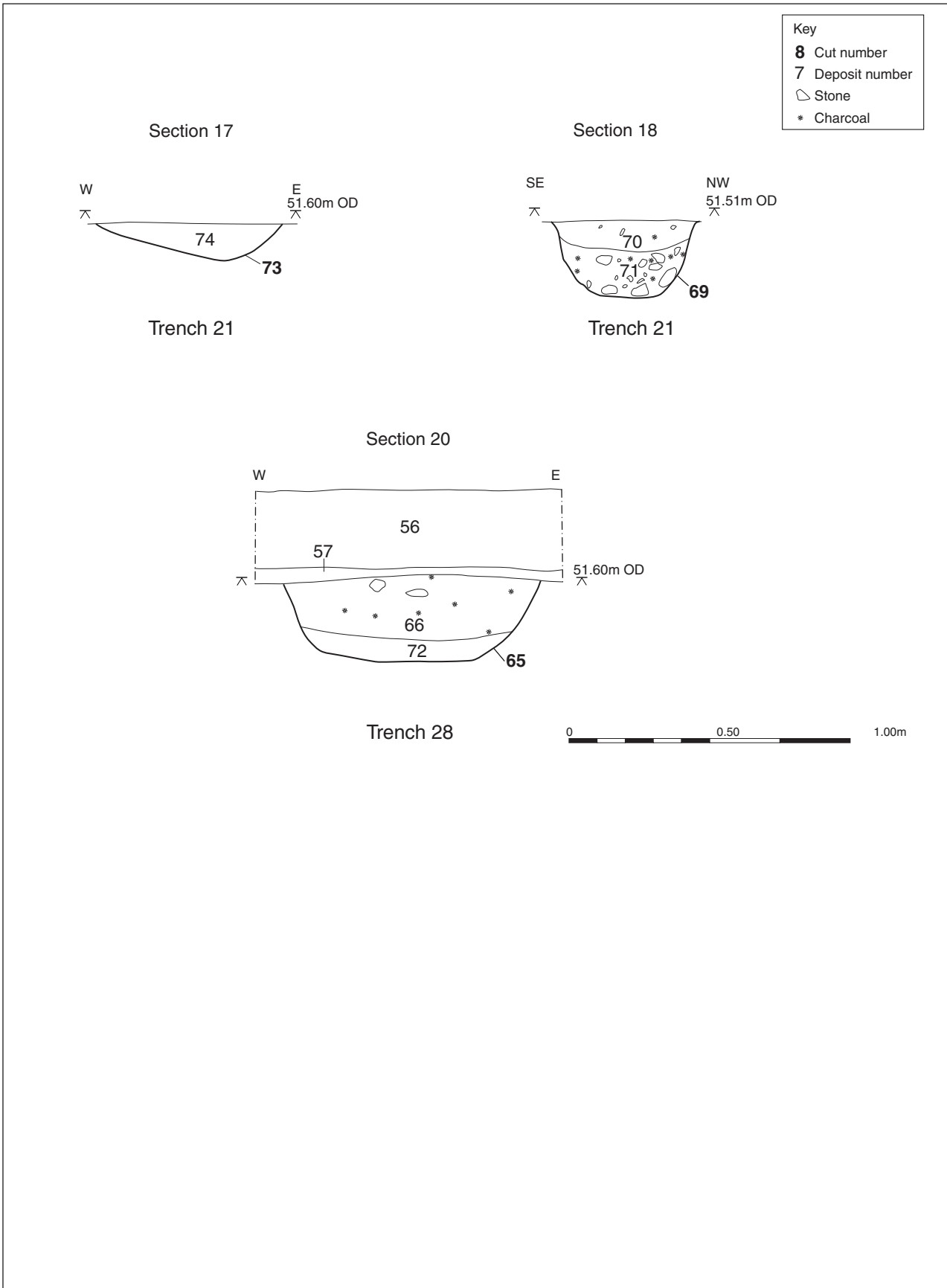


Figure 9: Sections from Field 3, Trenches 21 and 28.



Plate 1: Pit 10, taken from the west, 1m and 0.5m scale



Plate 2: Linear feature 18, taken from the north, 1m scale



Plate 3: Context (83), taken from the south, 2m scale



Plate 4: Post hole 48, taken from the north-east, 0.4m scale



Plate 5: Pit 69, taken from the north-east, 0.4m scale



Plate 6: Pit 65, taken from the north, 1m scale



**Head Office/Registered Office/
OA South**

Janus House
Osney Mead
Oxford OX2 0ES

t: +44 (0) 1865 263 800
f: +44 (0) 1865 793 496
e: info@oxfordarch.co.uk
w: <http://thehumanjourney.net>

OA North

Mill 3
Moor Lane
Lancaster LA1 1GF

t: +44 (0) 1524 541 000
f: +44 (0) 1524 848 606
e: oanorth@thehumanjourney.net
w: <http://thehumanjourney.net>

OA East

15 Trafalgar Way
Bar Hill
Cambridgeshire
CB23 8SQ

t: +44 (0) 1223 850500
f: +44 (0) 1223 850599
e: oaeast@thehumanjourney.net
w: <http://thehumanjourney.net>



Director: David Jennings, BA MIFA FSA

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