

Archaeological evaluation at Barham Quarry (Phases 6-10), Sandy Lane, Barham, Suffolk, IP6 0PB

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1 Summary

An archaeological evaluation (43 trial-trenches) was carried out at Barham Quarry (Phases 6-10), Sandy Lane, Barham, Suffolk. Previous archaeological investigations at Barham Quarry (Phases 1-5) to the west of the current development site had revealed prehistoric pits as well as a substantial Iron Age and Roman settlement with features including enclosures, roundhouses, a Roman pottery kiln and clay extraction pits.

The current evaluation revealed a Late Neolithic/Early Bronze Age pit, a Late Neolithic/Bronze Age pit, four Late Bronze Age pits, and eight ditches, pits and pits/tree-throws dating to the Late Iron Age/Romano-British period. Twenty-four agricultural ditches could be of Romano-British or possibly medieval date, and a large modern pit and several undated features were also present including a cremation burial. Among the finds were a number of pieces of residual prehistoric worked flint and Late Bronze Age pottery recovered from later features.

Four layers of colluvium were also recorded. Thin layers to the middle and north of the site appear to be of later Roman or post-Roman date. However, a thick layer of colluvium in the base of the valley to the south of the site is potentially of significant prehistoric date and warrants further investigation. Large quantities of worked flint recovered from the colluvium is indicative of prehistoric activity on the brow of the hill and the valley sides.

2 Introduction (Fig 1)

This report presents the results of an archaeological evaluation at Barham Quarry (Phases 6-10), Sandy Lane, Barham, Suffolk which was carried out on 17th September to 16th October 2018. The work, undertaken by Colchester Archaeological Trust (CAT), was commissioned by Andrew Josephs Associates on behalf of and funded by Brett Aggregates Ltd, in advance of the Phase 6-10 extensions to the quarry.

Suffolk County Council was advised by Suffolk County Council Archaeology Service (SCCAS) that this site lies in an area of high archaeological importance, and that, as permission had been granted for mineral extraction at the site, an archaeological evaluation was required to inform the Written Scheme of Investigation required by condition 4 on planning permission SCC/0145/17.

All archaeological work was carried out in accordance with a *Brief for a Trenched Archaeological Evaluation* detailing the required archaeological work written by Rachael Abraham (SCCAS 2018), and the Written Scheme of Investigation (WSI) prepared by CAT in response to the SCCAS brief and agreed with SCCAS (CAT 2018).

In addition to the brief and WSI, all fieldwork and reporting was done in accordance with *Requirements for a Trenched Archaeological Evaluation* (SCCAS 2017), English Heritage's *Management of Research Projects in the Historic Environment (MoRPHE)* (English Heritage 2006), and with *Standards for field archaeology in the East of England* (EAA 14 and 24). This report mirrors standards and practices contained in the Institute for Archaeologists' *Standard and guidance for archaeological evaluation* (ClfA 2017a) and *Standard and guidance for the collection, documentation, conservation and research of archaeological materials* (ClfA 2017b).

3 Archaeological and landscape background (Fig 2)

The following archaeological background draws on information from the Suffolk Historic Environment Record (archaeology.her@suffolk.gov.uk), SCC invoice number 9216925.

Geology

The Geology of Britain viewer (1:50,000 scale¹) shows the bedrock geology of the site as 'Thanet Formation And Lambeth Group (undifferentiated) – Clay, Silt And Sand' with superficial deposits of 'Lowestoft Formation – Diamicton', 'Lowestoft Formation – Sands and Gravel' and 'Kesgrave Catchment Subgroup – Sand And Gravel'.

In 2018 a desk-based assessment was written to provide background information on the geology and Palaeolithic archaeological potential of the quarry extension (Bates 2018a). The site is designated a geological SSSI because it contains one of the best developed sequences in the UK that records a unique succession of early middle-Pleistocene geological features, spanning the Beestonian-Anglian Stages. The sequence includes a palaeosol complex ('fossil' soil horizon), considered to have a composite origin dating from a number of temperate periods as well as the early Anglian (glacial) Stage.

During the current phase of archaeological evaluation, Martin Bates returned to the development site and excavated a number of test-pits to assess the nature of the geology and Palaeolithic archaeological potential. His findings are presented in *A test pit assessment of a proposed extension to the Sandy Lane Quarry, Barham, Suffolk* (Bates 2018b).

Historic landscape

Barham is in an area defined as *rolling estate farmlands* in the Suffolk Landscape Character Assessment². Within the Suffolk Historic Landscape Characterisation Map³ it is defined as landscape sub-type 10.1 (built up area -unspecified). The landscape immediately around the development site is primarily characterised as sub-type 1.1 (pre-18th-century enclosure – random fields), sub-type 2.1 (18th-century and later enclosure – former common arable or heathland), sub-type 3.1/3.2 (post-1950s agricultural landscape – boundary loss from random fields and rectilinear fields), sub-type 5.1 (meadow or managed wetland – meadow), sub-type 7.13 (woodland – park wood), sub-type 9.2 (post-medieval park and leisure – informal park), sub-type 11.1 (industrial – current industrial landscape), sub-type 11.14 (industrial – disused mineral extraction), sub-type 14.1 (communications – major road) and sub-type 14.2 (communications – railway).

Archaeology⁴ (Fig 2)

(All measurements are taken from the centre point of the development site to the centre point of the archaeological site).

At Barham Quarry

Previous archaeological finds on the site of Barham Quarry have included Iron Age pottery sherds, bone and flint (BRH 006 and BRH 013). Human skeletons and pottery (BRH 009) found periodically from the 1930s to the 1990s meant that the area has traditionally been thought of as the site of a battle between the Saxons and the Danes.

Excavations to the west of the development site in 1978 which revealed two large pits (Pit 1 being an oven or furnace which contained substantial fragments of a Late Bronze Age jar), a roundhouse of Early Iron Age date, and a small number of other features (BRH 015) (Martin 1993).

As part of Barham Quarry Phases 1-4, in 2001 an evaluation was carried out across the western side of the development site. It confirmed the presence of features of Late Iron Age and early Roman date, comprising enclosure ditches, pits and postholes (BRH 043) (Gardner & Sutherland 2001). Eleven of the 2001 evaluation trenches were located within the current development site (Trenches T5, T11, T16, T20, T23, T27, T30, T37, T40, T41 & T44). All of the eleven trenches were excavated to depths of 0.29-0.56m

¹ British Geological Survey – <http://mapapps.bgs.ac.uk/geologyofbritain/home.html?>

² <http://www.suffolklandscape.org.uk/>

³ The Suffolk Historic Landscape Characterisation Map, version 3, 2008, Suffolk County Council

⁴ This is based on records held at the Suffolk County Historic Environment Record (SCHER).

below ground level through topsoil, subsoil and into natural and the only features identified (two Roman pits, one Late Iron Age pit and four undated pits) were present in T5 and T11 (*ibid*).

Following evaluation, four phases of excavation were carried out between 2004 and 2009. No report has been produced for any of these excavations. SCCAS provided CAT with summary sheets for each phase of excavation, along with plans, context lists and databases of finds. However, the information provided was not complete enough to allow for anything more than a brief summary to be included here. A plan of the results of these excavations is included in this report as Fig 15.

Phase 1 excavation was carried out in 2004. It revealed five substantial prehistoric (?Iron Age) vertical-sided pits or shafts, along with Roman boundary ditches and two granary-type features (Anon 2004).

Phase 2 excavation was carried out in 2005. It revealed a sub-rectangular Roman enclosure (containing dispersed pit groups, several post-built structures and internal divisions), along with a Roman pottery kiln and clay extraction pits. A number of late prehistoric features including a possible Early Iron Age roundhouse were also identified (Anon 2005).

Phase 3 excavation was carried out in 2006. It revealed a number of ditches, pits, postholes and a roundhouse (Atfield 2006).

Phase 4 excavation was carried out in 2009. It revealed enclosure ditches, pits and postholes.

South of Barham Quarry

To the south of the development site (300-700m) a range of features and finds have been recorded from the Bronze Age, Iron Age, Roman, Anglo-Saxon, medieval and post-medieval periods (BRH 007, BRH 016, BRH 017, BRH 018, BRH 030, BRH 045, BRH 078).

Undated cropmarks are also located on the southern edge of the development site (BRH 028, sub-rectangular cropmarks of ?enclosures) and 600m south (BRH 055, enclosures, trackway, ring-ditch and linear features).

Further afield

Palaeolithic artefacts were recovered from Eastall's Pit (BRH 003, 1.63km W; BRH 023, 1.37km SW). Mesolithic and Neolithic flints were also recovered from Eastall's Pit. A Mesolithic tranchet axe was found 1.17km to the SW (BRH 012) and a Neolithic discoidal flint knife 1.26km to the SSE (BRH 004).

The scheduled Roman settlement identified with *Combretoivim* is located c 2.5km NW (CDD 003). Quarry pits of Roman or medieval date are located 2.05km WSW (BLG 035). Medieval remains include the medieval church and churchyard of St Mary (BLG 005, 2km WSW), ditches (BLG 013, 2km SW) and the site of a possible medieval moat (BRH 044, 1.32km SW). Scatters of Roman, Saxon, medieval and post-medieval finds have been identified across the landscape (BLG 003, BLG 006, BLG 008, BLG 009, BLG Misc, BRH 003, BRH 005, BRH 008, BRH 022, BRH 025, BRH 027, BRH 061).

Shrubland Hall and Park to the northwest is of post-medieval date and has an extensive Italianate garden (BRH 021). Post-medieval bridges over the River Gipping are located 1.8km W (BLG 014) and 1.9km SSW (BLG 015). The Bosmere and Claydon Incorporated Hundred Workhouse (BRH 038, 1.32km W) was erected in 1766 with pesthouse, hospitals and cemeteries (BRH 054). Also nearby are a demolished post-medieval corn mill (BRH 048, 1.8km W), post-medieval milestone (BLG 016, 1.95km SW), 19th-century pond (BRH 049, 1.11km W) and Claydon railway station (BLG 021,

1.83km SW, erected 1846). Modern factories include Mason's Cement Works (BLG 022, 1.92km SW) and the former MOD fuel depot (BLG 025, 1.86km SW). A World War II pillbox is located 1.94km SW (BLG 032). The Ipswich to Bury St Edmunds railway line, which opened in 1846, is located 1.75km W (SUF 069).

Undated cropmarks and other monuments include: an extraction pit (BRH 056, 983m WNW); earthwork ditches at right angles to Norwich Road, possibly medieval tofts (BRH 037, 1km SW); a pit with charcoal and a layer of burnt flints c 40cm thick (BRH 014, 1.65km W); and earthworks of linear banks (BRH 057, 1.17km SW).

Listed buildings⁵

Listed buildings (Grade II) dating from the late-15th/early-16th to the 19th centuries are located within 1km of the development site.

4 Aims

The aims of the evaluation were to:

- excavate and record any archaeological deposits that were identified within the development site.
- identify the date, approximate form and purpose of any archaeological deposit within the application area, together with its likely extent, localised depth and quality of preservation.
- evaluate the likely impact of past land uses, and the possible presence of masking colluvial/alluvial deposits.
- establish the potential for the survival of environmental evidence.

5 Methodology

Forty-three trial-trenches were laid out in a systematic grid array to cover 5% of the 2250m² development site. Forty trenches were 30m long by 1.8m wide with three shorter trenches: T24 (25m), T31 (20m) and T42 (15m) (totalling 1250m linear).

All of the trenches were mechanically excavated under archaeological supervision. All archaeological horizons were excavated and recorded according to the WSI. A metal detector was used to check trenches, spoil heaps and excavated strata. For full details of the methodology, refer to the attached WSI.

Additional note: Pit F21 was not confirmed as a human cremation burial until bone was analysed by Julie Curl (see Section 7.4). As the Department of Justice does not issue burial/exhumation licences retrospectively, there is no licence for this evaluation.

6 Results (Appendix 1, Figs 3-14)

Most of the 43 trenches were excavated through topsoil (L1, medium-dark grey/brown sandy-silt) onto natural sand (L2). However, four layers of hillwash/colluvium were identified. Layer L3 was a thick layer of medium orange/brown silt located at the southern end of the development site and recorded in trenches T36-T43. An additional layer, L6, was also identified in T36 between L3 and L2. Layer L4 was a thinner layer of light to medium grey/brown sandy-silt located in the centre of the development site and recorded in trenches T21, T26-T34. Layer L5 was a thin layer of light to medium grey/brown sandy-silt located in the northwest corner of the development site and recorded in trenches T3-T9 & T11-T12.

⁵ This is based on records held at the Suffolk County Historic Environment Record (SCHER).

Trench 1: Excavated through L1 (0.35-0.45m thick) onto L2. Pit/tree-throw F58, 1.6m wide by 0.35m deep, produced a flint flake of Late Neolithic/Bronze Age date. Two natural glacial features (F57 and F59) were also present.

Trench 2: Excavated through L1 (0.36-0.4m thick) into L2. Probable agricultural ditch F80 was aligned northeast to southwest, 0.74m wide by 0.29m deep, and contained pottery sherds of Late Iron Age/Early Roman date. Undated ditch or silt patch F81, 2.17m wide by 0.4m deep, was also aligned northeast to southwest.

Trench 3: Excavated through L1 (0.35-0.36m thick) onto a layer of colluvium (L5). A sondage excavated through L5 identified natural at a depth of 0.58m below current ground level (bcgl). There were no archaeological features.

Trench 4: Excavated through L1 (0.33-0.38m thick) onto L5. A sondage excavated through L5 identified natural at a depth of 0.48m bcgl. There were no archaeological features.

Trench 5: Excavated through L1 (0.34-0.42m thick) onto L5 in the far western end of the trench and onto L2 in the rest of the trench. Three features cut L2: F64, F65 and F67. Agricultural ditch F64 was aligned northeast to southwest, 0.62m wide by 0.22m deep, and contained prehistoric worked flint and pottery of Late Bronze Age, Romano-British and medieval date. Pit F65 and pit/tree-throw F67 were both undated, although F67 was cut by F64 so must be earlier than the ditch. F65 was 1m long by 0.86m wide and 0.15m deep and F67 at least 0.73m long by 0.67m wide and 0.2m deep. Undated pit F66, 0.57m diameter by 0.21m deep, had been cut into L5.



Photograph 1 Agricultural ditch F64, T5, looking northeast

Trench 6: Excavated through L1 (0.26-0.32m thick) onto L5. A sondage excavated through L5 identified natural (L2) at a depth of 0.9m bcgl. Pit F79 was identified during

the excavation of one of the geoarchaeological test-pits and it is uncertain if it cut or was sealed by L5. It was 0.57m in diameter and 0.1m deep. The pit contained residual Late Bronze Age pottery sherds and pieces of prehistoric worked flint along with pottery sherds and iron nails of Romano-British date.

Trench 7: Excavated through L1 (0.36-0.37m thick) onto L5. A sondage excavated through L5 identified natural (L2) at a depth of 0.56m bcgl. Two features had been sealed by L5 (F77 and F78) and one (F83) was cut into it. Ditch F77 was aligned north-northwest to south-southeast, 1.16m wide by 0.32m deep, and produced prehistoric worked flint and pottery of Late Bronze Age and Late Iron Age date. Ditch F78 was aligned northwest to southeast, 0.7m wide by 0.24m deep, and also produced prehistoric worked flint and pottery of Late Bronze Age and Romano-British date. Undated pit F83, 0.5m wide by 0.23m deep, was recorded in section and contained fragments of fired clay and animal bone.

Trench 8: Excavated through L1 (0.33m thick) onto L5. Pit F82 was sealed by L5 and cut into natural glacial feature F86. The pit was 0.42m diameter by 0.22m deep and produced worked flint and pottery of Late Neolithic to Early Bronze Age date.

Trench 9: Excavated through L1 (0.3-0.34m thick) onto a thin spread of L5. Two features were sealed by L5. Agricultural ditch F73 was aligned east-northeast by west-southwest, was at least 0.65m wide by 0.24m deep, and contained pottery of Late Bronze Age and Late Iron Age to Early Roman date. Posthole F74 cut F73. It was 0.3m diameter by 0.23m deep and contained residual sherds of Late Bronze Age pottery.



Photograph 2 T10, working shot, looking northwest.

Trench 10: Excavated through L1 (0.38-0.46m thick) onto L2. Five parallel agricultural ditches (F84, F85, F87, F89 and F90) were aligned east-northeast by west-southwest. They were mostly u-shaped ditches, aside from F90 which was slightly more irregular in appearance, and were between 0.49-0.92m wide and 0.16-0.3m deep. Ditches F85, F87 and F90 contained prehistoric worked flint and/or pottery of Late Bronze Age date and ditch F89 pottery of Romano-British date. Pit F91, c 0.72m diameter and 0.22m deep, also produced prehistoric worked flint and pottery of Late Bronze Age date.

Trench 11: Excavated through L1 (0.4-0.5m thick) onto L2. Irregularly-shaped pit F51 had been cut by posthole F52, both contained medieval pottery sherds. F51 measured c 5m long by 1m wide and 0.1m deep and F52 c 0.5m diameter by 0.23m deep. Three natural silt patches (F53-F55) were also investigated.

Trench 12: Excavated through L1 (0.32m thick) onto L5 in the far northern end of the trench and L2 in the rest of the trench. To the south, tree-throws F49 and F50 produced a single sherd of Late Iron Age pottery (F49) and a piece of prehistoric worked flint and a Romano-British pottery sherd (F50). F49 measured over 2.5m long and between 1-2.5m wide by 0.24-0.3m deep and F50 1.5m long and at least 0.75m wide by 0.4m deep.

Trench 13: Excavated through L1 (0.32-0.35m thick) onto L2. There were no archaeological features.



Photograph 3 T15, looking southwest

Trench 14: Excavated through L1 (0.34-0.37m thick) onto L2. Four parallel agricultural ditches (F60, F61, F62 and F63) were aligned east-northeast by west-southwest. All u-shaped in profile, they were between 0.56-0.63m wide and 0.12-0.21m deep. Ditches F60 and F62 produced pottery of Late Bronze Age date and ditch F61 of early Romano-British date, F60, F61 and F63 also contained prehistoric worked flint.

Trench 15: Excavated through L1 (0.35-0.38m thick) onto L2. Two parallel agricultural ditches (F71 and F88) were aligned east-northeast by west-southwest. U-shaped in profile were at least 0.55m wide by 0.21m deep and 0.54m wide by 0.23m deep respectively. Both produced prehistoric worked flint with ditch F71 also containing pottery of Romano-British date and ditch F88 pottery of Late Bronze Age date. Pit/tree-throw F72, 1m long by 0.35m wide and 0.33m deep, also produced prehistoric work flint but cuts F71 so must post-date the ditch. Two natural features (F75 and F76) were also excavated.

Trench 16: Excavated through L1 (0.35-0.36m thick) onto L2, with L5 possibly present in the far northern end of the trench. There were no archaeological features.

Trench 17: Excavated through L1 (0.34-0.35m thick) onto L2. Large modern pit F56 was also excavated as F48 in T18, F32 in T22 and F31 in T23. The pit was approximately 50m by 50m and was dug to a maximum depth of 0.92m but was not fully excavated.

Trench 18: Excavated through L1 (0.38-0.51m thick) onto L2. Large modern pit F48 was also excavated as F56 in T17, F32 in T22 and F31 in T23. The pit was approximately 50m by 50m and was dug to a maximum depth of 0.92m but was not fully excavated.

Trench 19: Excavated through L1 (0.39-0.42m thick) onto L2. Agricultural ditch F46 was aligned east-northeast to south-southwest, 0.54m wide by 0.07m deep, and produced no finds. Undated pit F47, c 0.43m diameter by 0.16m deep, and probable natural glacial feature F45 were also excavated.

Trench 20: Excavated through L1 (0.28-0.33m thick) onto L2. Five parallel agricultural ditches (F40, F41, F42, F43 and F44) were aligned east-northeast by west-southwest. All u-shaped ditches, they were between 0.57-0.82m wide and 0.14-0.26m deep. Ditches F40, F43 and F44 produced prehistoric worked flint, ditch F40 contained pottery of Late Bronze Age date and ditches F41 and F44 pottery of Romano-British date.

Trench 21: Excavated through L1 (0.33-0.4m thick) onto L2 in most of the trench and onto L4 in the far western end. There were no archaeological features.

Trench 22: Excavated through L1 (0.33-0.6m thick) onto L2. Large modern pit F32 was also excavated as F56 in T17, F48 in T18 and F31 in T23. The pit was approximately 50m by 50m and was dug to a maximum depth of 0.92m but was not fully excavated. Ditch F27, 2m wide by 0.15m deep, was cut into the top of pit F32 so is also modern in date, likely an agricultural feature. Undated pit F25, 0.6m long by 0.5m wide and 0.15m deep, was also excavated.

Trench 23: Excavated through L1 (0.34-0.4m thick) onto L2. Large modern pit F31 was also excavated as F56 in T17, F48 in T18 and F32 in T22. The pit was approximately 50m by 50m and was dug to a maximum depth of 0.92m but was not fully excavated.

Trench 24: Excavated through L1 (0.34-0.37m thick) onto L2. Four parallel agricultural ditches (F33, F34, F35 and F36) were aligned east-northeast by west-southwest. All u-shaped in profile, they were between 0.67-0.77m wide and 0.15-0.24m deep. Ditches F33, F34 and F36 all produced prehistoric worked flint, and F34 and F35 both contained pottery dating to the Late Bronze Age.



Photograph 3 T24, looking southeast

Trench 25: Excavated through L1 (0.28-0.35m thick) onto L2. Undated pit F37, 0.5m diameter by 0.12m deep, and undated pits/ditch terminals F38 and F39 were excavated. F38 was 0.83m wide by 0.2m deep, and F39 0.4m wide by 0.1m deep.

Trench 26: Excavated through L1 (0.27-0.31m thick) onto a layer of colluvium L4. A sondage excavated through L4 encountered natural (L2) at 0.56m bcgl. There were no archaeological features.

Trench 27: Excavated through L1 (0.41-0.5m thick) onto L2 in the eastern half of the trench and L4 in the western half. Pit F22 had been cut into L4, it was c 0.73m diameter by 0.24m deep, and produced worked flint of Late Neolithic/Bronze Age date.

Trench 28: Excavated through L1 (0.38-0.45m thick) onto L2 in the northern half of the trench and L4 in the southern. Ditch F23 was cut into L2. It was aligned northwest to southeast with a V-shaped profile, 0.57m wide by 0.14m deep, and produced a single piece of worked flint of Late Neolithic/Bronze Age date.

Trench 29: Excavated through L1 (0.28-0.37m thick) onto L4. There were no archaeological features.

Trench 30: Excavated through L1 (0.3-0.44m thick) onto L4. Sondages excavated through L4 identified natural at 0.72-0.9m bcgl. Ditch F24, cut into L4, was aligned north to south and 0.97m wide by 0.16m deep. It produced a single prehistoric flint core.

Trench F31: Excavated through L1 (0.32-0.42m thick) onto L4. A sondage excavated through L4 identified natural (L2) at 0.65m bcgl.

Trench 32: Excavated through L1 (0.35-0.37m thick) onto patches of L4 (0.15-0.21m thick) or onto L2. Cremation burial F21 had been cut into L4, it was 0.47m in diameter by

0.24m deep and contained 310g of cremated human bone. Pit F26, cut into L2, was 0.38m in diameter by 0.17m deep. Both features contained worked flint of Late Neolithic/Bronze Age date.

Trench 33: Excavated through L1 (0.32-0.38m thick) onto a thin layer of L4 in the western half of the trench and L2 in the eastern half of the trench. All of the features were cut into L2. Ditch F30 was aligned north-northwest to south-southeast and measured 1.02m wide by 0.46m deep. Pits F28 and F29 were also excavated, measuring (respectively) 2.5m long by 1.1m wide and 0.18m deep, and at least 0.85m long by 0.85m wide and 0.3m deep. The only dating evidence recovered was Late Neolithic/Bronze Age flint from F29 and F30.

Trench 34: Excavated through L1 (0.42m thick) onto L4 in the far northern end of the trench, L2 in the centre of the trench, and L3 in the far southern end of the trench. There were no archaeological features.

Trench 35: Excavated through L1 (0.33-0.42m thick) onto L2. There were no archaeological features.

Trench 36: Excavated through L1 (0.33-0.38m thick) onto L2 in the far northern end of the trench and onto a layer of colluvium, L3, in the rest of the trench. A second phase of machining occurred within this trench to removed L3 and investigate any contexts sealed beneath. In part of the trench, a second layer of colluvium, L6, had been sealed by L3, and natural was identified at 1.7m bcgl. Pit/tree-throw F68 had also been sealed by L3 and produced worked flint of Late Neolithic/Bronze Age date. It measured 1.95m wide and 0.4m deep. Two small undated features (F69 and F70, both 0.14m diameter by 0.05m deep) could either be the base of postholes or root holes.



Photograph 5 T36 showing depth of colluvium L3 sealing F68-F70, looking northeast

Trench 37: Excavated through L1 (0.34-0.37m thick) onto L3. A sondage excavated through L3 identified natural (L2) at 1.2m bcgl.

Trench 38: Excavated through L1 (0.36-0.38m thick) onto L2 in the far northern end of the trench and onto L3 in the rest of the trench. Two features had been cut into L3. Ditch F3, aligned north-northwest to south-southeast, was at least 0.95m wide by 0.33m deep, and pit F2 measured c 1.4m diameter by 0.28m deep. Both features produced pieces of Late Neolithic/Bronze Age worked flint.

Trench 39: Excavated through L1 (0.27-0.42m thick) onto L3. A sondage excavated through L3 identified natural at 2m bcgl. There were no archaeological features.

Trench 40: Excavated through L1 (0.32-0.34m thick) onto L3. A sondage excavated through L3 identified natural (L2) at 1.4m bcgl. There were no archaeological features.

Trench 41: Excavated through L1 (0.27-0.42m thick) onto L3. A sondage excavated through L3 identified natural (L2) at 1.2m bcgl. Several features were investigated but, after excavation it became apparent that F5, F14, F16, F17 and F18 were lighter patches of hillwash within L3. Feature F13 may also belong to this group of features but as it was slightly deeper (c 3m wide by 0.25m deep) it may be an undated pit or depression. Four dated features were cut into L3. Ditches F4 and F19 were aligned north-northwest to south-southeast. Ditch F4, 1.36m wide by 0.42m deep, produced pottery sherds of Late Iron Age/Early Roman date and ditch F19, 1.4m wide and 0.47m deep, pottery sherds and ceramic building material of Romano-British date. Pits F15 (c 0.45m diameter by 0.23m deep) and F20 (0.34m diameter by 0.15m deep) contained sherds of Roman and Late Bronze Age pottery respectively.

Trench 42: Excavated through L1 (0.32-0.34m thick) onto L3 in the northern half of the trench and onto L2 in the southern half. There were no archaeological features.

Trench 43: Excavated through L1 (0.28-0.34m thick) onto L2 in the western half of the trench and L3 in the eastern half. Undated ditch F1 and pit F8 were cut into L2 to the west. Ditch F1 was aligned north-northwest to south-southeast and 1.16m wide by 0.12m deep. Pit F8, 0.79m diameter by 0.07m deep, contained pottery of Late Bronze Age date and a piece of Late Neolithic/Bronze Age worked flint. Six mostly undated features were cut into L3 to the east. Ditches F6 and F7 were aligned north to south and 1.2m wide by 0.38m deep and 1.15m wide by 0.38m deep respectively. The relationship between the two ditches could not be determined. Gully F11, 0.26m wide by 0.18m deep, had been cut by possible posthole F10, 0.18m diameter by 0.11m deep, and had cut Late Bronze Age pit F12, at least 0.88m long by 0.81m wide and 0.14m deep. Posthole F9 was also excavated, 0.2m diameter by 0.1m deep. Late Neolithic/Bronze Age worked flint was recovered from F11 and F12, with Late Bronze Age pottery also from F12.

7 Finds

7.1 Lithics

by Adam Wightman

Introduction

All of the worked flint was examined and analysed to determine typological and technological characteristics present in the assemblage. Measurements of length, breadth and thickness were taken through the centre of each piece and any breaks were noted. The number of previous removals were counted and the amount of cortex remaining was estimated as a percentage (to the nearest 5%). The striking platform of each flake/blade was inspected to determine whether the piece had been detached using a hard hammer or soft hammer/punch and to see if the edge of the platform had been prepared prior to striking. A description of the raw material used and any patination or

staining on the surface were also noted. Each worked flint was examined to determine whether any edge modification by retouch, use-wear or edge-damage was present. The edge and face on which modification had occurred was recorded and a description of the type of retouch (abrupt/semi-abrupt/invasive etc) was made. All of the data from the analysis of the worked flints has been tabulated in Appendix 2.

Results

The lithic assemblage recovered during the evaluation comprised a total of two hundred and forty pieces of worked flint. Thirty-seven were recovered from cut features dated as prehistoric on the basis of pottery dating evidence, stratigraphic relations or the nature of fills, forty-three were in undated cut features and thirty-nine were residual in later cut features (Roman, medieval or modern). Seventy-nine were recovered from colluvium deposits stratified between the topsoil and the natural geology (L3, L4 and L5) and forty-two were collected from the ploughsoil.

The whole assemblage consisted of worked flints knapped using nodular flint. The majority of the flints which retained cortex exhibited crazed or water-worn cortex indicating that most of the raw material was probably derived from local secondary gravel sources. However, a small component of the assemblage may have been made using material curated from primary chalk locations. The predominant colour of the raw material (based on an examination on the visible surfaces) was a mottled or dark grey. Bullhead flint, which derives from the Thames basin (Butler 2005, 21), was present in the assemblage and staining/patination was noted on a relatively high proportion of the pieces.

Worked flints in features containing prehistoric pottery

A context containing Late Neolithic-Early Bronze Age pottery (F82) also produced a small worked flint assemblage consisting of seven hard-hammer flakes, one retouched blade and a possible axe-thinning flake. The flakes were detached from their parent core using a hard-hammer without prior preparation of the striking platform and are not closely datable. However, the axe-thinning flake and retouched blade are diagnostic of flint working in the Neolithic period.

Ten contexts containing worked flints also produced Late Bronze Age pottery and no later finds (F8, F12, F20, F34, F40, F60, F85, F88, F90 and F91; although five of these features are thought to be of a later date). The majority of the flints recovered from these features were undiagnostic, comprising a high number of secondary and tertiary hard-hammer flakes and a smaller number of primary flakes and core fragments. There was also a retouched natural piece (a 'tool of convenience') and four retouched flakes, one of which has a retouched notch. With the exception of a probable axe-thinning flake, all of the worked flints from these contexts could be associated with the Late Bronze Age pottery.

Five hard-hammer flakes with no edge modification were also recovered from a ditch containing Late Iron Age pottery. Although it is possible that these flakes are functional and utilitarian pieces belonging to this period (Young & Humphrey, 1999), it is more likely that they are residual in this context.

Cut features with no other dating evidence

Worked flints were recovered from twenty contexts which contained no other dating evidence (F2, F3, F7, F11, F13, F14, F21, F22, F23, F24, F26, F29, F30, F33, F36, F43, F58, F63, F68, F72; although four of these features are thought to be of a later date). With the exception of ditch F30 (which contained eight worked flints), these features contained small assemblages of four pieces or less. The low quantity of finds in each context is likely to suggest that many of the flints are residual in the fills of later cuts.

Ditch F30 contained a probable blade (?long flake), a probable axe-thinning flake and six hard-hammer flakes, which as an assemblage could date to the Late Neolithic or Bronze

Age. Very few of the remaining worked flints from the above contexts are particularly diagnostic. However, there is a low incidence of blades (maximum two) and axe-thinning flakes (one from F11), with the assemblages mostly consisting of irregular secondary and tertiary hard hammer flakes and flake cores. This would suggest that most of the worked flints probably derive from the Late Neolithic, or perhaps more likely, sometime in the Bronze Age. The presence of three flakes with retouched notches and a tool of convenience in these features is also supportive of a Late Neolithic-Bronze Age date range for this material.

Colluvium (L3, L4 and L5)

Twenty-nine worked flints were recovered from a thick deposit of colluvium near the base of a dry valley in the south of the of the evaluation area (L3, T36-T41) and twenty-seven were collected from what is likely to be the same colluvium further up slope to the north (L4, T26, T30-T33). The majority were collected from the surface of the colluvium close to the interface with the ploughsoil, but others were recovered from depths of over 1m below modern ground level in sondages excavated into the colluvium (ie T40 find no 20 and T39 find nos 22 and 89). Amongst the material from L3 there was a snapped blade with retouch along one edge which is likely to date to the Early Neolithic and a smaller snapped bladelet which could be Mesolithic or Early Neolithic in date. Some of the unmodified flakes and retouched flake tools from L3 had prepared platforms and had been detached with a soft-hammer/punch, which also suggests a possible Mesolithic/Early Neolithic date for some of the material. However, the majority of the unmodified flakes and retouched tools recovered from L3 and L4, such as the retouched notches, scrapers and piercers/borers, are more likely to date to later in the Neolithic or the Bronze Age.

A separate deposit of colluvium on the northern slope of the hill on which the evaluation area was centred (L5) also contained worked flints. Twenty-three flints were recovered from L5 in trenches T3 and T4, mostly near the interface between the colluvium and the overlying ploughsoil. The assemblage from L5 is similar in character to that from L3/L4. A blade with a retouched notch from T4 is likely to date to the Mesolithic or Early Neolithic, but the rest of the retouched pieces (including piercers/borers and a retouched notch) are typologically and technologically more likely to date to later in prehistory. Of particular interest from L4 in T3 is a large, heavily patinated flake which has been extensively rolled and could be Palaeolithic in date.

Worked flints residual in later contexts (including ploughsoil L1)

Eighty-one prehistoric worked flints were residual in thirteen contexts dating to the Roman, medieval and modern periods (L1, F19, F27, F31/F32/F48/F56, F44, F50, F52, F61, F64, F71, F78, F79, F89). The quantity of residual flints in some of these contexts suggests that either prehistoric features were disturbed by the excavation of the later features or, more likely, that the contemporary topsoil layer contained a high frequency of worked flints. Fifty-six are unmodified hard-hammer flakes or waste pieces, many of which are broken and/or exhibit evidence of use-wear or edge-damage. There is one flake core, one probable core-rejuvenation flake and seventeen retouched flakes, of which seven are scrapers made on short, broad hard-hammer flakes typical of the later Neolithic and Early Bronze Age. There is a higher frequency of retouched tools in the later contexts when compared to the possible prehistoric contexts and colluvium. The figure could be high due to post-depositional damage to the flints being mistaken for retouch, or because more retouched pieces were lost or discarded in the topsoil than were deposited in cut features. Once again there were very few blades or blade cores (two blades, one of which is retouched) and only two probable axe-thinning flakes. Of particular interest is an oval-shaped bifacially-flaked tool called an ovate recovered from the ploughsoil near T20. Ovates are often found in later Neolithic contexts and (Butler 2005, 170) and are amongst the tools produced at Grimes Graves flint mines (Mercer 1981). It is possible that it may have been used as a chopping tool or could have been a roughout for a discoidal knife (Butler 2005, 170).

Conclusions

Overall, the flint assemblage from the evaluation at Barham Quarry is representative of significant prehistoric activity next to what is now a dry valley during the Bronze Age and probably the Later Neolithic. The quantity of worked flints recovered could be suggestive of habitation in the close vicinity during these periods. The low number of diagnostic tools recovered makes it difficult to comment on what activities may have been taking place, although the presence of some axe-thinning flakes suggests that axe production was occurring in the vicinity in the Neolithic period. There is little material in the assemblage which can be typologically ascribed to the Mesolithic or Early Neolithic or that displays the technological characteristics you would associate with flintworking during these periods (for example, the careful preparation prior to the removal of flakes from their parent cores or the production and retouching of blades). However, the presence of some retouched and snapped blades/bladelets does suggest that there may have been limited activity in the area during these periods. Also of interest is the presence of a heavily rolled and patinated flake which is likely to date to the Palaeolithic period. The worked flints from the colluvium deposits are likely to have been caught up in the loose silts as they washed down the slopes and are therefore a reflection of the prehistoric activity that is likely to have been occurring on the brow of the hill and on the valley slopes.

If further fieldwork is undertaken in the evaluation area a more detailed analysis of the expanded flake assemblage would be recommended, as would an analysis of the spatial distribution of the worked flints from the site.

7.2 Ceramic and pottery finds (Appendix 3) by Dr Matthew Loughton

The evaluation produced a modest collection of 248 sherds of pottery, ceramic building material and baked clay with a weight of 1.8kg (Table 1). The mean sherd weight (MSW) is only 7g. The prehistoric pottery was classified into fabric groups on the basis of the type of inclusions (flint, sand, grog, organic), their size, frequency, and sorting (Table 3), using the scheme developed by Brown (1988a) to record prehistoric pottery from Essex. The vessel forms were recorded according to the classification scheme developed by Barrett (1980) and Brown (1988a). The Late Iron Age and Roman pottery was classified according to the fabric groups (Table 5) outlined in *CAR 10* (Symonds and Wade 1999). Roman vessel types were classified via the Colchester (*Camulodunum*), henceforth Cam, type series (Hawkes and Hull 1947; Hull 1958; *CAR 10*, 468-487) (Table 7). The post-Roman pottery was classified according to the fabric groups from *CAR 7* (2000) and Cunningham (1985) (Tables 5, 9). The pottery was recorded by sherd count, the number of rims, handles and bases, and weight, for each fabric group. The number of vessels was determined by rim EVREP (estimated vessel representation) and rim EVE (estimated vessel equivalent).

Ceramic material	No.	%	Weight (g)	%	MSW/g	No. Rim	Rim EVE	Rim EVREP
Prehistoric	143	57.7	669	36.4	5	7	6	0.25
Late Iron Age-Roman	54	21.8	303	16.5	6	6	6	0.33
Medieval-Post Medieval	7	2.8	32	1.7	5	0	0	0.00
Ceramic Building Material (CBM)	33	13.3	823	44.8	25	-	-	-
Baked clay	11	4.4	9	0.5	*	-	-	-
All	248		1,836		7	13	12	0.58

Table 1 Details on the main types of ceramics and pottery. * Less than 1g.

Sherds of pottery, ceramic building material and baked clay were recovered from 38 features (Table 2) of which most contained small assemblages and only three features (F8, F31 and F73) produced 10 or more sherds. Indeed, many of the features only contained one or two, often very small and worn pottery sherds. The largest assemblage came from pit F8 which contained 57 sherds of prehistoric pottery with a weight of 332g and two vessels (rim EVREP). The next largest assemblage is the 18 sherds (304g) and nearly all of CBM from the pit F31. Finally, ditch F73 produced 15 sherds of prehistoric and Roman pottery with a weight of 110g.

Context	No.	%	Weight (g)	%	MSW/g
F4	7	2.8	13	0.7	2
F8	57	23.0	332	18.1	6
F12	1	0.4	14	0.8	14
F15	1	0.4	4	0.2	4
F19	2	0.8	28	1.5	14
F20	3	1.2	2	0.1	*
F27	3	1.2	12	0.7	4
F31	18	7.3	304	16.6	17
F32	4	1.6	13	0.7	3
F34	2	0.8	4	0.2	2
F35	1	0.4	4	0.2	4
F40	3	1.2	7	0.4	2
F41	1	0.4	1	0.1	1
F44	3	1.2	8	0.4	3
F48	6	2.4	54	3.0	9
F49	2	0.8	5	0.3	3
F50	1	0.4	6	0.2	6
F51	3	1.2	4	0.2	1
F52	8	3.3	144	7.9	18
F56	1	0.4	1	0.1	1
F60	1	0.4	6	0.1	6
F61	3	1.2	8	0.4	3
F63	3	1.2	9	0.5	3
F64	7	2.8	17	0.9	2
F71	7	2.8	16	0.9	2
F73	15	6.1	110	6.1	7
F74	1	0.4	4	0.2	4
F77	2	0.8	6	0.3	3
F78	8	3.3	31	1.7	4
F79	6	2.4	27	1.5	5
F80	3	1.2	5	0.3	2
F82	1	0.4	6	0.3	6
F83	9	3.7	6	0.3	*

Context	No.	%	Weight (g)	%	MSW/g
F85	3	1.2	1	0.1	*
F87	3	1.2	10	0.6	3
F88	5	2.0	14	0.8	3
F89	2	0.8	7	0.4	3
F90	7	2.8	3	0.2	*
F91	4	1.6	2	0.1	*
L3	2	0.8	7	0.4	4
L4	20	8.1	542	29.8	27
L5	8	3.2	33	1.4	4
T13	1	0.4	6	0.3	6
Total	248		1,836		7

Table 2 Number and weight of pottery, CBM and baked-clay from features and other contexts. * Less than 1g.

Prehistoric Pottery

Prehistoric pottery accounts for just over half of the assemblage with 142 sherds, weighing 661g and six vessels (rim EVREP) or 0.25 according to the rim EVE (Table 1). The mean sherd weight is only 5g. As can be seen from Table 3 these sherds are found in a variety of flint- and sand-tempered fabrics. The most common fabric, representing nearly a third of the prehistoric pottery, is Fabric B with frequent small- to medium-sized flint (Table 3). Fabrics B, C, and H account for the majority of sherds and 68% by sherd count and 66% by sherd weight.

Fabric Group	Description	No.	%	Weight (g)	%	MSW/g	No. Rim	Rim EVE	Rim EVREP
HMF	A	1	0.7	6	0.9	6	0	0.00	0
	B	47	32.9	222	33.2	9	4	0.15	3
	C	21	14.7	159	23.8	12	0	0.00	0
	D	19	13.3	137	20.5	7	1	0.04	1
HMFS	E	7	4.9	33	4.9	5	0	0.00	0
HMS	F	4	2.8	24	3.6	6	0	0.00	0
	G	2	1.4	6	0.9	3	0	0.00	0
	H	28	19.6	57	8.5	2	2	0.06	2
	I	2	1.4	12	1.8	6	0	0.00	0
	P	1	0.7	6	0.9	6	0	0.00	0

Fabric Group		Description	No.	%	Weight (g)	%	MSW/g	No. Rim	Rim EVE	Rim EVREP
HM	Z	Unclassifiable	11	7.7	7	1.0	*	0	0.00	0
Total			143		669		5	7	0.25	6

Table 3 Prehistoric pottery fabrics represented in the assemblage. * Less than 1g.

The majority of the prehistoric pottery is plain and undecorated except for some rim sherds decorated with finger-nail or finger-tip impressions on the top of the rim. Some of the sherds are heavily oxidised and are orange coloured, while in others the oxidisation is restricted to the surface of the sherds and the core is black or grey. Some of the prehistoric pottery sherds from F4 were smoothed and burnished, and occasional sherds also preserved traces of a red haematite coating on their outer surfaces. The use of a haematite coating is noted on Late Bronze Age and Early Iron Age pottery from southern England (Gibson & Woods 1997, 181). One base sherd from L4 was also heavily gritted with flint on its outer face. The surfaces of most sherds are relatively fresh and there is little evidence of abrasion suggesting that the pottery, once broken, was quickly disposed of.

The rim sherds indicate a minimum of six vessels (rim EVREP) while the rim EVE is 0.25 (Table 3). The rims are flat-topped straight or slightly everted, and are possibly from slack shouldered jars and small bucket urns (Brown's forms IE, IQ?) and are similar to Late Bronze Age vessels from Frog Hall, Fingringhoe (Brown in Brooks 2002, 59 fig. 4), Broomfield, Chelmsford (Brown in Atkinson 1995, 8-12 fig. 7 no. 15) and from Broads Green, Essex (Brown 1988b, 10-12 fig. 5.4). There is also a flat-topped externally thickened rim from F73, which resembles a vessel from the Boreham Interchange, Essex (Brown in Lavender 1999, 13 fig. 2.4 no. 13).

Dating the prehistoric pottery assemblage is difficult given its small size, fragmentary state, the rarity of diagnostic sherds, and the absence of any complete or partially complete vessels. However, several features, notably the rarity of decoration which is restricted to finger-tip impressions on the top of rims, and the flint-gritted base (Brown in Brooks 2002, 60), is perhaps suggestive of a Late Bronze Age date and an attribution to the post-Deverel-Rimbury pottery tradition (c.1100-800 BC).

Finally, one small sherd (6g) of Beaker pottery (Late Neolithic-Early Bronze Age) was recovered from F82. This is in a finer fabric (P) with an oxidised brown surface, black core, and is decorated with cord bands and cross hatching decoration. Pit F82 contained no other ceramic material. Occasional sherds of Beaker pottery have previously been found at Barham (Martin 1993, 10, 15).

Context	No.	%	Weight (g)	%	MSW/g	Rim	Handle	Base	Rim EVE	Rim EVREP
F4	5	3.5	6	0.9	1	0	0	0	0.00	0
F8	57	40.1	332	50.2	6	3	0	2	0.10	2
F12	1	0.7	14	2.1	14	0	0	0	0.00	0
F20	3	2.1	2	0.3	1	0	0	0	0.00	0
F27	2	1.4	2	0.3	1	0	0	0	0.00	0
F31	2	1.4	2	0.3	1	0	0	0	0.00	0
F32	2	1.4	11	1.7	6	0	0	0	0.00	0
F34	2	1.4	4	0.6	2	0	0	0	0.00	0
F35	1	0.7	4	0.6	4	0	0	0	0.00	0

Context	No.	%	Weight (g)	%	MSW/g	Rim	Handle	Base	Rim EVE	Rim EVREP
F40	3	2.1	7	1.1	2	0	0	0	0.00	0
F44	2	1.4	6	0.9	3	0	0	0	0.00	0
F48	1	0.7	6	0.9	6	0	0	0	0.00	0
F56	1	0.7	1	0.2	1	0	0	0	0.00	0
F60	1	0.7	6	0.9	6	0	0	0	0.00	0
F63	3	2.1	9	1.4	3	1	0	0	0.04	1
F64	5	3.5	9	1.4	2	0	0	0	0.00	0
F71	4	2.8	10	1.5	2	1	0	0	0.02	1
F73	8	5.6	66	10.0	8	2	0	1	0.09	2
F74	1	0.7	4	0.6	4	0	0	1	0.00	0
F77	1	0.7	4	0.6	4	0	0	0	0.00	0
F78	1	0.7	8	1.2	8	0	0	0	0.00	0
F79	2	1.4	6	0.9	3	0	0	0	0.00	0
F82	1	0.7	6	0.9	6	0	0	0	0.00	0
F85	3	2.1	1	0.2	*	0	0	0	0.00	0
F87	1	0.7	8	1.2	8	0	0	0	0.00	0
F88	5	3.5	14	2.1	3	0	0	0	0.00	0
F90	7	4.9	3	0.5	*	0	0	0	0.00	0
F91	4	2.8	2	0.3	*	0	0	0	0.00	0
L3	1	0.7	6	0.9	6	0	0	0	0.00	0
L4	10	7.0	92	13.9	9	0	0	1	0.00	0
L5	1	0.7	4	0.6	4	0	0	0	0.00	0
T13	1	0.7	6	0.9	6	0	0	0	0.00	0
Total	142		661		5	7	0	5	0.25	6

Table 4 Prehistoric pottery from features and layers. *Less than 1g.

Late Iron Age and Roman pottery

There was a modest collection of Late Iron Age and Roman pottery with 54 sherds with a weight of 303g (Table 6) and six vessels (rim EVREP) while the rim EVE is 0.33 (Table 7). The mean sherd weight is low at only 6g and the material is heavily fragmented and worn. This material was recovered from 19 features and three layers (Table 8). Most of these features only contained one or two small sherds of Late Iron Age and Roman pottery, and only two structures, the pit F52 and the linear feature F73, produced datable assemblages, although even these were still relatively modest in size (Table 8).

Fabric code	Fabric description	Fabric date range guide
Roman:		
GTW	Late Iron Age 'Belgic' grog-tempered wares	Late Iron Age
CZ	Colchester and other red colour-coated wares	Early 2nd-3rd century
DJ	Coarse oxidised and related wares	Roman (primarily mid 1st-2nd century)
DZ	Fine oxidised wares	Mid 1st-early 2nd century
GB	BB2: black-burnished ware, Category 2	Early 2nd-3rd century AD
GX	Other coarse wares, principally locally pro-	Roman

Fabric code	Fabric description	Fabric date range guide
	duced grey wares	
HZ	Large storage jars and other vessels in heavily-tempered wares	Mid 1st-2nd/3rd century
ON/DZ	Fine oxidised ware possibly originally mica-gilt	c 1st-early 3rd century
UR	<i>Terra nigra</i> -type wares	c 1st century
Post-Roman:		
10	St-Neots-type ware	11th-13th century AD
20	Medieval sandy grey ware (general) – elsewhere medieval coarse ware	1150-1375/1400

Table 5 Roman and post-Roman pottery fabrics recorded.

Fabric Group	Fabric description	No.	%	Weight (g)	%	MSW/g	Rim	Handle	Base
GTW	Late Iron Age 'Belgic' grog-tempered wares	7	13.0	18	5.9	3	2	0	0
CZ	Colchester and other red colour-coated ware	1	1.9	1	0.3	1	0	0	0
DJ	Coarse oxidised and related wares	7	13.0	21	6.9	3	0	0	0
DZ	Fine oxidised wares	4	7.4	7	2.3	2	0	0	0
GB	BB2: black-burnished ware, category 2	2	3.7	54	17.8	27	1	0	1
GX	Other coarse wares, principally locally produced grey wares	29	53.7	170	56.1	6	2	0	2
HZ	Large storage jars and other vessels in heavily -tempered grey wares	1	1.9	12	4.0	12	0	0	0
ON/DZ	Fine oxidised ware possibly originally mica-gilt	2	3.7	8	2.6	4	0	0	0
UR	<i>Terra nigra</i> -type wares	1	1.9	12	4.0	12	1	0	0
Total		54		303		6	6	0	3

Table 6 Details on the Late Iron Age and Roman pottery.

Fabric Group	Fabric description	Rim EVREP	Rim EVE	Forms
GTW	Late Iron Age 'Belgic' grog-tempered wares	2	0.11	Cam 266
GB	BB2: black-burnished ware, category 2	1	0.08	Cam 40B
GX	Other coarse wares, principally locally produced grey wares	2	0.10	Cam 270B
UR	<i>Terra nigra</i> -type wares	1	0.04	Cam 14
Total		6	0.33	

Table 7 Late Iron Age and Roman pottery quantification.

Context	No.	%	Weight (g)	%	MSW/g	Rim	Handle	Base	Rim EVE	Rim EVREP
F4	2	3.7	7	2.3	4	0	0	0	0.00	0
F19	1	1.9	2	0.7	2	0	0	0	0.00	0
F27	1	1.9	10	3.3	10	0	0	1	0.00	0
F32	1	1.9	1	0.3	1	0	0	0	0.00	0
F41	1	1.9	1	0.3	1	0	0	0	0.00	0
F44	1	1.9	2	0.7	2	0	0	1	0.00	0
F48	1	1.9	2	0.7	2	0	0	0	0.00	0
F49	2	3.7	5	1.7	2	1	0	0	0.08	1
F50	1	1.9	6	2.0	6	0	0	0	0.00	0
F52	5	9.3	124	40.9	25	1	0	1	0.08	1
F61	3	5.6	8	2.6	3	0	0	0	0.00	0
F64	1	1.9	4	1.3	4	0	0	0	0.00	0
F71	2	3.7	4	1.3	2	0	0	0	0.00	0
F73	7	13.0	44	14.5	6	2	0	0	0.08	2
F77	1	1.9	2	0.7	2	0	0	0	0.00	0
F78	6	11.1	22	7.3	4	0	0	0	0.00	0
F79	4	7.4	21	6.9	5	1	0	0	0.05	1
F80	3	5.6	5	1.7	2	0	0	0	0.00	0
F87	2	3.7	2	0.7	1	0	0	0	0.00	0
F89	2	3.7	7	2.3	3	0	0	0	0.00	0
L3	1	1.9	1	0.3	1	0	0	0	0.00	0
L4	3	5.6	8	2.6	3	0	0	0	0.00	0
L5	3	5.6	15	5.0	5	1	0	0	0.04	1
Total	54		303		6	6	0	3	0.33	6

Table 8 Late Iron Age and Roman pottery from features and layers. *Less than 1g.

Most of this material consists of locally-produced grey wares (Fabric GX) including one Cam 270B from the pit F79, dating from the pre-conquest to the 2nd/3rd century AD (Symonds and Wade 1999, 479). There was also a small quantity of Late Iron Age 'Belgic' grog-tempered (Fabric GTW) pottery, including one Cam 266 from the feature F49 (Irregular linear feature\glacial). This form is dated from the pre-conquest to the late 1st century AD (Symonds & Wade 1999, 479). At Sheepen, the Cam 266 is found during Period 1 (AD 5-43), albeit in modest numbers, and becomes increasingly common during Periods III, IVb and V (AD 44-61) (Niblett 1985, 49 table 2, 51 fig. 13, 61 fig. 22 no. 20). Other noteworthy sherds included a black-burnished, category 2 (Fabric GB) Cam 40B from the pit F52 and a *terra-nigra* (Fabric UR) Cam 14 from the layer L5. The former dates from the early 2nd until the late 3rd century AD (Symonds & Wade 1999, 470). The Cam 14, or possibly a local copy (Cam 28), is pre-Flavian (Symonds & Wade 1999, 469).

Post-Roman pottery

Post-Roman pottery was rare with only seven sherds with a weight of 32 gr. (Table 9). Two fabrics are represented: the medieval sandy grey ware (Fabric 20) and the St-Neots type ware, which is tempered with fine shell (Fabric 10). A sherd of sandy grey pottery from pit F52 was covered with black sooting on its outer surface. These wares are broadly datable from the 12th until the 14th century AD (CAR 7, 32-33, 91-92). Medieval

pottery was recovered from the following features: pit F51, pit F52 and ditch F64. Pit F51 contained sherds of both the St-Neots type and medieval sandy grey ware.

Fabric Group	Fabric description	No.	Weight (g)	MSW/g	Rim	Handle	Base
10	St-Neots type ware	2	2	1	0	0	2
20	Medieval sandy grey ware (general) – elsewhere medieval coarse ware	5	30	6	0	0	0
Total		7	32	5	0	0	2

Table 9 Details on the post-Roman pottery.

Baked clay

Eleven sherds of baked clay with a weight of 11g was recovered from F71, F78 and F83 which contained most of this material (9 sherds).

Ceramic building material (CBM)

There was a modest collection of Roman and medieval/post-medieval CBM with 33 sherds with a weight of 823g (Table 10).

CBM code	CBM type	No.	Weight (g)	MSW/g
Roman				
RT	Roman <i>Tegulae</i> tile	5	352	70
RBT	Roman brick/tile (general)	13	151	12
Total		18	503	28
Post-Roman				
PT	Peg tile	5	242	48
BR	Brick	10	78	8
Total		15	320	21
Total		33	823	25

Table 10 Roman and post-Roman CBM by type.

Feature	No.	Weight (g)	MSW/gr.
F14	1	4	4
F19	1	26	26
F31	16	302	19
F32	1	1	1
F48	4	46	12
F52	1	2	2
L4	6	436	73
L5	3	6	2

Table 11 Quantities of Roman CBM by feature.

CBM was recovered from six features and two layers although most of this material came from F31 (Table 11). The only pieces of Roman *tegula* were from L4. The medieval/post-medieval peg-tile came from F31 and F48.

Summary

Most of the features cannot be dated with any certainty given that they contained too little material, often one to three very small sherds, and/or a mix of prehistoric, Late Iron Age to Roman and sometimes medieval/post-medieval material. Many of the suggested dates for the pottery assemblages provided in Table 12 are therefore very approximate and in truth many of the features are probably not really datable. Rare contexts do however contain slightly larger and/or more coherent assemblages of pottery. For example, F8 contained an assemblage of Late Bronze Age pottery while a very small assemblage of Late Iron Age 'Belgic' grog-tempered pottery was recovered from F49, F52 contained a modest assemblage of 2nd to 3rd century Roman pottery, and F51 is possibly of later medieval date.

Taking the pottery assemblage as a whole indicates occupation dating to the Late Neolithic-Early Bronze Age, Late Bronze Age, Late Iron Age to Early Roman, Roman, and late medieval periods. Previous excavations at Barham 'Hill top' and the quarry have uncovered limited evidence of late Neolithic-Early Bronze Age activity, increasing evidence for Late Bronze Age and Early Iron Age occupation, and finally some Late Iron Age and Roman finds (Martin 1993, 1-40). It has been suggested that there was also a Late Saxon/early medieval church or chapel (Martin 1993, 40), which would perhaps account for the small quantity of later medieval pottery and CBM from the evaluation and reported on here.

Context	Prehistoric	LIA-Roman	Medieval-post-medieval	CBM	Overall date of finds approx.
F4	LBA	LIA-ER	-	-	LIA/Early Roman
F8	LBA	-	-	-	LBA
F12	LBA		-	-	LBA
F15	-	-	-	Roman	Roman
F19	-	Roman	-	Roman	Roman
F20	LBA	-	-	-	LBA
F27	LBA	Roman	-	-	Roman
F31	LBA	-	-	Roman/ medieval- post-med	Medieval/ post-medieval
F32	LBA	Roman	-	Roman	Roman
F34	LBA	-	-	-	LBA
F35	LBA	-	-	-	LBA
F40	LBA	-	-	-	LBA
F41	-	Roman	-	-	Roman
F44	LBA	Roman	-	-	Roman
F48	LBA	Roman		Roman/ medieval- post-med	Medieval/ post-medieval
F49	-	LIA	-	-	LIA
F50	-	Roman	-	-	Roman
F51	-	-	1100-1375/1400	-	Medieval, 1100-1375/1400

Context	Prehistoric	LIA-Roman	Medieval-post-medieval	CBM	Overall date of finds approx.
F52	-	2nd-3rd cent	1150-1375/1400	Roman	Medieval, 1150-1375/1400
F56	LBA?				LBA
F60	LBA	-	-	-	LBA
F61	-	Early Roman	-	-	Early Roman
F62	LBA	-	-	-	LBA
F64	LBA	Roman	1150-1375/1400	-	Medieval, 1150-1375/1400
F71	LBA	Roman	-	-	Roman
F73	LBA	LIA-ER	-	-	LIA/Early Roman
F74	LBA	-	-	-	LBA
F77	LBA	LIA	-	-	LIA
F78	LBA	Roman	-	-	Roman
F79	LBA	Roman			Roman
F80	-	LIA-ER	-	-	LIA-ER
F82	LN-EBA	-	-	-	Late Neolithic- Early Bronze Age
F83	-	-	-	-	-
F85	LBA	-	-	-	LBA
F87	LBA	-	-	-	LBA
F88	LBA	-	-	-	LBA
F89	-	Roman	-	-	Roman
F90	LBA	-	-	-	LBA
F91	LBA	-	-	-	LBA
L3	LBA	Roman	-	-	Roman
L4	LBA	Roman	1150-1375/1400	Roman	Roman (+1 medieval sherd)
L5	LBA	Roman	-	Roman	Roman

Table 12 Feature and layer dating summary

7.3 Metal small finds

by Laura Pooley

Metal finds from the Barham Quarry evaluation were sparse. The most interesting was a tiny curved silver strip (SF1) from pit F52⁶. The strip was tapering with rectangular cross-section and four small horizontal notches at the wider end. Finds of Roman and medieval date were recovered from this pit and the silver strip could date to either of these periods. Iron nails of Manning (1985) Type 1b were recovered from ditch F73 (SF2) and pit F79 (SF4 and SF5) with a fragment of iron sheet with rivet hole from L5 (SF3). A modern cartridge cap from the surface of trench T40 (finds no. 30) was discarded.

⁶ Reported to SCCAS on 12th October 2018 who recommended that as it was 'an unidentifiable object, fragmentary, and cannot be dated by its form alone that it should not go through treasure but be treated like any other small find' (Faye Minter, Senior Archaeological Officer SCCAS, email to the author 16/10/2018).

SF1 F52 (63) Tiny fragment of a curved silver strip, rectangular cross-section, tapering, four small horizontal notches on thicker end, 16mm long, 1mm wide, 1mm thick, <0.1g.

SF2 F73 sx1 (101) Roman iron nail, incomplete with tip missing, square-sectioned shank, flat round head (16mm diameter), Manning Type 1b (1985), 60mm long, 46.6g.

SF3 L5 (66) Iron sheet, roughly rectangular fragment, broken at both ends, rivet hole at one end (7mm diameter), 46mm long, 30mm wide, 5mm thick, 17.4g

SF4 F79 (109) Roman iron nail, incomplete with tip missing, square-sectioned shank, flat round head (18mm diameter), Manning Type 1b (1985), 85mm long.

SF5 F79 (127) Roman iron nails. A) Two complete iron nails corroded together at head, so now forming an L-shape, square-sectioned shanks, the shorter nail is clenched at 45° at tip, heads probably flat and round but mostly obscured within corrosion, the larger nail appears to have a head diameter of c 20mm, both Manning Type 1b (1985), 86mm and 74mm long, 63.1g. B) Complete iron nail, square-sectioned shank, flat round head (c 14mm diameter), Manning Type 1b (1985), 76mm long, 33.6g.

7.4 Human and animal bone

by Julie Curl

7.4.1 Cremated human bone (Appendix 1)

Methodology

Two bags of burnt bone were submitted for recording and analysis from cremation burial F21. The bone was sorted manually by size, ie those over 10mm, 5-9mm and 2-4mm. Those of 1mm or less were not counted. Greatest lengths were measured for the largest fragments in the assemblage.

Quantification, provenance and preservation

Context	Finds no.	Weight	Count	Elements and Comments
F21	15	126g	184	Skull, radius, tibia, sacrum, clavicle.
F21	16	184g	530	Humerus, skull, ulna, tibia.
TOTALS		310g	714	Adult

Table 13 Quantification of the cremated assemblage by context, weight and count.

Analysis results and discussion

A total of 310g of burnt bone (714 pieces) was recovered from F21. Of this total, 184g of bone, consisting of 530 fragments, was recovered from a soil sample.

Elements present

Fragments of skull, humerus, radius, ulna, clavicle, sacrum and tibia were identified. All identifiable fragments are of human origin. It may be possible that some animal bone was included in the cremation, but none were positively identified.

Size of Cremation

The size of a cremation depends on the individual (age, sex, body mass, bone density), maintenance of the pyre, the extent of bone recovery from the pyre site and during excavation, as well as on the rate of bone preservation (McKinley, 1993).

The weight for the cremation at 310g in this assemblage is in the low weight range in comparison to average archaeological cremations (range: 57 – 3000 g) (McKinley, 2000) and considerably less than the lowest weight in comparison to a modern cremation (1000 – 3600 g) (McKinley, 2000). However, the cremation was not contained in an urn, which can offer protection of the cremated remains and this is likely to have affected the size.

Fragmentation

The fragmentation of bone resulting from the cremation process may be increased by funerary practices such as raking and tending of the pyre, collection of bone at the pyre

site, deliberate crushing prior to burial, as well as a result of post-depositional processes, excavation and processing (McKinley, 1989).

The maximum size in this cremation was 49mm, the next greatest length is 38mm, with most fragments (in terms of count and weight) in the 25-9mm size range (see Table 14). Some cremations produce fragments of around 70-100mm or more, so the remains in this cremation are heavily fragmented. Little bone was recorded as 1mm or less, where often there is considerable numbers of small fragments, although with wet sieving of part of the cremation, many small fragments would be lost. The overall small range of sizes and lack of larger fragments and smaller fragments might suggest heavy raking of the cremation while burning. The lack of very large fragments and fewer very small pieces is less common and might suggest poor soil preservation, poor collection prior to placing in the urn or over raking of remains. The overall degree of bone fragmentation is more than that generally seen in archaeological cremations where an average of 50% of bone fragments are over 10mm in size (McKinley, 1994).

Size of fragments	Number of fragments
>10mm	205
5-9mm	347
<5mm	162
<i>TOTAL</i>	<i>714</i>

Table 14 Quantification of the burnt bone by fragment size.

Colour

The colour of cremated bone depends on a range of factors including the maximum temperature reached, the length of the cremation process, the type and amount of fuel, the quantity of oxygen, the amount of body fat as well as on the degree of uniformity of exposure to the heat across the body. A correlation has been found between the temperature attained and colour changes. Cremated bone can exhibit a large range of heat-induced colour variation from normal coloured (unburnt), to black (charred: c 300°C), through hues of blue and grey (incompletely incinerated: up to c 600°) to fully oxidised white (> c 600°C) (McKinley, 2004).

All of the bone in this cremation was fully oxidised. A couple of fragments of blue-grey bone were recorded. The variation in colour might suggest that the cremation was not raked and tended sufficiently to ensure fully burning of all of the remains.

Surface Changes

Surface changes such as warping, cracking and fissuring are characteristics of cremated bone and are produced during the process of dehydration undergone by bone exposed to heat. The pattern of heat-induced bone changes in colour and texture can be exploited to infer the technological aspects of the ritual, the condition of the body at the time when the cremation process took place and the nature of post-depositional disturbance (Shipman *et al* 1984).

Approximately 60% of the bone in this assemblage showed warping, twisting, cracking and fissures, with fragments that were burnt at higher temperature and fully oxidised.

The remains

All of the identifiable bone seen in this assemblage is human, with no clearly identifiable animal remains in this assemblage. Elements that could be identified consist mostly of skull and limb fragments, with one piece of clavicle. There seems a slightly better survival of the upper body elements, perhaps with less fat around the skull and shoulders, but the ground may have been damp in areas that may have affected heat. No elements were seen that would allow estimation of age, sex or stature. No pathologies were observed on any of the bone. The lack of larger fragments and the small sizes of the assemblage would affect this.

Conclusions

The inhumation bone represents the burial of an adult with fused sutures on the skull. The burnt remains from Barham Quarry is a very small cremated assemblage, which is most likely due to truncation and/or disturbance of its burial pit.

The small size, heavy fragmentation and poor condition of the assemblage limits what information can be obtained. The uncertain date also limits interpretation of the remains.

7.4.2 Animal bone (Appendix 2)

Methodology

This assessment was carried out following a modified version of guidelines by English Heritage (Davis 1992). All of the bone was scanned to determine range of species and elements present with the total number of bones identified to each species (NISP). A note was also made of butchering and any indications of skinning, hornworking and other modifications. When possible, a record was made of ages and any other relevant information such as pathologies. Counts and weights taken and additional counts were made for each species identified. Counts were also taken of bone classed as 'countable' (Davis 1992) remains. The bones were sorted manually and attempts made to piece together pieces of bone to determine elements present. As this is a small assemblage, the catalogue was produced directly into a table in the appendix.

The faunal assemblage

A total of 112g of animal bone (48 pieces) was recovered from this site, with quantification in Table 15. Faunal remains were found in three deposits, medieval pit F52 (63), Roman ditch F78 (107) and undated pit F83 (125). Finds at this site ranged widely in date from Late Bronze Age to medieval.

Context	Qty	Wt (g)	Species	NISP
F52 (63)	34	76	Equid	5
			Mammal	29
F78 (107)	1	6	Sheep/goat	1
F83 (125)	13	30	Mammal	13
TOTALS	48	112	TOTAL NISP	48

Table 15 Quantification of the bone assemblage by context, feature, count, weight in grams and species.

Medieval pit F52 (63) produced fragments of an equid pelvis and other small fragments that may be part of the same animal.

A single sheep/goat incisor tooth was found in Roman ditch F78 (107); the tooth is worn on the biting surface, which indicates an adult.

Undated pit F83 (125) yielded fragments of large mammal (equid or cattle sized), with one possibly from a scapula.

The assemblage is in reasonable condition, although fragmented, but no butchering was seen on any of the remains in this assemblage. No gnawing was observed on any of the bone, which would suggest it may not have been available for scavengers.

Discussion

This is a very small assemblage of varying dates. The assemblage is very fragmented and such small amounts in isolation can be very difficult to interpret. It is likely the remains represent domestic stock, with equids as traction animals and sheep/goat for a supply of milk, meat, wool and skins.

Statement of potential and recommendations for further work

The preservation at this site is reasonable for bone preservation and identifiable remains have survived. There is potential for further bone to be recovered and it may be worthwhile taking samples for sieving to increase potential dietary, husbandry and environmental information.

This particular assemblage is of limited potential and no further work is recommended.

7.5 Other finds

by Laura Pooley

Stone: Two naturally-rounded sandstone pebbles (379.7g and 336.2g) came from layer L4 (find no. 68) in trench T32. Both would fit comfortably into the palm of a hand and one had been worn smooth along part of its edge, indicating possible use as a hone or grinder. There is no usewear or obvious indications of use on the second pebble in which case it may be natural. Pieces of other naturally-shattered sandstone were recorded from F8 (find no. 8) (one piece, 328g) and F13 (find no. 9) (four pieces, 770g) that showed no evidence of being utilised or worked and were discarded.

Slag: Fragment of slag (25g) unstratified from trench T13 (find no. 104).

Shell: Snail shell (0.7g) from F48 (find no. 59). Discarded.

Modern glass: Two modern glass fragments (136.7g) from F31 (find nos. 44 & 71). Discarded.

Burnt flint: A total of 106 pieces of burnt flint (2,693g) were found in 14 contexts. Due to its poor thermal properties, flint has a tendency to fragment when heated and then rapidly cooled. Most of the burnt flints are whitened (calcified) and cracked from the heat although a few are discoloured various shades of white, grey and red, some with surface crazing.

The largest quantity by number (45%) and weight (45%) came from layer L4. Although they were found scattered across four trenches, most were concentrated in trench T32. The second largest quantity by number (26%) and weight (25%) came from pit F22 which also produced a quantity of charcoal. It is likely that at least some of this flint derives from flint pebbles used as pot boilers.

All of the burnt flint was recorded (Table 16) and discarded.

Context	Finds no.	Qt	Wt	Description
F11	11	1	18	Flint, cracked, crazed and discoloured greyish-white
F21	15	1	4	Flint, crazed, discoloured reddish/grey
F22	26	12	218	Flint, cracked, crazed and discoloured grey and white
	75	14	374	Flint, cracked, crazed and discoloured grey, white and red
	76	2	92	Flint, cracked, crazed and discoloured grey, white and red
F24	31	7	448	Flint, cracked, crazed and discoloured grey, white and red
F26	35	5	16	Flint, cracked, crazed and discoloured greyish-white
F33	48	1	30	Flint, cracked, crazed and discoloured reddish-pink
F50	61	2	108	Flint, cracked, crazed and discoloured white and reddish-pink
F51	62	1	16	Flint, cracked, crazed and discoloured pinkish-red
F52	63	1	26	Flint, cracked, crazed and discoloured grey and white

Context	Finds no.	Qt	Wt	Description
F61	69	4	76	Flint, cracked, crazed and discoloured white
F80	122	4	28	Flint, cracked, crazed and discoloured grey
F88	131	2	14	Flint, cracked, crazed and discoloured grey and white
L4 T27	25	1	19	Flint, cracked, crazed and discoloured white and grey
L4 T26	27	2	32	Flint, cracked, crazed and discoloured grey and reddish-pink
L4 T30	34	2	126	Flint, cracked and crazed, partially discoloured white
L4 T32	36	3	40	Flint, cracked, crazed and discoloured grey and white
	37	11	264	Flint, cracked, crazed and discoloured grey and white with one discoloured red.
	68	29	732	Flint, cracked, crazed and discoloured grey, white and red
L5 T4	129	1	12	Flint, cracked, crazed and discoloured grey and red

Table 16 Burnt flint by context

8 Environmental assessment and charcoal identification

by Lisa Gray MSc MA ACIfA Archaeobotanist

8.1 Environmental assessment

Introduction

Thirty-three samples were presented for assessment. They were taken during an evaluation that revealed a small number of prehistoric, Roman and medieval ditches, pits, pits/tree throws, postholes and three layers of colluvium/hillwash.

The aims of this assessment are to determine the significance and potential of the plant macro-remains in the samples and consider their use in providing information about diet, craft, medicine, crop-husbandry, feature function and environment.

Sample	Finds no.	Context	Date
1	7	F8 fire pit (mid fill)	Late Bronze Age
2	16	F21 cremation burial	Undated
3	32	F24 ditch (upper fill)	Undated
3	32	F24 ditch (lower fill)	Undated
4	76	F22 pit	Undated
5	82	F68 pit/tree throw (Fill B)	Undated
6	83	F68 pit/tree throw (Fill C-D)	Undated
7	84	Trench 36, L3 (lower fill, 1500-1700mm deep)	Roman
8	85	Trench 36, L3 (mid fill, 1000-1200mm deep)	Roman
9	86	Trench 36, L3 (upper fill, 500-700mm deep)	Roman
10	87	Trench 31, L4 (400-500mm deep)	Roman
11	88	Trench 31, L4 (500-600mm deep)	Roman
12	90	Trench 30, L4 (400-600mm deep)	Roman
13	91	Trench 30, L4 (400-600mm deep)	Roman
14	92	Trench 32, L4 (400-480mm deep)	Roman
15	93	Trench 32, L4 (480-560mm deep)	Roman
16	94	Trench 40, L3 (400-500mm deep)	Roman
17	95	Trench 40, L3 (800-900mm deep)	Roman
18	96	Trench 40, L3 (1100-1200mm deep)	Roman
19	97	Trench 39, L3 (400-550mm deep)	Roman
20	98	Trench 39, L3 (1000-1200mm deep)	Roman
21	99	Trench 39, L3 (1800-1950mm deep)	Roman
22	110	Trench 7, L5 (upper fill, 370-430mm deep)	Roman
23	111	Trench 7, L5 (mid fill, 430-490mm deep)	Roman

Sample	Find no.	Context	Date
24	112	Trench 7, L5 (lower fill, 490-560mm)	Roman
25	113	Trench 4, L5 (upper fill, 380-430mm deep)	Roman
26	114	Trench 4, L5 (lower fill, 430-480mm deep)	Roman
27	115	Trench 3, L5 (upper fill, 350-430mm deep)	Roman
28	116	Trench 3, L5 (mid fill, 430-510mm deep)	Roman
29	117	Trench 3, L5 (lower fill, 510-580mm deep)	Roman
30	118	F52 pit	Medieval
31	126	F78 ditch (mid fill)	Roman
32	127	F79 pit	Roman
33	128	F82 pit	Late Neolithic to Early Bronze Age?

Table 17 Sample descriptions

Sampling and processing methods

Samples were taken and processed by Colchester Archaeological Trust. All samples were completely processed using a Siraf-type flotation device. Flot was collected in a 300 micron mesh sieve then dried.

Once with the author, the flots were scanned under a low-powered stereo-microscope with a magnification range of 10 to 40x. The whole flots were examined. The abundance, diversity and state of preservation of eco- and artefacts in each sample were recorded. A magnet was passed across each flot to record the presence or absence of magnetised material or hammerscale.

Identifications were made using uncharred reference material (author's own and the Northern European Seed Reference Collection at the Institute of Archaeology, University College London) and reference manuals (such as Beijerinck 1947; Cappers *et al.* 2006; Charles 1984; Fuller 2007; Jacomet 2006). Nomenclature for plants is taken from Stace (Stace 2010). Latin names are given once and the common names used thereafter. Low numbers of non-charcoal charred plant macro-remains were counted. Uncharred plant remains, fauna and magnetic fragments were given estimated levels of abundance unless, in the case of seeds, numbers are very low in which case they were counted.

At this stage numbers given are estimates but where only one item is present that has been noted. Identifiable charred wood >4mm in diameter has been described as that. Charred wood <4mm diameter are described as 'flecks'. Samples this size are easier to break to reveal the cross-sections and diagnostic features necessary for identification and are less likely to be blown or unintentionally moved around the site (Asouti 2006, 31; Smart and Hoffman, 1988, 178-179). Fragments smaller than this and larger than 2mm \emptyset were scanned in case any fragments of twig or roundwood survived.

Results (Tables 18 to 21)

The plant remains

Although plant remains were not counted at this stage the density of items per litre of sampled soil was estimated and is clearly very low. This means that the plant remains in each sample are more likely to be general background debris or accidental additions to a context rather than directly related to it.

Fragments of charcoal of identifiable size were found in low numbers in six samples. Most were found in pit/tree throw F68 (Sample 5) and a L3 colluvial/hillwash sample from Trench 40 (1100-1200 mm deep) (Sample 18). Lower numbers of fragments were found in Late Bronze Age pit F8 (Sample 1), pit F22 (Sample 4), L4 colluvial/hillwash from Trench 30 (400-600 mm deep) (Samples 12 and 13), and L3 colluvial/hillwash sample from Trench 40 (800-900 mm deep) (Sample 17).

Two poorly preserved charred grains were present. One barley/wheat (*Hordeum/Triticum* sp.) was found in ditch F24 (upper fill) (Sample 3) and one wheat grain was found in L5

colluvium/hillwash Trench 7 (lower fill 490-560 mm) (Sample 24). No charred cereal chaff or charred seeds were found in any sample.

Uncharred, possibly dried waterlogged and probably more recent seeds were found in thirteen samples from features F23, F24 and layers L3 (in T36, T39 & T40), L4 (in T30, T31 & T32) and L5 (in T4 & T7). The seeds observed were those of ruderals such as fat hen (*Chenopodium album* L.), knot grass (*Polygonum aviculare* L.) and lady's/hedge bedstraw (*Galium verum/album*). Individual plants of these types can produce many thousands of seeds per plant so the low number observed in these samples gives a very general view of the local environment rather than anything feature specific.

Fauna

Faunal remains were found in thirty-one samples. Terrestrial mollusca were the most frequent taxon with shells of the burrowing snail *Ceciliodes acicula* (Müller) present in samples from features F8, F21, F22, F24, F52, F68, F78 and F79 and layers L3 (in T36, T39 & T40), L4 (in T30, T31 & T32) and L5 (in T3, T4 & T7). Earthworm cocoons were found in the samples from F8, L3 (T36, 1500–1700mm deep), L4 (T32, 480–560mm deep) and L5 (T3, lower fill, 520–580mm deep).

Inorganic artefacts

No artefacts were found.

Key to Tables 18-21:

* = estimated charred plant macro-remains per litre of sample excluding charcoal flecks, root/rhizome fragments and stem/leaf fragments;
a = abundance [1 = occasional 1-10; 2 = moderate 11-100; and 3 = abundant >100];
d = diversity [1=low 1-4 taxa types; 2 = moderate 5-10; 3 = high];
p = preservation [1 = poor (family level only); 2 = moderate (genus), 3 = good (species identification possible)]

Sample No.	Sample volume (L.)	Flot volume (L.)*	Charred Plant Remains					Uncharred Plant Remains			Fauna			
			Grain			Charcoal Fragments >4mm	Charcoal flecks <4mm	Seeds			Root/Rhizome fragments	Terrestrial mollusca	<i>Ceciliodes acicula</i> (Müller)	Earthworm cocoons
			a	d	p	a	a	a	d	p	a	a	a	a
1	30	0.025	-	-	-	1	3	-	-	-	3	-	1	1
2	20	0.005	-	-	-	-	2	-	-	-	3	-	2	-
3	20	0.005	1	1	2	-	-	1	1	3	3	-	2	-
4	30	0.01	-	-	-	1	-	1	1	2	3	-	2	-
5	10	0.02	-	-	-	2	3	-	-	-	3	-	1	-
6	10	0.01	-	-	-	-	3	-	-	-	3	-	1	-
30	20	0.01	-	-	-	-	-	-	-	-	1	-	2	-
31	?	0.005	-	-	-	-	2	-	-	-	-	1	2	-
32	?	0.01	-	-	-	-	2	-	-	-	3	-	2	-
33	10	0.005	-	-	-	-	1	-	-	-	1	-	-	-

Table 18 Contents of samples from features

Sample No.	Sample volume (L.)	Flot volume (L.)*	Charred Plant Remains					Uncharred Plant Remains					Fauna	
			Grain			Charcoal fragments >4mm	Charcoal flecks <4mm	Seeds			Root/rhizome fragments	<i>Ceciliodes acicula</i> (Müller)	Earthworm cocoon	
			a	d	p	a	a	a	d	p	a	a	a	
9	10	0.001	-	-	-	-	-	-	-	-	-	1	-	-
7	10	0.01	-	-	-	-	-	-	-	-	-	1	-	1
8	10	0.002	-	-	-	-	-	1	1	3	2	1	-	-
19	10	0.005	1	1	2	-	-	1	1	3	2	1	-	-
20	10	0.005	-	-	-	-	2	-	-	-	2	1	-	-
21	10	0.001	-	-	-	-	2	-	-	-	1	1	-	-
16	10	0.01	-	-	-	-	-	-	-	-	2	1	-	-
17	10	0.005	-	-	-	1	2	-	-	-	3	1	-	-
18	10	0.03	-	-	-	2	-	1	1	3	3	-	-	-

Table 19 Contents of samples from L3 'colluvium/hillwash' to the south of the site

Sample No.	Sample volume (L.)	Flot volume (L.)*	Charred Plant Remains		Uncharred Plant Remains				Fauna			
			Charcoal fragments >4mm	Charcoal flecks <4mm	Seeds				Root/rhizome fragments	Terrestrial mollusca	<i>Ceciliodes acicula</i> (Müller)	Earthworm cocoon
			a	a	a	d	p	a	a	a	a	
12	10	0.005	1	-	1	1	2	-	-	1	-	
13	10	0.005	-	1	-	-	-	1	-	1	-	
10	10	0.002	-	-	1	1	3	2	-	-	-	
11	10	0.005	-	-	-	-	-	2	-	1	-	
14	10	0.002	-	1	1	1	3	-	-	1	-	
15	10	0.002	-	-	2	1	3	-	1	1	1	

Table 20 Contents of samples from L4 'colluvium/hillwash' in the middle of the site

Sample No.	Sample volume (L.)	Flot volume (L.)	Charred Plant Remains				Uncharred Plant Remains				Fauna		
			Grains			Charcoal flecks <4mm	Seeds			Root/rhizome fragments	Terrestrial mollusca	<i>Ceciliodes acicula</i> (Müller)	Earthworm cocoons
			a	d	p		a	a	d				
27	10	0.002	-	-	-	1	-	-	-	3	-	1	-
28	10	0.01	-	-	-	-	-	-	-	3	1	1	-
29	10	0.005	-	-	-	-	-	-	-	-	-	2	1
25	10	0.01	-	-	-	-	1	1	2	3	-	2	-
26	10	0.01	-	-	-	-	-	-	-	3	-	1	-
22	10	0.002	-	-	-	-	1	1	3	1	1	-	-
23	10	0.005	-	-	-	-	1	1	3	1	-	2	-
24	10	0.002	1	1	2	-	1	1	3	2	-	1	-

Table 21 Contents of samples from L5 'colluvium/hillwash' to the north of the site

Discussion

Biases in recovery, residuality, contamination

Nothing with regards biases in recovery, residuality or contamination was highlighted for any of these samples at the time of writing. Modern root/rhizome fragments were present in each sample so bioturbation is possible. The presence of terrestrial snails, particularly the subterranean snail *Ceciliodes acicula* (Müller) can be indicative of bioturbation. *Ceciliodes acicula* borrows well below the ground surface (Kerney & Cameron 1979, 149). Earthworm activity was only evident in four samples but, if present, earthworms can carry small items such as seeds and small stones up to a metre down into the soil (Canti 2003, 143).

Quality and type of preservation

The plant remains in these samples were preserved by charring and possibly by waterlogging. Preservation by waterlogging occurs when plant remains are in anoxic conditions such as sealed pits, layers or a high water-table (Campbell *et al* 2011, 13). Charring of plant macrofossils occurs when plant material is heated under '...reducing conditions...' where oxygen is largely excluded (Boardman & Jones 1990, 2) leaving a carbon skeleton resistant to biological and chemical decay (Campbell *et al* 2011, 17). These conditions can occur in a charcoal clamp, the centre of a bonfire or pit or in an oven or when a building burns down with the roof excluding the oxygen from the fire (Reynolds 1979, 57).

No plant remains were preserved by mineralisation (Green 1979, 281) or silicification (Robinson & Straker 1990), which means that there is no archaeobotanical evidence for the cess disposal or slow-burning aerated fires.

Potential and significance

The possible deposition rates (density of plant remains per litre of sampled soil) of each sample was calculated by dividing the estimated number of charred plant macro-remains (excluding charcoal flecks, stem/leaf fragments and root/rhizome fragments) in a sample by the number of litres taken for that sample. At assessment stage charred plant macro-remains are not counted like they are at analysis level so estimated amounts were

calculated by giving a value of 10 to an abundance of '1', 100 to an abundance of '2' and 200 to an abundance of '3' unless actual numbers were known. Although these are estimates, they help give an idea of the productivity of the samples. The meaning of these densities here is based on the work of Kate Nicholson, who based her interpretations of Romano-British archaeobotanical assemblages from a villa site (Nicholson 2014) on the work of Professor Marijke Van der Veen and Professor Glynis Jones (Van der Veen & Jones 2006; Van der Veen 2007). (Nicholson 2014, 158). Nicholson's density value interpretations are given as follows below:

High density = >/ 21 items per litre of sampled soil = rapid/single event deposition

Low density = 3-13 items per litre of deposit = gradual accumulation in day to day activities

Very-low density = <3 items per litre of deposit = accidentally incorporated (e.g. wind-blown) into fills of features they no longer have association with. (Nicholson 2014, 157-158).

The estimated densities for all these samples are low suggesting that the plant remains are residual. They may, however, be general background waste from activities taking place in the area.

Nevertheless, any significance such low numbers of charred plant remains may have is limited by the fact that these durable charred plant remains survive being moved between contexts by human action and bioturbation so cannot be properly interpreted unless radiocarbon dates are gained from the plant macro-remains themselves (Pelling *et al* 2015, 96).

Recommendations for further work on these samples and if the evaluation goes to excavation

Further work is not recommended on these samples unless the charcoal is needed for identification to select taxa suitable for radiocarbon dating.

It is clear that charred plant remains have survived at this site so further bulk 'whole earth' sampling for flotation may reveal archaeobotanical evidence for feature use and activities at the site.

8.2 Charcoal analysis

Introduction

During the archaeobotanical assessment (see above) six samples were found to contain charcoal fragments large enough for identification (see Table 22 below).

Sample	Finds no.	Feature	Date
1	7	F8 pit (mid fill)	Late Bronze Age
4	76	F22 pit	Undated
5	82	F68 pit/tree throw (Fill B)	Prehistoric
12	90	Trench 30, L4 (400-600mm deep)	Undated
17	95	Trench 40, L3 (800-900mm deep)	Undated
18	96	Trench 40, L3 (1100-1200mm deep)	Undated

Table 22 Samples containing fragments of identifiable charcoal

Identification

Only fragments of charred wood larger than 4mm (sieve mesh aperture size) or roundwood or twigs larger than 2mm were selected for identification. The reason for this size selection was based on observations made by charcoal specialists that fragments larger than this size are easier to break to reveal the cross-sections necessary, meaning that more diagnostic features are likely to survive (Asouti 2006, 31; Smart & Hoffman, 1988, 178-179). When fragments have been broken to reveal anatomy they have been wrapped in foil to keep those fragments intact so they can be counted. Charcoal

identifications were made using modern reference slides (author's own) and anatomical guides.

Results (Table 23)

No fragments of roundwood or any other fragments clearly discernible as sapwood were present. 48 fragments were identified. Oak (*Quercus* sp.) stem/branch wood was the most frequent taxa. These fragments had the flame-like ring pore distribution and very large rays distinctive of oak. Oak wood species cannot be differentiated based on their microscopic wood anatomy alone. (Schoch *et al* 2004). Two fragments of sapling oak were found in Sample 1. Fragments of cherry/plum (*Prunus* sp.) and possible cherry/plum wood were found in Samples 1 and 17. These fragments had multiseriate rays, diffuse vessel porosity, simple perforation plates and spiral thickening. For the possible cherry/plum fragments spiral thickening was difficult to see.

Sample	Oak (<i>Quercus</i> sp.) Stem/branch wood	Oak (<i>Quercus</i> sp.) Sapling wood	Cherry/Plum (<i>Prunus</i> sp.)	cf. Cherry/Plum (<i>Prunus</i> sp.)
1	8	2	-	3
4	2	-	-	-
5	30	-	-	-
12	1	-	-	-
17	-	-	1	-
18	1	-	-	-

Table 23 Charcoal identification

Recommendations for radiocarbon dating

Unfortunately, oak trees tend to be regarded as too long-lived to provide accurate radiocarbon dates unless they are from sapwood or saplings. Sample 1 has two fragments of sapling oak. The cherry/plum fragments may be suitable for radiocarbon dating.

9 Radiocarbon dating

No radiocarbon dating was carried out as part of this evaluation. If further work is to be carried out in the future, a sample of the cremated human bone from F21 should be sent for radiocarbon dating. Furthermore, depending on the results of environmental assessment and analysis from any future work, some of the charcoal and/or charred grains from this evaluation could also be selected for radiocarbon dating.

10 Conclusion

Archaeological evaluation at Barham Quarry revealed a small number of prehistoric, Roman, medieval and modern features. The earliest features were two pits dated to the Late Neolithic/Early Bronze Age (F82) and Late Neolithic/Bronze Age (F63), with a further four pits producing both Late Bronze Age pottery and Late Neolithic/Bronze Age worked flint (F8, F12, F20 and F91). Late Neolithic/Bronze Age worked flint was the only dating evidence recovered from a number of otherwise undated features, but the low quantity recovered from each context is likely to suggest that many are residual within the fills of later cuts (see Wightman, Section 7.1, 12-13). Residual prehistoric flint and pottery was also recovered from many of the later-dated features.

At least eight features date to the Late Iron Age or Romano-British periods: a Late Iron Age ditch (F77) and tree-throw (F49); a Late Iron Age/Early Roman ditch (F4); and Roman ditches (F19 and F78), pits (F15 and F79) and a tree-throw (F50). A small amount of residual Late Iron Age and Romano-British finds were also found in later dated features.

In the northeastern corner of the site were the remains of a series of a parallel agricultural ditches aligned roughly northeast to southwest and c 4m apart (F33, F34, F35, F36, F40, F41, F42, F43, F44, F46, F60, F61, F62, F63, F64, F71, F73, (possibly) F80, F84, F85,

F87, F88, F89, F90). The ditches were fairly shallow suggesting a high degree of truncation, probably the result of subsequent agricultural activities. Where dating evidence was recovered, they produced spot-dates ranging from the prehistoric (x4), Late Bronze Age (x9), Late Iron Age/Early Roman (x2) and Romano-British (x5) periods, with one ditch (F64) also containing medieval pottery (AD 1100-1375/1400). Based on the latest dated finds, this would suggest that these agricultural ditches were of a medieval date, possibly the remains of ridge and furrow or similar practices. There is a chance that the ditches are Romano-British, especially given the presence of a Romano-British settlement to the west, perhaps associated with viticulture. This interpretation would mean that either ditch F64 is not contemporary with this group despite being on the same alignment or that the medieval pottery sherd is intrusive although, as so little medieval pottery was recovered from the site as a whole, this is considered unlikely. The only other contexts to produce medieval pottery were pits F51 and F52 and colluvium layer L4. Future excavation on the development site should provide further dating evidence to better determine the nature and date of these features, and whether they are contemporary with the Romano-British settlement.

Prehistoric and Romano-British finds were recovered from colluvium layers L3-L5, along with a medieval pottery sherd from L4 (which may or may not be intrusive). Layer L5 also sealed three features containing Late Iron Age and Romano-British finds. This evidence would suggest that colluvium layers L4 and L5 date from the late Roman or post-Roman period. Of particular interest however is agricultural ditch F73, which is sealed by L5. It produced finds of a Late Iron Age to Early Roman date but, if the agricultural ditches do prove to be medieval (see discussion above) and if the medieval pottery sherd from L4 is not intrusive, then these layers may actually date from the medieval period. Further excavation should help to resolve this dating.

The significant depth of L3 to the south of the development site warrants further investigation to determine if the colluvium is a single deposit or a series of deposits over a number of years, especially as colluvium layer L6 was found sealed beneath L3 in T36. Two pieces of worked flint dated to the Late Neolithic/Bronze Age were found sealed beneath L3 in pit F63 (also in T36) and provide a terminus post quem for L3. Other dating evidence from L3 includes a sherd of prehistoric pottery recovered from the surface of L3 in T36, a Roman pottery sherd recovered from a sondage excavated through L3 in T40 and finds of prehistoric and Romano-British date recovered from features cut into L3. Is the Roman pottery sherd from T40 intrusive? If not, it might suggest that L3 is contemporary with L4 and L5, and therefore that many of the finds from features cut into L3 are actually residual. Alternatively, if pits F12 and F20 are of a Late Bronze Age date (and do not contain residual finds), the fact that they are both cut into L3 would indicate that the sherd is intrusive, and that L3 cannot date to later than the Late Bronze Age. Perhaps it is more likely that L3 is not a homogeneous layer at all, but this would need to be investigated and analysed in more detail. It should also be noted that although sondages were excavated through all the colluvium layers to establish the depth of natural, these layers were not always fully excavated and, if present, earlier features sealed beneath them remain unexcavated.

Of particular importance is the large quantity of prehistoric flints recovered from these colluvium layers (and found residually in later-dated features), which is representative of significant prehistoric activity during the Later Neolithic/ Bronze Age on the brow of the hill and on the valley slopes. Future investigation on the development site should include an analysis of the spatial distribution of the flints and a detailed analysis of the expanded flake assemblage. The results of this evaluation and any future excavations have the potential to help answer research questions on Neolithic/Bronze Age settlement and material culture as highlighted in the Regional Research Framework for these periods (Medlycott 2011, 13 & 20).

Previous archaeological investigations at Barham Quarry (Phases 1-5) (see Fig 15) to the west of the current development site had revealed prehistoric pits as well as a substantial Iron Age and Romano-British settlement with features including enclosures, roundhouses, a pottery kiln and clay extraction pits. The current evaluation would suggest that there is less

comparable activity on the development site although it is possible that the parallel agricultural ditches to the east of the site are contemporary with the settlement, and could perhaps even be evidence of viticulture. Further investigation and analysis of Iron Age and Romano-British contexts on the development site, especially in relation to the previous archaeological findings to the west, have the potential to contribute into a number of research topics highlighted by the Regional Research Frameworks (Medlycott 2011, 29-32, 47-48 & 70-71). For the Iron Age this could include such research themes as settlement chronology and dating, settlement types and land division, social organisation, the development of an agrarian economy, and the Late Iron Age/Roman transition, and for the Romano-British period rural settlements and landscapes, Roman agricultural and Romanisation. Furthermore, if the agricultural ditches and colluvium do have a medieval origin then themes such as medieval landscapes and agriculture can be explored.

Other features recorded during the evaluation included a large modern pit (F31, F32, F48 and F56) located in the centre of the site and 31 undated features including ditches, pits and postholes, some of which contained residual prehistoric worked flint. Of significance is the undated cremation burial of an adult (F21) and future archaeological investigation of the development site should include provision to radiocarbon date the bone. The burial can then be placed within the wider phasing of the site and compared to any other burials found during future excavations.

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12 References

Note: all CAT reports, except for DBAs, are available online in .pdf format at <http://cat.essex.ac.uk>

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13 Abbreviations and glossary

Bronze Age	period from c 2500 – 700 BC
CAT	Colchester Archaeological Trust
CIfA	Chartered Institute for Archaeologists
context	a single unit of excavation, which is often referred to numerically, and can be any feature, layer or find.
feature (F)	an identifiable thing like a pit, a wall, a drain, can contain 'contexts'

Iron Age	period from 700 BC to Roman invasion of AD 43
layer (L)	distinct or distinguishable deposit (layer) of material
medieval	period from AD 1066 to c AD 1500
Mesolithic	period from c 10,000 – 4000BC
modern	period from c AD 1800 to the present
natural	geological deposit undisturbed by human activity
Neolithic	period from c 4000 – 2500 BC
NGR	National Grid Reference
OASIS	Online Access to the Index of Archaeological Investigations, http://oasis.ac.uk/pages/wiki/Main
Palaeolithic	period c 800,000 BC to c 10,000BC
post-medieval	from c AD 1500 to c 1800
prehistoric	pre-Roman
residual	something out of its original context, eg a Roman coin in a modern pit
Roman	the period from AD 43 to c AD 410
SCC	Suffolk County Council
SCCAS	Suffolk County Council Archaeological Services
SCHER	Suffolk County Historic Environment Record
section	(abbreviation sx or Sx) vertical slice through feature/s or layer/s
u/s	unstratified, ie without a well-defined context
wsi	written scheme of investigation

14 Contents of archive

Finds: One box

Paper record

The report (CAT Report 1385)

SCCAS evaluation brief, CAT written scheme of investigation

Original site record (trench record sheets, section drawings)

Inked section drawings

Site digital photographic log and site photographic thumbnails

Digital record

The report (CAT Report 1385)

SCCAS evaluation brief, CAT written scheme of investigation

Original site records (database files)

Graphic files and survey data

Site digital photographs, photographic log and record

15 Archive deposition

The paper archive and finds are currently held by CAT at Roman Circus House, Roman Circus Walk, Colchester, Essex, but will be permanently deposited with SCCAS under Parish Number BRH 080.

Distribution list:

Andrew Josephs Associates
Brett Aggregates Ltd
Suffolk County Council Archaeological Service
Suffolk County Historic Environment Record



Colchester Archaeological Trust

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email: lp@catuk.org

checked by: Philip Crummy
date: 8.3.2019

Appendix 1 Context list

Layers

Layer Number	Finds Number	Context type	Description	Date
L1	43, 57, 108, 135	Topsoil	Soft, friable, dry, medium to dark grey/brown sandy-silt with 1% stone	Modern
L2		Natural	Friable, firm, dry, light to medium yellow/orange sand with 5% gravel	Post-glacial
L3	17, 18, 19, 20, 21, 22, 23, 24, 81, 84, 85, 86, 89, 94, 95, 96, 97, 98, 99, 120	Colluvium: T36-T43	Soft, dry, light to medium grey/brown sandy-silt	Uncertain, could be prehistoric, later Roman or post-Roman
L4	25, 27, 34, 36, 37, 42, 68, 87, 88, 90, 91, 92, 93	Colluvium: T21, T26-T34	Soft, dry, light to medium grey/brown sandy-silt	Later Roman or medieval
L5	66, 73, 110, 111, 112, 113, 114, 115, 116, 117, 119, 121, 129	Colluvium: T3-T9 & T12	Firm, dry, medium orange/brown silt, 5% gravel, 10% stone	Later Roman or medieval
L6		Colluvium: T36	Soft, dry, light yellow-brown silt, 1% stone	Undated

Features

Trench No.	Feature No.	Finds no.	Context type	Description	Date
T43	F1	135	Ditch	Hard dry medium grey brown sandy silt and inclusions of: stone (50%)	Undated
T38	F2	2	Pit	Firm dry medium grey brown sandy silt and inclusions of: stone (1%)	Post-dates L3
T38	F3	3	Ditch	Firm dry medium grey brown sandy silt and inclusions of: stone (1%)	Post-dates L3
T41	F4	4	Ditch	friable dry medium brown silty sand with charcoal flecks, and inclusions of: stone (4%)	Late Iron Age/ Early Roman
T41	F5	5	Lighter silt patch within L3	Friable medium brown silt with charcoal flecks and inclusions of: stone (4%)	Undated
T43	F6	-	Ditch	Hard dry light grey brown sandy silt and inclusions of: stone (1%)	Undated
T43	F7	1	Ditch	Hard dry light grey brown sandy silt and inclusions of stone (1%)	Post-dates L3
T43	F8	6, 7, 8	Pit	Hard dry medium grey brown sandy silt with charcoal flecks and inclusions of: gravel (30%), stone (30%), pot (15%)	Late Bronze Age
T43	F9	-	Posthole	firm moist medium grey brown silty clay with charcoal flecks, and inclusions of: stone (1%)	Undated
T43	F10	-	?Posthole	Firm moist medium grey brown with charcoal flecks and inclusions of: stone (1%)	Undated
T43	F11	11	Gully	Firm dry medium grey brown sandy silt with charcoal flecks	Post-dates L3
T43	F12	10	Pit	Firm dry medium grey brown sandy silt with charcoal flecks and inclusions of: stone (1%)	Late Bronze Age
T41	F13	9	Probably a lighter silt patch within L3	Firm dry medium grey brown sandy silt with daub flecks and inclusions of: stone (1%)	See L3
T41	F14	-	Lighter silt patch within L3	Soft dry moist medium brown silty sand and inclusions of: stone (4%)	See L3
T41	F15	12	Pit	Soft friable dry moist medium grey brown silty sand with charcoal flecks and inclusions of: stone (2%)	Roman
T41	F16	-	Lighter silt patch within L3	Friable dry moist medium brown silty sand and inclusions of: stone (1%)	See L3
T41	F17	-	Lighter silt patch within L3	Friable dry moist medium brown silty sand with charcoal flecks and inclusions of: stone (2%)	See L3

Trench No.	Feature No.	Findings no.	Context type	Description	Date
T41	F18	-	Lighter silt patch within L3	Friable dry moist medium brown silty sand with charcoal flecks, and inclusions of: stone (3%)	See L3
T41	F19	13	Ditch	Friable dry moist medium grey brown sandy silt with charcoal flecks and inclusions of: stone (2%)	Roman
T41	F20	14	Pit	Firm dry medium grey brown sandy silt	Late Bronze Age
T32	F21	15, 16	Cremation burial	Hard dry light medium dark grey brown sandy silt and inclusions of: stone (3%)	Undated (?post-dates L4)
T27	F22	26, 75, 76	Pit	Soft moist medium dark grey brown black sandy silt with charcoal flecks and inclusions of: stone (15%)	Post-dates L4
T28	F23	33	Ditch	Soft friable moist light medium grey brown sandy silt with charcoal flecks and inclusions of: stone (3%)	?Late Neolithic/ Bronze Age*
T30	F24	31, 32	Ditch	Soft dry dark brown black with charcoal flecks and inclusions of: gravel (5%) stone (25%)	Post-dates L4
T22	F25	-	Pit	Firm moist medium orange brown clay and inclusions of: stone (1%)	Undated
T32	F26	35	Pit	Firm dry light medium grey brown sandy silt and inclusions of: stone (15%)	?Late Neolithic/ Bronze Age*
T22	F27	38	Ditch	Soft moist light grey brown black sandy silt with charcoal flecks, daub flecks and inclusions of: stone (5%)	Modern (cut into F32)
T33	F28	39	Pit	Soft friable dry medium orange brown sandy silt	Undated
T33	F29	40	Pit	Soft dry medium brown sandy silt	?Late Neolithic/ Bronze Age*
T33	F30	41	Ditch	Soft dry medium brown sandy silt	?Late Neolithic/ Bronze Age*
T23	F31	44, 52, 53, 74	Pit/quarry pit	Firm moist medium dark grey brown sandy silt clay and inclusions of: stone (1%)	Modern
T22	F32	45, 46, 47	Pit/quarry pit	Firm hard dry moist medium orange brown sandy silt with daub flecks and inclusions of: gravel (1%)	Modern
T24	F33	48	Agricultural ditch	Firm dry moist light grey brown sandy silt with charcoal flecks, and inclusions of: stone (7%)	Romano-British or medieval
T24	F34	49	Agricultural ditch	Hard dry medium grey brown sandy clay and inclusions of: pot (5%)	Romano-British or medieval
T24	F35	50	Agricultural ditch	Hard dry medium grey brown sandy clay loam with charcoal flecks and inclusions of: pot (10%)	Romano-British or medieval
T24	F36	51	Agricultural ditch	hard dry medium grey brown silty clay	Romano-British or medieval
T25	F37	-	Pit	Friable firm dry medium brown clayey silt with charcoal flecks and inclusions of: stone (2%)	Undated
T25	F38	-	Pit/ditch terminus	Soft friable medium brown silty clayey sand with charcoal flecks, and inclusions of: stone (2%)	Undated
T25	F39	-	Pit/ditch terminus	Firm dry moist medium brown silty clayey sand inclusions of: stone (2%)	Undated
T20	F40	54	Agricultural ditch	Firm dry medium grey brown sandy silt clay with charcoal flecks, and inclusions of: stone (6%)	Romano-British or medieval
T20	F41	55	Agricultural ditch	Friable firm dry moist medium brown sandy silty clay with charcoal flecks and inclusions of: stone (2%)	Romano-British or medieval
T20	F42	-	Agricultural ditch	Firm dry medium brown sandy silt and inclusions of: stone (1%)	Romano-British or medieval
T20	F43	56	Agricultural ditch	Friable firm medium grey brown silty clay with charcoal flecks, daub flecks and inclusions of: stone (3%)	Romano-British or medieval
T20	F44	58	Agricultural ditch	Friable firm dry moist medium grey brown silty clayey sand with charcoal flecks and	Romano-British or medieval

Trench No.	Feature No.	Finds no.	Context type	Description	Date
				inclusions of: stone (4%)	
T19	F45	-	Natural feature	Firm moist medium orange brown sandy silt	Post-glacial
T19	F46	-	Agricultural ditch	Hard dry medium orange grey brown sandy silt	Romano-British or medieval
T19	F47	-	Pit	Hard dry light grey brown silty clay	Undated
T18	F48	59	Pit/quarry pit	Hard dry medium orange brown sandy silt and inclusions of: stone (1%)	Modern
T12	F49	60	Tree-throw	Soft dry light medium yellow grey brown silty sand and inclusions of: stone (1%)	Late Iron Age
T12	F50	61	Tree-throw	Soft dry light to medium yellow grey brown silty sand and inclusions of: stone (1%)	Romano-British
T11	F51	62	Pit	Loose soft moist medium brown sandy silt and inclusions of: gravel (2%)	Medieval
T11	F52	63, 118	Pit	Soft moist light medium grey brown sandy silt and inclusions of: gravel (1%)	Medieval
T11	F53	-	Natural feature	Very loose soft moist light brown sandy silt and inclusions of: gravel (2%)	Post-glacial
T11	F54	-	Natural feature	Firm light brown sandy silt and inclusions of: gravel (1%)	Post-glacial
T11	F55	-	Natural feature	Loose soft moist light brown silty sand and inclusions of: gravel (2%)	Post-glacial
T17	F56	64	Pit/quarry pit	Hard dry medium orange brown sandy silt and inclusions of: stone (1%)	Modern
T1	F57	-	Natural feature	Firm dry medium orange brown sandy silty clay and inclusions of: stone (1%)	Post-glacial
T1	F58	67	Pit/tree-throw	Firm dry light medium orange grey brown sandy silty clay and inclusions of: stone (1%)	?Late Neolithic/ Bronze Age*
T1	F59	-	Natural feature	Soft moist light medium yellow grey brown sandy silt	Post-glacial
T14	F60	65	Agricultural ditch	Firm dry medium brown sandy silt and inclusions of: stone (1%)	Romano-British or medieval
T14	F61	69	Agricultural ditch	Firm dry light medium orange brown clayey silt and inclusions of: gravel (1%)	Romano-British or medieval
T14	F62	70	Agricultural ditch	Firm hard dry light medium brown clayey silt and inclusions of: gravel (1%)	Romano-British or medieval
T14	F63	-	Agricultural ditch	Firm hard dry light to medium brown clayey silt and inclusions of: gravel (1%)	Romano-British or medieval
T5	F64	71, 72, 77	Agricultural ditch	firm moist medium brown sandy silt and inclusions of: stone (1%)	Romano-British or medieval
T5	F65	-	Pit	Soft dry medium grey brown sandy silt and inclusions of: stone (1%)	Undated
T5	F66	-	Pit	Soft dry medium grey brown sandy silt and inclusions of: stone (1%)	Undated
T5	F67	-	Pit /tree-throw	Soft dry medium grey brown sandy silt and inclusions of: stone (1%)	Undated
T36	F68	80, 82, 83	Pit/tree-throw	Firm dry light medium yellow grey brown sandy silt and inclusions of: stone (5%)	Late Neolithic/ Bronze Age
T36	F69	-	Base of posthole/ roots	Firm dry light grey sandy silt and inclusions of: stone (1%)	Undated
T36	F70	-	Base of posthole/ roots	Firm dry light grey sandy silt and inclusions of: stone (1%)	Undated
T15	F71	78, 79, 105	Agricultural ditch	Hard dry medium orange grey brown sandy silt clay and inclusions of: stone (1%)	Romano-British or medieval
T15	F72	-	Pit/tree-throw	Hard dry medium orange grey brown sandy silty clay	Post-dates F71
T9	F73	100, 101, 102	Agricultural ditch	Soft moist grey brown clayey sand with charcoal flecks, daub flecks and inclusions of: stone (2%)	Romano-British or medieval
T9	F74	103	Posthole	Soft moist dark grey brown clayey sand with charcoal flecks	Post-medieval/ modern
T15	F75	-	Natural feature	Firm moist medium orange grey brown sandy silt and inclusions of: stone (1%)	Post-glacial
T15	F76	-	Natural feature	firm moist medium grey brown sandy silt and	Post-glacial

Trench No.	Feature No.	Finds no.	Context type	Description	Date
				inclusions of: stone (1%)	
T7	F77	106	Ditch	Friable firm dry medium silty clayey sand with charcoal flecks, and inclusions of: stone (11%)	Late Iron Age
T7	F78	107, 126	Ditch	Friable firm dry medium brown clayey silty sand and inclusions of: stone (7%)	Roman
T6	F79	109, 127	Pit	Firm dry medium grey brown silty sand with charcoal flecks, and inclusions of: stone (4%)	Roman
T2	F80	122	?Agricultural ditch	Friable firm dry moist medium brown silty clay and inclusions of: stone (3%)	Romano-British or medieval
T2	F81	-	?Agricultural ditch/silt patch	Soft friable medium grey brown silty clay and inclusions of: stone (18%)	Undated
T8	F82	123, 128	Pit	Soft moist medium dark grey brown sandy silt with charcoal flecks and inclusions of: stone (3%)	Late Neolithic/ Early Bronze Age
T7	F83	125	Pit	Friable firm dry moist medium grey brown silty clay sand and inclusions of: stone (2%)	Undated
T10	F84	-	Agricultural ditch	Firm moist medium grey brown sandy silt	Romano-British or medieval
T10	F85	124	Agricultural ditch	Firm moist grey brown sandy silt	Romano-British or medieval
T8	F86	-	Natural feature	Soft moist medium grey brown sandy silt and inclusions of: stone (3%)	Post-glacial
T10	F87	130	Agricultural ditch	Firm moist medium grey brown sandy silt and inclusions of: stone (1%)	Romano-British or medieval
T15	F88	131	Agricultural ditch	Firm moist medium grey brown sandy silty clay and inclusions of: stone (1%)	Romano-British or medieval
T10	F89	134	Agricultural ditch	Soft friable medium grey brown sandy silt clay and inclusions of: stone (1%)	Romano-British or medieval
T10	F90	132	Agricultural ditch	Firm moist medium grey brown sandy silt with charcoal flecks, daub flecks, and inclusions of: stone (1%)	Romano-British or medieval
T10	F91	133	Pit	Friable dry moist medium brown sandy silt and inclusions of: stone (1%)	Late Bronze Age

* indicates that the finds are likely to be residual

Appendix 2 Worked flint catalogue

(prox- proximal, dist-distal, RL- right lateral edge, LL- left lateral edge, D- dorsal, V- ventral).

F/L no.	finds no.	length mm	width mm	thick mm	broken, hinge etc	type	cortex %	raw material	hammer type	platform prep	previous removal no. (min)	edge modification	edges modified	face modified
F2	2	50	22	8	broken RL	flake	40	dark grey	hard	yes	4	usewear/edge damage		
		41	21	9	broken prox	flake (retouched notch)	25	mottled grey flint			4	semi-abrupt	LL	D
F3	3	34	28	10		flake	0	grey flint	hard	no	8	usewear/edge damage		
F7	1	36	26	8		flake	50	bullhead flint	hard	no	4			
		34	24	5		flake	0	dark grey	hard	no	5			
F8	6	37	25	11		flake	0	dark grey	hard	no	3	usewear/edge damage		
F11	11	23	21	5		flake	5	light grey flint	hard	no	6			
		25	23	2	broken prox	flake (?axe thinning)	0	grey flint			5			
F12	10	35	19	5		flake	15	grey flint	hard	no	2			
		36	25	7	broken prox	flake	0	light grey			4			
F13	9	24	30	12		flake	0	dark grey	hard	no	4	usewear/edge damage		
		27	21	8	broken distal	flake	0	dark grey	hard	no	3	usewear/edge damage		
		40	32	7		flake	0	grey flint	hard	yes	6	?usewear		
		40	13	6		blade	0	grey flint	soft	yes	7			
F14	12	39	24	11	broken RL	flake	0	dark grey	hard	no	4	usewear/edge damage		
F19	13	23	31	5		flake	10	dark grey	hard	no	2	usewear/edge damage		
		16	30	4		flake	20	grey flint	hard	no	1			
		20	22	5	broken distal	flake	0	dark grey	hard	no	6	usewear/edge damage		
		13	20	4		waste fragment	0							
		25	25	8	broken RL	flake (retouched)	0	dark grey	hard	?yes	4	long, shallow retouch	LL	V
F20	14	25	26	4		flake	20	grey flint	hard	no	2	usewear/edge damage		
F21	15	20	17	3	broken distal	?blade	10	light grey	soft	yes	4			
F22	26	15	17	7	broken prox	flake	0	dark grey flint	hard	no	4			
	75	39	41	19		flake		dark grey	hard	no	3			
	76	21	29	7	plunge distal	flake	0	dark grey flint	hard	no	3			
F23	33	38	32	16	broken distal	flake	100	dark grey	hard	no	0			
F24	137	33	42	49		core (flake)	0	dark grey			9			

F/L no.	finds no.	length mm	width mm	thick mm	broken, hinge etc	type	cortex %	raw material	hammer type	platform prep	previous removal no. (min)	edge modification	edges modified	face modified
F26	35	23	27	7	broken distal	flake	15	dark grey	hard	no	5			
F27	38	22	20	9	broken distal	flake	0	dark grey	?soft	no	3			
		32	29	9	broken LL	flake	5	mottled grey flint	hard	no	2			
		32	21	5	broken prox	flake (retouched)	0	light grey/brown flint			4	abrupt	LL	D
F29	40	27	18	5		flake	0	grey flint	hard	no	5			
F30	41	30	25	4		flake	5	dark grey	hard	no	3			
		39	30	11		flake	100	grey flint	hard	no	0			
		31	20	6	broken distal	flake	65	grey flint	hard	yes	3			
		22	17	4		flake	30		hard	no	5			
		33	30	5	broken prox	flake	0							
		14	20	4		flake	0		hard	no	3			
		32	13	3		blade/flake	0	grey flint	hard	yes	4			
		26	22	2		flake (?axe thinning)	0	grey flint	soft	no	3			
F31	44	37	30	10		flake	85	dark grey	hard	no	1			
	52	35	23	10		waste fragment	15	dark grey						
		24	25	5	broken prox	flake (retouched)	0	dark grey			3	semi-abrupt	RL	D
		31	27	8		flake (retouched)	5	grey flint	hard	no		abrupt & semi-abrupt	R & L	d
(lower/mid)	53	44	29	6		flake (retouched)	10	bullhead flint	hard	no	4	abrupt & semi-abrupt	LL, RL & D	D&V
		36	29	11		flake	85	dark grey flint	hard	no	2	usewear/edge damage		
		34	31	8		flake	0	grey flint	hard	no	4	abrupt	LL	D
		27	27	5		flake	25	grey flint	hard	no	4	usewear/edge damage		
F32	45	22	31	6		flake	90	dark grey	hard	no	1			
F33	48	50	42	10		tool of convenience	90	grey flint (patinated)				semi-abrupt	one edge	
		35	21	11		core frag	0	dark grey			4			
		45	29	13		waste fragment	10	dark grey			3	?usewear		
F34	49	29	18	3	broken prox	flake	70	dark grey			2			
		38	39	31		core (flake)		dark grey			7			
F36	51	31	27	10		flake	100	dark grey (patinated)	hard	no	0			
		28	38	12		core frag	35	dark grey			2			
F40	54	65	36	12		tool of convenience	65	grey flint				semi-abrupt	one edge	both faces

F/L no.	finds no.	length mm	width mm	thick mm	broken, hinge etc	type	cortex %	raw material	hammer type	platform prep	previous removal no. (min)	edge modification	edges modified	face modified
		34	43	16	broken distal	flake	0	light grey	hard	no	5			
		19	22	5	plunge distal	flake	35	grey flint	hard	no	1	usewear/edge damage		
		20	34	5		?flake	20	light grey flint	?hard		?1			
		20	22	3	broken distal	flake (retouched)	0	grey flint	soft	no	5	abrupt	LL	D
		18	22	8	broken distal	flake	50	dark grey	hard	no	3	usewear/edge damage		
F43	56	28	25	7		flake (retouched notch)	10	grey flint	hard	no	3	abrupt	RL	V
		25	24	8	broken distal	flake (retouched notch)	45	grey flint	hard	no	3	abrupt	RL	D
		68	41	21		core frag (flake)	15	bullhead flint			7			
F44	58	25	28	7		flake	60	dark grey	hard	no	1			
		14	15	4		waste fragment	0	dark grey						
		17	14	2		flake (axe thinning)	5	grey flint	soft		5			
F48	59	21	17	5		flake (retouched)	0	dark grey	?soft	yes	6	semi-abrupt	LL	V
		27	23	8	broken distal	flake	0	dark grey	hard	no	5	semi-abrupt	LL	D
F50	61	37	37	9		flake	5	mottled grey flint (patinated)	hard	no	2			
F52	118	22	33	6	plunge distal	flake	60	grey flint	hard	no	3			
F56	64	22	17	3	hinge distal	flake	0	grey flint	soft	yes	3			
F58	67	24	36	10		flake		dark grey	hard	no	3	usewear/edge damage		
F60	65	30	15	7		flake	85	dark grey	hard	no	1			
F61	69	23	25	5		flake	5	dark grey	hard	no	2	usewear/edge damage		
		36	22	6	plunge distal	flake	25	grey flint	hard	yes	3			
		23	11	7		debitage	50	grey flint	hard	no	1			
		16	20	8		debitage		dark grey	hard	no	3			
F63	70	19	21	4	broken distal	flake		grey flint	hard	no	1	usewear/edge damage		
		21	27	7		flake		grey flint (patinated)	hard	no	2			
F64	71	42	34	5	broken prox	flake		mottled light grey	hard	yes	3			
		77	22	3		flake	0	light grey flint	soft	?yes	4			
F68	80	19	29	6		flake	10	dark grey	hard	no	3			
		19	24	7		waste fragment	15	grey flint			5			
F71	78	22	27	6	broken distal	flake	0	dark grey	hard	no	3			
		15	12	3		flake	5	grey flint	?hard	no	3			

F/L no.	finds no.	length mm	width mm	thick mm	broken, hinge etc	type	cortex %	raw material	hammer type	platform prep	previous removal no. (min)	edge modification	edges modified	face modified
F72	100	42	34	18		?core frag	15	dark grey			5			
		11	27	11		waste fragment	0	mottled grey flint	hard	no	3			
F77	106	32	32	9		flake	0	dark grey	hard	no	3			
		25	27	7	broken LL	flake	15	grey flint (patinated)	hard	no	3	usewear/edge damage		
		33	32	9		flake	30	dark grey	hard	no	4			
		23	18	6		flake	60	grey flint	hard	no	1			
		27	19	6		flake	0	light grey flint	hard	no	3			
F78	107	29	19	5		?flake	0	light grey flint			6			
	126	22	20	7	hinge LL	flake	0	grey flint	hard	no	3	usewear/edge damage		
F79	109	28	31	9		flake	5	dark grey	hard	no	2	usewear/edge damage		
		73	44	27		core (flake)	10	mottled grey flint			7			
F82	123	32	18	5	broken prox	flake	30	grey flint			3			
		27	32	7		flake	15	grey flint	hard	no	3			
		25	22	10		flake	10	grey flint	hard	no	3			
		25	16	3		flake	100	grey flint	hard	no	0			
		25	14	4		flake	60	grey flint	hard	yes	2			
		40	17	5		blade (retouched)	35	bullhead flint	hard	no	2	semi-abrupt	RL	D
		18	20	6		flake	10	grey flint	hard	no	3			
		30	15	3		flake	0	grey flint	hard	no	2			
		15	20	2		flake (?axe thinning)	0	grey flint			2			
F85	124	20	26	6	broken distal	flake	15	dark grey	hard	no	2			
		28	21	5		flake	0	grey flint	hard	no	3			
		39	36	21		core (flake)	25	dark grey			6			
F88	131	73	38	6		flake (retouched)	5	mottled grey flint	hard	no	6	semi-abrupt	LL	D
		33	26	8		flake (retouched notch)	25	dark grey flint	hard	no	3	abrupt	RL	V
		21	18	6		flake (retouched)	40	dark grey flint	hard	no	4	abrupt	RL	D
		16	15	2		flake (axe thinning)	0	light grey flint	soft		7			
F89 T10	134	22	22	6		flake	40	grey flint	hard	no	3	usewear/edge damage		
		15	13	3		flake	90	dark grey	hard	no	1			
F90	132	21	24	6	broken distal	flake	0	mid brown/grey	hard	no	5			

F/L no.	finds no.	length mm	width mm	thick mm	broken, hinge etc	type	cortex %	raw material	hammer type	platform prep	previous removal no. (min)	edge modification	edges modified	face modified
F91	133	17	9	2		waste flake	0	dark grey						
		19	10	4		waste flake	0	dark grey						
L3	24	17	20	9	broken prox	?flake	40	mottled grey flint	soft	no	1			
		58	48	11	plunge distal, broken prox	?flake	5	patinated flint			4			
L3 T36	17	48	35	11		flake (retouched notch)	35	grey flint	hard	no	2	abrupt	R & L	D&V
		35	30	13		flake	85	grey flint	hard	no	1			
		38	20	4		flake/blade	10	grey flint	hard	no	4	usewear/edge damage		
		19	19	3		flake	0	grey flint	?soft	no	2	usewear/edge damage		
		25	16	4	plunge distal	flake (retouched)	0	dark grey	soft	yes	5	abrupt	RL	D
		17	20	4		flake	0	grey flint	hard	?yes	2	usewear/edge damage		
		20	19	3		flake	0	mottled grey flint	hard	no	4			
		17	18	5		waste fragment	0	grey flint						
L3 T36	81	43	41	5		flake (end scraper)	5	grey flint	hard	yes	4	abrupt	D	D
L3 T37	18	38	22	5		flake (retouched)	0	dark grey	soft/punch	yes	6	semi-abrupt	R & L	D
L3 T38	19	24	40	17		flake	40	dark grey	hard	no	0			
		24	17	4	broken distal	blade (retouched)	0	grey flint	soft	yes	3	long, invasive, shallow retouch	LL	D
		18	13	4		flake (retouched)	0	grey flint	hard	no	4	abrupt	RL	D
L3 T39	21	30	33	11		flake	0	grey flint (patinated)	hard	no	3	usewear/edge damage		
		29	24	9		flake (retouched)	35	grey flint	hard	no	2	abrupt/semi-abrupt	RL	D
		40	25	8		flake	45	grey flint (patinated)	hard	no	2			
L3 T39	22	45	35	7		flake (piercer/borer)	0	dark grey	hard	no	5	abrupt	D	D
L3 T39	89	41	33	10		flake	45	dark grey	hard	no	5			
		19	17	3		flake	15	grey flint	soft	yes	2			
		11	13	2		flake	40	light grey flint	soft	no	1			
L3 T40	20	49	26	8	broken prox	?flake	65	dark grey			4			
		33	27	6		flake	100	dark grey	hard	no				
		28	13	5	broken prox	flake	0	dark grey (patinated)			5			
		22	27	5		flake	0	grey flint (patinated)	hard	no	3			

F/L no.	finds no.	length mm	width mm	thick mm	broken, hinge etc	type	cortex %	raw material	hammer type	platform prep	previous removal no. (min)	edge modification	edges modified	face modified
L3 T41	120	23	29	7	broken distal & RL	flake	5	grey flint	hard	no	3			
		20	17	5	broken prox & distal	flake	70	grey flint			1			
		13	11	3	broken prox & distal	bladelet	0	grey flint (patinated)			3			
L4 T26	27	25	32	7		flake	35	grey flint	hard	no	7	usewear/edge damage		
		20	29	10		flake	15	mottled grey flint	hard	no	2	usewear/edge damage		
		30	22	7		flake		grey flint	hard	no	6	usewear/edge damage		
		20	18	5		waste fragment	0	grey flint						
		25	35	4		flake	10	mottled grey flint	?soft	no	2			
L4 T30	34	63	22	22		flake core frag	40	dark grey flint			8			
		40	11	7		?blade	0	bullhead flint	?soft	no	4			
L4 T31	136	15	22	5		flake	0	dark grey	hard	no	2			
		29	37	6		flake (?scraper)	5	dark grey	hard	no	3	abrupt	D	D
		31	30	7		flake (?scraper)	15	dark grey	hard	yes	6	abrupt	D	D
L4 T32	36	26	28	5		flake	35	dark grey	soft	no	4			
L4 T32	37	24	26	7		flake (?piercer/borer)	0	dark grey flint	hard	no	5	semi-abrupt	LL	D
		33	28	8	broken prox	flake (retouched)	10	bullhead flint	hard	yes	5	abrupt	RL	D
		34	25	6		flake	25	dark grey flint (patinated)	hard	?yes	4			
		17	22	4	broken prox	flake	0	dark grey flint	hard					
		36	23	6	broken RL	flake (retouched)	0	dark grey flint	hard		5	rough semi-abrupt retouch	LL	D
		35	31	8		flake	15	grey flint	hard	no	2			
L4 T32	68	49	25	6		flake (retouched)	15	grey flint	hard	yes	5	semi-abrupt	LL	V
		30	43	6		flake	0	mottled grey flint	hard	no	5			
		29	25	5		flake	0	mottled grey flint	hard	no	4			
		31	18	5		blade/flake (retouched)	5	dark grey	hard	no	5	abrupt	LL	D
		17	36	6		flake	10	grey flint	hard	no	1	usewear/edge damage		
		23	24	4		flake	0	mottled grey flint	?hard	no	6	usewear/edge damage		
L4 T33	42	37	20	4		flake (retouched)	15	grey flint	?soft	no	4	abrupt	RL	D
		28	32	9		flake (retouched)	0	mottled grey/brown	hard	no	4	long, invasive, shallow retouch	D	D

F/L no.	finds no.	length mm	width mm	thick mm	broken, hinge etc	type	cortex %	raw material	hammer type	platform prep	previous removal no. (min)	edge modification	edges modified	face modified
								flint						
		33	27	8		flaked flake (retouched)	0	dark grey	hard	no	1	abrupt	RL	V
		50	35	5		flake (retouched)	10	grey flint	hard	no	5	serrated edge	RL	D
L5 T3	66	41	29	7		flake (piercer/borer)	35	grey flint	hard	no	4	abrupt	D&RL&LL	D
		25	37	11		flake	0	mottled grey flint	hard	no	3			
		33	14	5	broken RL	flake (retouched)	0	dark grey			3	abrupt	LL	D&V
		18	13	3		waste flake	0	dark grey						
		17	11	2		flake	10	grey flint	soft	no	1	usewear/edge damage		
L5 T3	115	61	49	20		flake	0	light grey/brown flint (patinated)	hard	no	2			
L5 T4	119	48	52	11		flake (piercer/borer)	15	mottled grey flint	hard	no	6	abrupt/semi-abrupt	D&RL&LL	D&V
		38	40	10		flake (piercer/borer)	0	dark grey	hard	yes	6	abrupt	D&RL&LL	D
		18	26	12		flake	50	dark grey	hard	no	4	usewear/edge damage		
L5 T4	129	18	13	6		flake (retouched)	0	mottled grey flint	hard	yes	4	abrupt	RL	D
		25	14	5	broken prox	blade/flake	35	dark grey			1	usewear/edge damage		
		14	21	5	broken distal	flake (retouched)	85	grey flint	hard	no	1	semi-abrupt	LL	D
		14	16	3		flake	0	grey flint	hard	yes	4			
		15	15	5		waste fragment	0	dark grey			5			
		22	18	4	broken prox & distal	flake	5	bullhead flint			5	usewear/edge damage		
		49	28	13		flake	5	mottled grey flint	hard	no	7			
		56	24	7		flake (retouched notch)	35	dark grey	hard	no	2	abrupt	RL	D
		28	33	12		flake	5	mottled grey flint	hard	no	5			
		34	37	14		flake	0	dark grey	hard	no	6			
		29	16	5		flake	10	grey flint	?soft	no	3	usewear/edge damage		
		26	14	3	broken distal	blade (retouched notch)	0	grey flint	soft	yes	4	abrupt	RL	V
		16	16	5	broken RL & distal	flake	0	dark grey	hard	no	3			
		16	17	3		flake	5	grey flint	soft	no	3	usewear/edge damage		
L1 T1-T15	29					flake	15	grey flint	hard	no				
						flake	20	dark grey	hard	no		usewear/edge damage		
						flake	25	mottled grey flint	hard	no				

F/L no.	finds no.	length mm	width mm	thick mm	broken, hinge etc	type	cortex %	raw material	hammer type	platform prep	previous removal no. (min)	edge modification	edges modified	face modified
						flake (retouched)	90	grey flint	hard	no				
						core rejuvenation flake	0	grey flint	hard	no				
						flake	40	grey flint	hard	no		usewear/edge damage		
L1 T1	43					blade/flake	0	mottled grey flint				usewear/edge damage		
						flake	10	dark grey				usewear/edge damage		
						flake	35	grey flint						
						flake (scraper)						abrupt	D&RL&LL	
L1 T6	28					flake	0	light grey flint	hard	no	4	usewear/edge damage		
						flake (retouched)		mottled grey flint	hard	no	3	abrupt	D	D
L1 T7	108					flake (scraper)	25	dark grey	hard	no	3	abrupt	D&RL&LL	D
L1 T13	104					flake	40	grey flint	hard	no	4			
						flake	5	bullhead flint	soft	yes	3	usewear/edge damage		
L1 T19	135					blade (retouched)	5	dark grey	hard	no	4			
						flake	0	mottled grey flint	soft	no	4	usewear/edge damage		
						flake	0	light grey	soft	no	4			
						flake	0	grey flint	soft	no	5			
						waste flake	5	grey flint						
L1 T20	57					flake (scraper)		mottled grey flint	hard	no	4	abrupt	RL	D
						ovate		dark grey (patinated)						
L1 T25	135					flake	0	light grey	hard	no	3			
						flake	40	mottled grey flint	hard	no	2			
						blade (retouched)	5	grey flint (patinated)	hard	yes	6	abrupt & semi-abrupt		
						flake (?axe thinning)	0	light grey	soft	no				
L1 T26	135					flake	0	mottled grey flint	hard	no	3	usewear/edge damage		
						flake (retouched)	30	mottled grey flint	hard	no	4	abrupt	RL	D
						flake	15	mottled grey flint	hard	no	1			
						flake	0	grey flint	hard	no	3			
L1 T31	135					flake	0	grey flint	hard	no	5			
L1 T32	135					flake (scraper)	10	grey flint	hard	no	4	abrupt	RL	D

F/L no.	finds no.	length mm	width mm	thick mm	broken, hinge etc	type	cortex %	raw material	hammer type	platform prep	previous removal no. (min)	edge modification	edges modified	face modified
						flake	5	mottled grey flint	hard	yes	3			
						flake (scraper/? denticulate)	45	dark grey	hard	no	3	abrupt	D&RL&LL	
						flake	15	mottled grey flint	soft	no	3			
L1 T40	135					flake (retouched)	0	grey flint	hard	no	6	semi-abrupt		
						flake	15	grey flint	hard	no	2			
						flake	10	grey flint	hard	no	1			
						flake	0	grey flint	hard	no	1			
						flake (?nosed scraper)	5	dark grey	hard	no	3	semi-abrupt	D	D
L1 T43	135					?flake	5	mottled grey flint						
						flake (scraper)	10	light grey	hard	no	4			

Appendix 3 Ceramic and pottery catalogue

Context	Find no.	Find Type	Fabric Group	Nr	Weight	Rim	Handle	Base	Form	Comments	Date Approx.
F4	4	Pottery	GTW	1	6	0	0	0			Late Iron Age
			H	3	2	0	0	0			Prehistoric
			DJ	1	1	0	0	0			Roman
			H	2	4	0	0	0			Prehistoric
F8	6	Pottery	B	7	36	1	0	0		Orange oxidised surface, black/grey inside, burnishing	Prehistoric
			C	2	30	0	0	0			Prehistoric
			E	1	8	0	0	0			Prehistoric
			B	1	14	0	0	0		Oxidised, burnished surface with some red haematite coating	Prehistoric
			C	4	64	0	0	0		Orange surface, darker core, burnished, possible haematite coating	Prehistoric
			B	4	40	0	0	0		Orange/dark brown surface, darker core, burnished, possible haematite coating	Prehistoric
			E	1	8	0	0	0		Orange, oxidised	Prehistoric
			Z	1	2	0	0	0			Prehistoric
			D	1	4	0	0	0			Prehistoric
			B	9	24	0	0	1		Orange/brown surface, black/grey core	Prehistoric
			B	1	12	0	0	0		Orange/brown surface, burnished, possible haematite coating	Prehistoric
			B	7	8	0	0	0		Orange, oxidised, black core	Prehistoric
			F	1	6	0	0	1		Oxidised, red surface-haematite slip	Prehistoric
			B	1	4	1	0	0		Finger-nail impressions on top of rim	Prehistoric
			B	1	4	1	0	0		Finger-nail impressions on top of rim	Prehistoric
			Z	2	1	0	0	0			Prehistoric
			E	2	10	0	0	0			Prehistoric
			A	1	6	0	0	0			Prehistoric
			D	2	6	0	0	0			Prehistoric
				7	Pottery	B	4	28	0	0	0
B	1	6				0	0	0			Prehistoric
C	1	4				0	0	0			Prehistoric
C	2	7				0	0	0			Prehistoric
F12	10	Pottery	D	1	14	0	0	0		Oxidised, orange, very coarse flint	Prehistoric

Context	Find no.	Find Type	Fabric Group	Nr	Weight	Rim	Handle	Base	Form	Comments	Date Approx.
F15	12	CBM	-	1	4	-	-	-	RBT		Roman
F19	13	CBM	-	1	26	-	-	-	RBT		Roman
		Pottery	DJ	1	2	0	0	0			Roman
F20	14	Pottery	H	3	2	0	0	0			Prehistoric
F27	38	Pottery	C	2	2	0	0	0			Prehistoric
F31	52	Pottery	C	1	1	0	0	0			Prehistoric
		CBM	-	3	4	-	-	-	RBT		Roman
	53	CBM	-	1	198	-	-	-	PT	14/15 mm thick	Medieval/Post-Medieval
			-	2	22	-	-	-	PT		Medieval/Post-Medieval
	74	Pottery	C	1	1	0	0	0			Prehistoric
CBM		-	10	78	-	-	-	BR	Modern	Modern	
F32	46	Pottery	Z	1	1	0	0	0			Prehistoric
			B	1	10	0	0	0			Prehistoric
	47	CBM	-	1	1	-	-	-	RBT		Roman
	48	Pottery	GX	1	1	0	0	0			Roman
F34	49	Pottery	B	2	4	0	0	0			Prehistoric
F35	50	Pottery	H	1	4	0	0	0			Prehistoric
F40	54	Pottery	G	2	6	0	0	0			Prehistoric
			E	1	1	0	0	0			Prehistoric
F41	55	Pottery	GX	1	1	0	0	0			Roman
F44	58	Pottery	B	2	6	0	0	0			Prehistoric
			GX	1	2	0	0	1			Roman
F48	39	Pottery	DZ	1	2	0	0	0			Roman
			D	1	6	0	0	0			Prehistoric
	59	CBM	-	2	24	-	-	-	RBT	?	Roman
			-	1	12	-	-	-	PT		Medieval/Post-Medieval
			-	1	10	-	-	-	PT	?	Medieval/Post-Medieval
F49	60	Pottery	GTW	1	4	1	0	0	Cam 266	Burnt	Pre-conquest-late 1st century AD
			GTW	1	1	0	0	0			Late Iron Age
F50	61	Pottery	GX	1	6	0	0	0			Roman
F51	62	Pottery	F10	2	2	0	0	2			10th-12th century

Context	Find no.	Find Type	Fabric Group	Nr	Weight	Rim	Handle	Base	Form	Comments	Date Approx.
			F20	1	2	0	0	0			1150/1175-1375/1400
F52	63	Pottery	GB	1	44	1	0	0	Cam 40B	BB2 plain	Trajanic/Hadrianic-AD 275
			GX	2	58	0	0	0		Decorated shoulder with zig zags	Roman
			GB	1	10	0	0	1		BB2	Early 2nd-3rd century
			HZ	1	12	0	0	0		Organic temper voids	Roman
			F20	1	14	0	0	0		Black sooting on outer surface	1150/1175-1375/1400
			F20	1	4	0	0	0		?	1150/1175-1375/1400
		CBM	1	2	-	-	-	RBT	?	Roman	
F56	64	Pottery	Z	1	1	0	0	0		Prehistoric	
F60	65	Pottery	I	1	6	0	0	0		Prehistoric	
F61	69	Pottery	ON/DZ	1	2	0	0	0		? some fine mica, worn surface, burning, thin	Roman
			GX	1	4	0	0	0			Roman
			DJ	1	2	0	0	0			Roman
F62	70	Pottery	H	1	1	0	0	0			Prehistoric
			H	2	8	1	0	0		Finger impression	Prehistoric
F64	71	Pottery	C	1	1	0	0	0			Prehistoric
			B	1	1	0	0	0			Prehistoric
	72	Pottery	D	1	4	0	0	0			Prehistoric
			B	1	1	0	0	0			Prehistoric
			F	1	2	0	0	0			Prehistoric
			F20	1	4	0	0	0			1150/1175-1375/1400
	77	Pottery	GX	1	4	0	0	0		?	Roman
F71	78	Baked clay		1	2	-	-	-			-
		Pottery	H	3	6	1	0	0		Black, impression (organic?)	Prehistoric
	79	Pottery	DZ	2	4	0	0	0			Roman
	105	Pottery	H	1	4	0	0	0		Black grey	Prehistoric
F73	100	Pottery	D	1	10	1	0	0		Oxidised surface to interior	Prehistoric
			B	2	4	0	0	0			Prehistoric
			C	1	12	0	0	0			Prehistoric
			F	1	12	0	0	1		Parallel marks on outside of base	Prehistoric

Context	Find no.	Find Type	Fabric Group	Nr	Weight	Rim	Handle	Base	Form	Comments	Date Approx.
			C	1	6	0	0	0			Prehistoric
			GTW	1	4	1	0	0		Grog?	Late Iron Age
			GX	1	4	1	0	0		Some silver mica (ON/DZ?)	Roman
	102	Pottery	E	1	4	0	0	0			Prehistoric
			B	1	18	1	0	0		Oxidised surface, grey core, finger-nail impressions	Prehistoric
			DJ	1	12	0	0	0			Roman
			DJ	1	2	0	0	0			Roman
			GX	1	6	0	0	0		?	Roman
			ON/DZ	1	6	0	0	0		? some fine mica, worn surface	Roman
			GX	1	10	0	0	0		Worn surface	Roman
F74	103	Pottery	H	1	4	0	0	1			Prehistoric
F77	106	Pottery	GTW	1	2	0	0	0			Late Iron Age
			H	1	4	0	0	0			Prehistoric
F78	107	Baked clay	-	1	1	-	-	-			-
		Pottery	D	1	8	0	0	0			Prehistoric
			GX	1	4	0	0	0			Roman
	126	Pottery	GX	5	18	0	0	0			Roman
F79	109	Pottery	C	1	4	0	0	0			Prehistoric
			B	1	2	0	0	0			Prehistoric
			GX	3	20	1	0	0	Cam 270B		Pre-conquest-2nd/3rd century AD
	127	Pottery	GX	1	1	0	0	0			Roman
F80	122	Pottery	GX	1	4	0	0	0			Roman
			GTW	2	1	0	0	0			Late Iron Age
F82	123	Pottery	P	1	6	0	0	0	Beaker	Beaker, cord bands/cross hatching decoration	Prehistoric
F83	125	Baked clay		9	6	-	-	-			-
F85	124	Pottery	Z	3	1	0	0	0			Prehistoric
F87	130	Pottery	H	1	8	0	0	0		Black reduced	Prehistoric
			DZ	1	1	0	0	0			Roman
			DJ	1	1	0	0	0			Roman

Context	Find no.	Find Type	Fabric Group	Nr	Weight	Rim	Handle	Base	Form	Comments	Date Approx.	
F88	131	Pottery	D	1	7	0	0	0			Prehistoric	
			D	3	5	0	0	0			Prehistoric	
			E	1	2	0	0	0		?	Prehistoric	
F89	134	Pottery	GX	1	5	0	0	0			Roman	
			GX	1	2	0	0	0			Roman	
F90	132	Pottery	H	4	2	0	0	0			Prehistoric	
			Z	3	1	0	0	0			Prehistoric	
F91	133	Pottery	H	4	2	0	0	0		Black reduced	Prehistoric	
L3	17	Pottery	I	1	6	0	0	0		Oxidised surface (possible haematite coating), black-grey core	Prehistoric	
	20	Pottery	GX	1	1	0	0	0			Roman	
L4	25	CBM	-	5	352	-	-	-	RT	24 mm thick	Roman	
	36	Pottery	C	1	8	0	0	0			Prehistoric	
	37	Pottery	F20	1	6	0	0	0			1150/1175-1375/1400	
	68	Pottery	D	5	58	0	0	1			Burning, lots of flint grit on base underside	Prehistoric
			F	1	4	0	0	0			Finger impression on ridge (shoulder?)	Prehistoric
			C	1	14	0	0	0			Burnt	Prehistoric
			C	1	1	0	0	0				Prehistoric
			DJ	1	1	0	0	0				Roman
			GX	1	4	0	0	0				Roman
			CBM	-	1	84	-	-	-	RBT		
?	Pottery	D	1	7	0	0	0				Prehistoric	
		GX	1	3	0	0	0				Roman	
L5	66	Pottery	CZ	1	1	0	0	0			Roman	
			GX	1	2	0	0	0		?	Roman	
		CBM	-	3	6	-	-	-	RBT	White/yellow and red nodules, slightly marbled fabric	Roman	
	73	Pottery	UR	1	12	1	0	0	Cam 14	TN local copy	Late Iron Age-Early Roman	
	121	Pottery	C	1	4	0	0	0			Prehistoric	
T13	104	Pottery	H	1	6	0	0	0			Prehistoric	

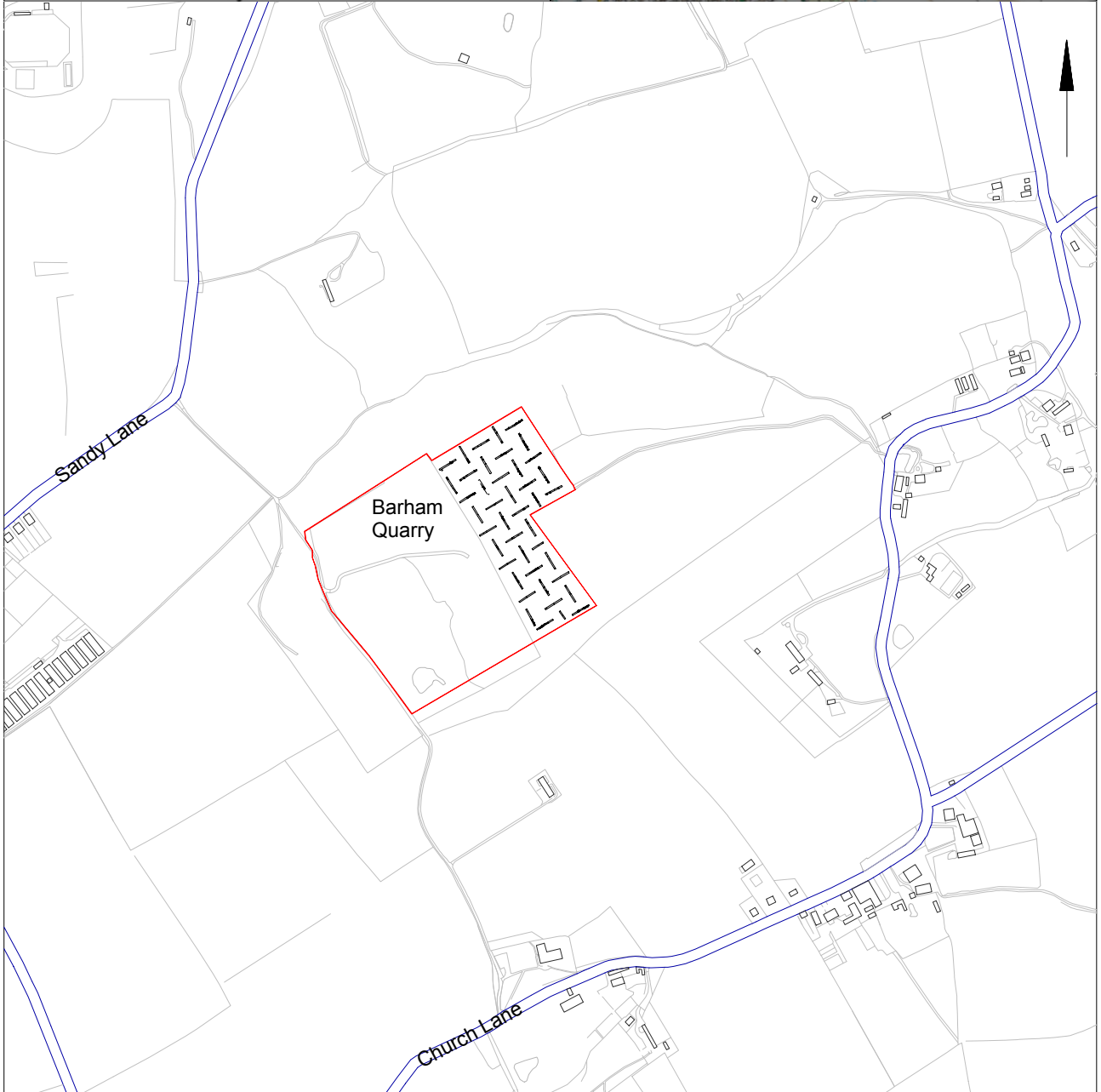
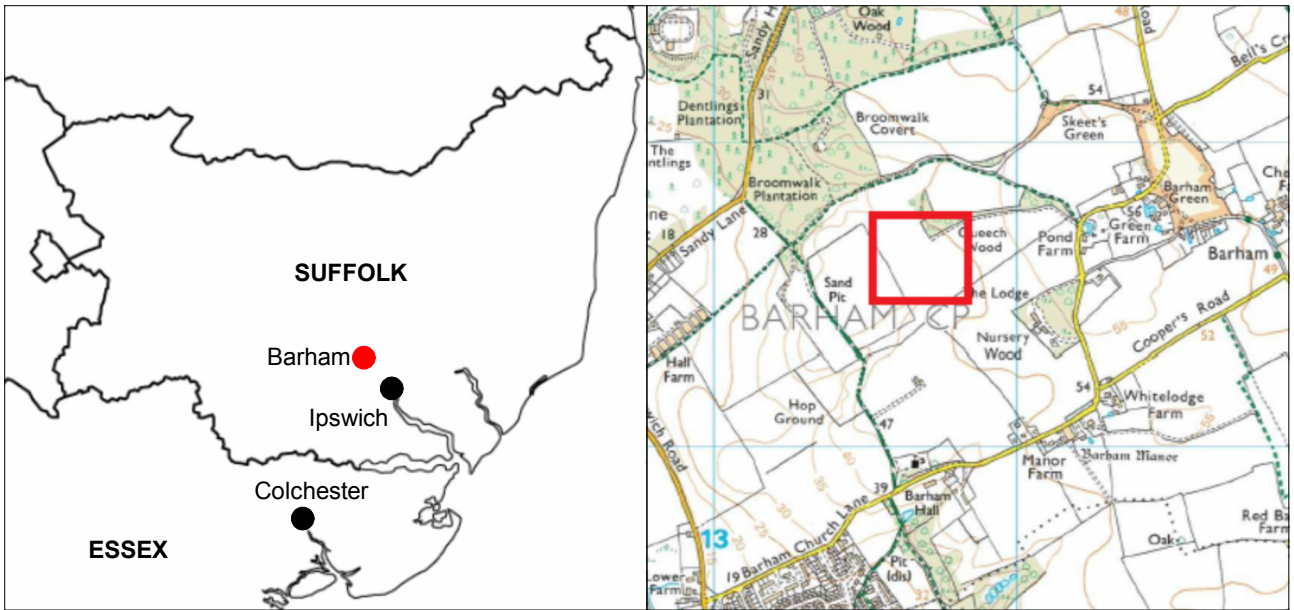
Appendix 4 Human and animal bone catalogue

Human

Feature	Finds no.	Weight	Count	Elements	Age	Sex	Pathologies	Trauma	Max size	Comments
F21	15	126g	184	Skull, radius, tibia, sacrum, clavicle,	adult	?	None seen	None seen	49mm GL	2nd GL = 38mm Over 10mm = 63 5-9mm = 80 Under 5mm = 41 Under 1mm not counted Many fragments cracked and warped. Skull and upper limb survived better.
F21	16	184g	530	Humerus, skull, ulna, tibia	adult	?	None seen	None seen	35mm GL	Over 10mm = 142 5-9mm = 267 Under 5mm = 121 Under 1mm not counted Many fragments cracked and warped. Skull and upper limb survived better.

Animal

Feature	Finds no.	Count	Weight	Species	NISP	Ad	Juv	Neo	MNI	Element range	Countable (Davis, 1992)	Butchering	Comments
F52	63	34	76	Equid	5	5			1	Pelvis	0	none	Fragments, small equid
				Mammal	29						Fragments	0	none
F78	107	1	6	Sheep/goat	1	1				Incisor tooth	0	none	Quite worn on biting surface
F83	125	13	30	Mammal	30					Fragments	0	none	Included one probable scapula fragment from a large mammal (equid/cattle/large deer)



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Fig 1 Site location.

0 500 m

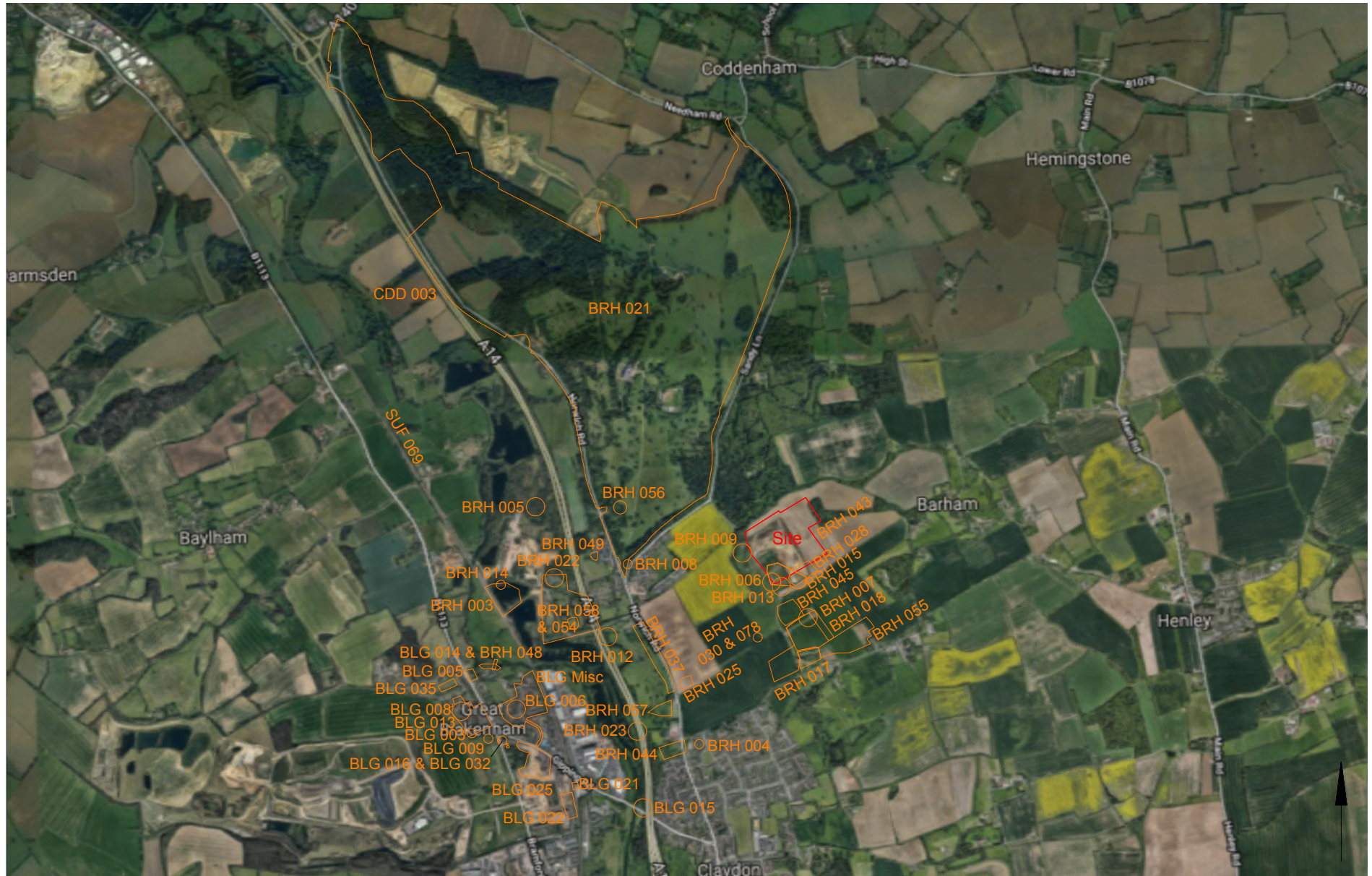


Fig 2 Development site in relation to nearby archaeological monuments and findspots



Fig 3 Results

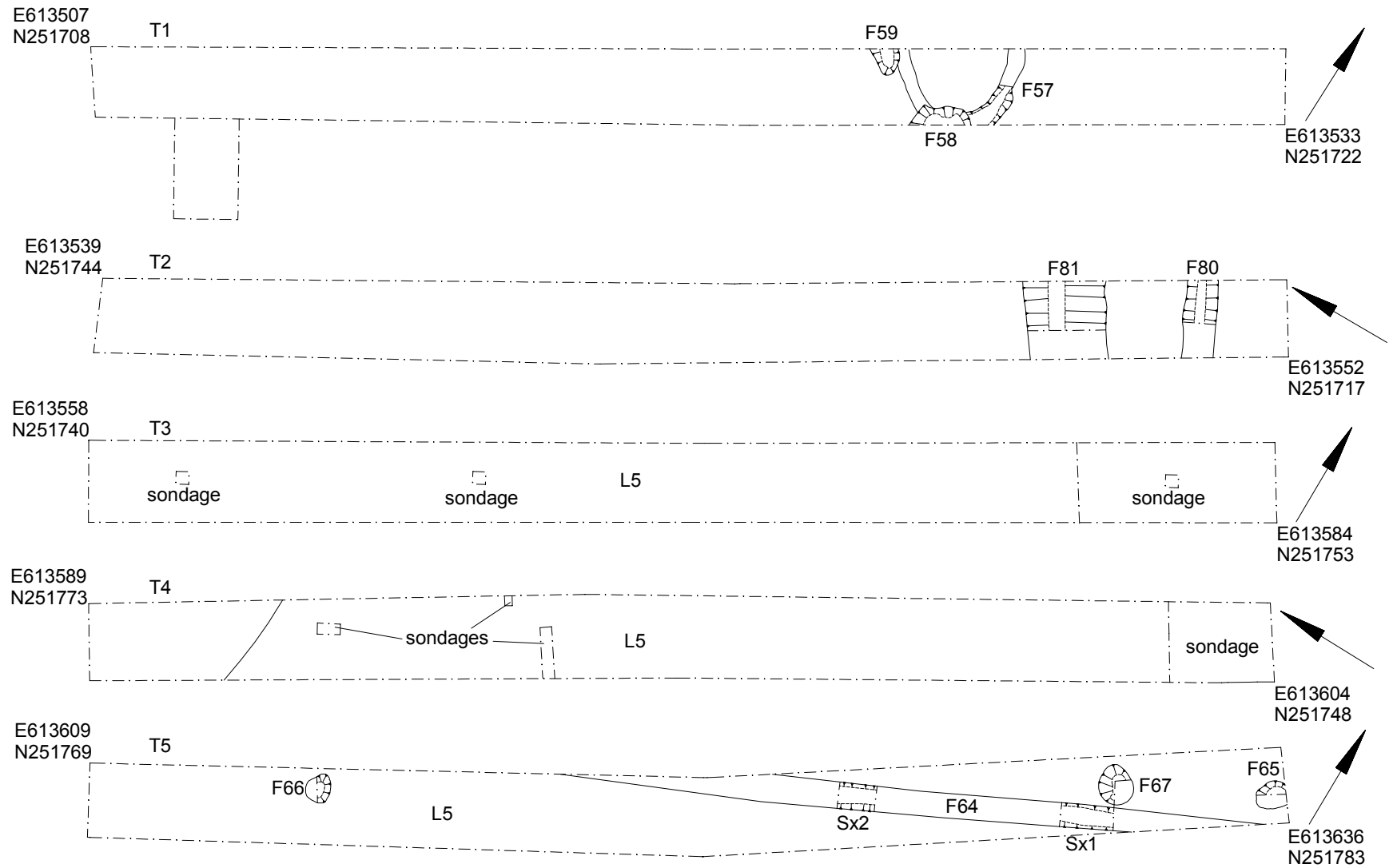


Fig 4 Detailed trench plans: T1-T5.



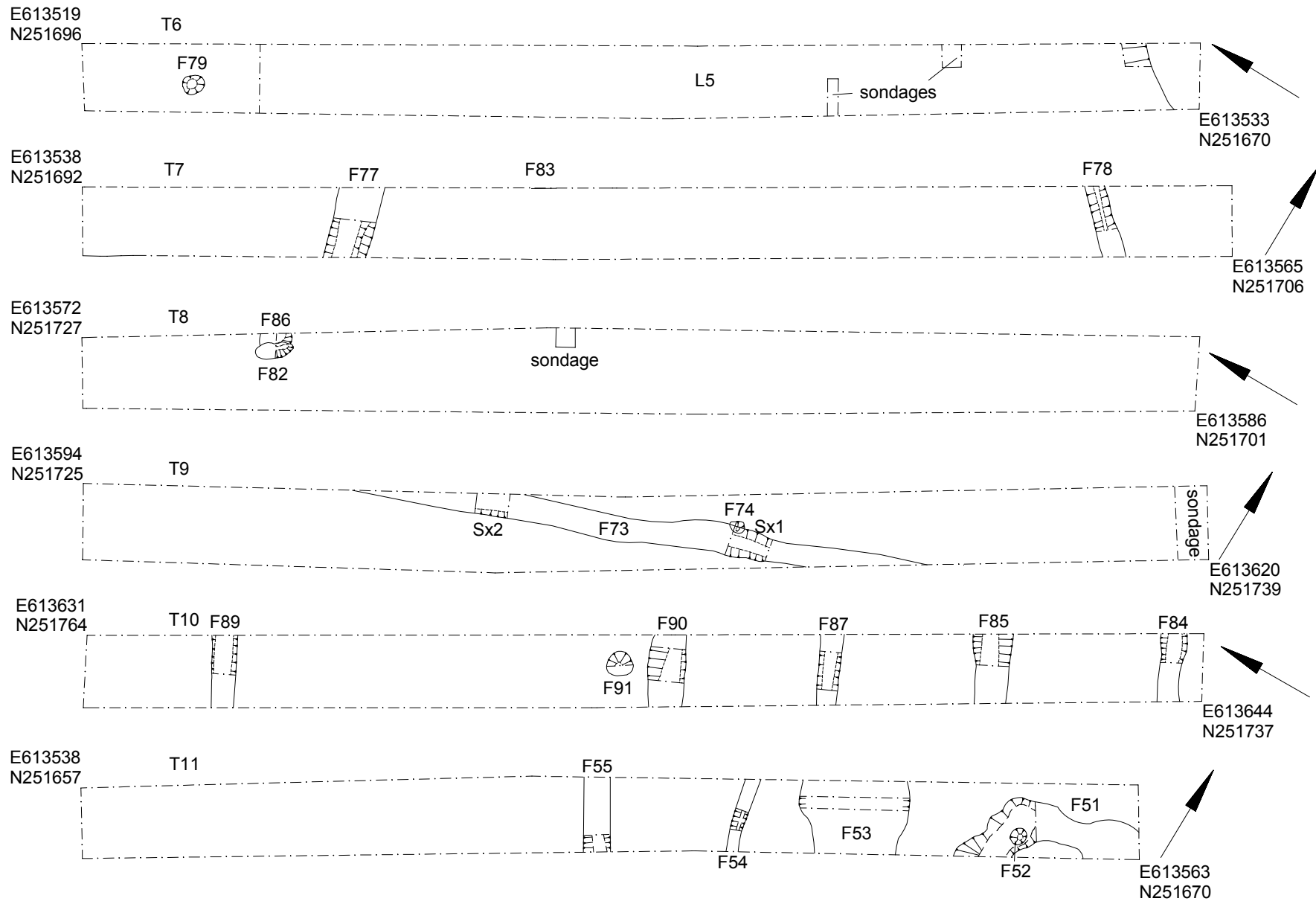


Fig 5 Detailed trench plans: T6-T11



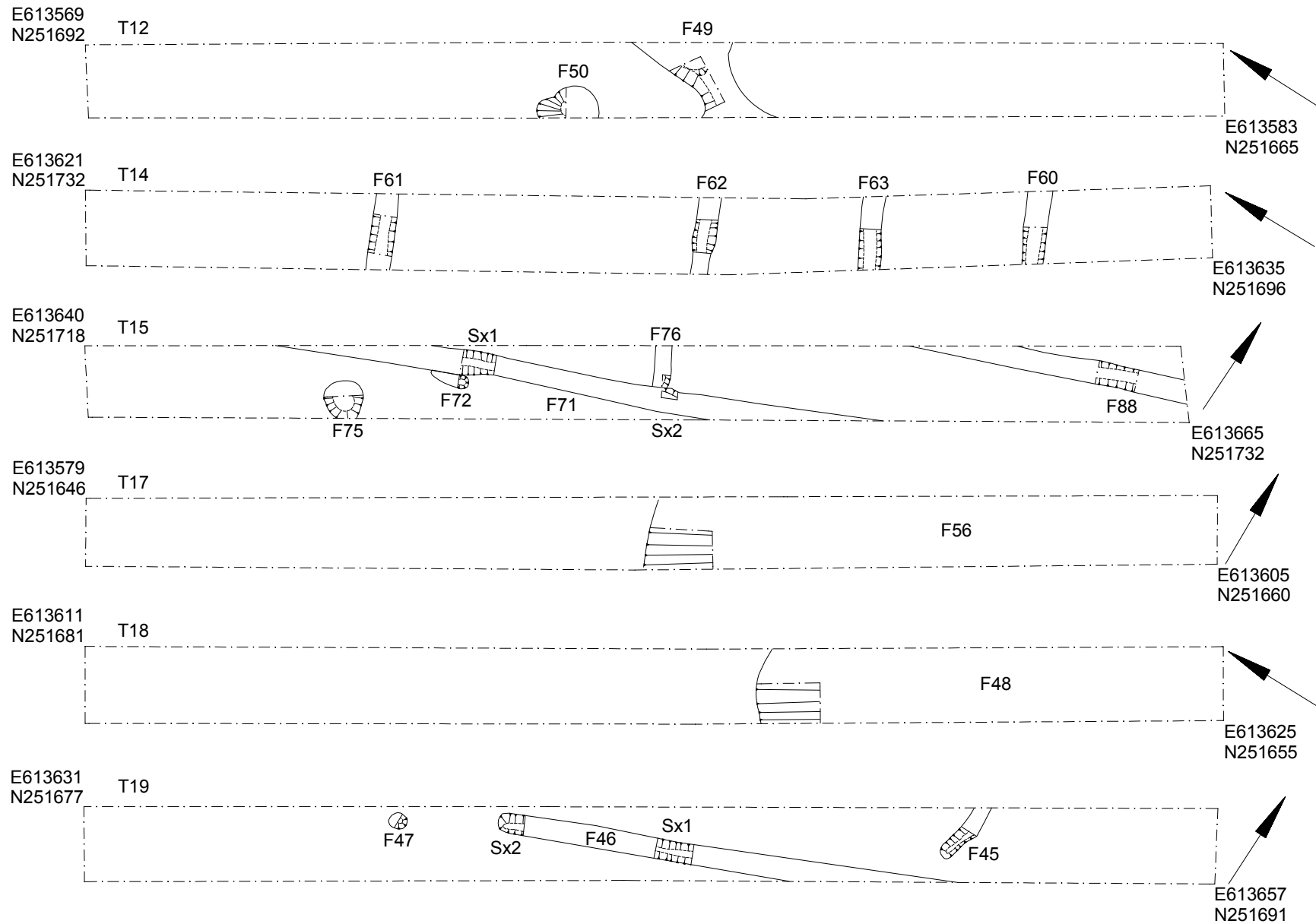


Fig 6 Detailed trench plans: T12, T14-T15 and T17-T19



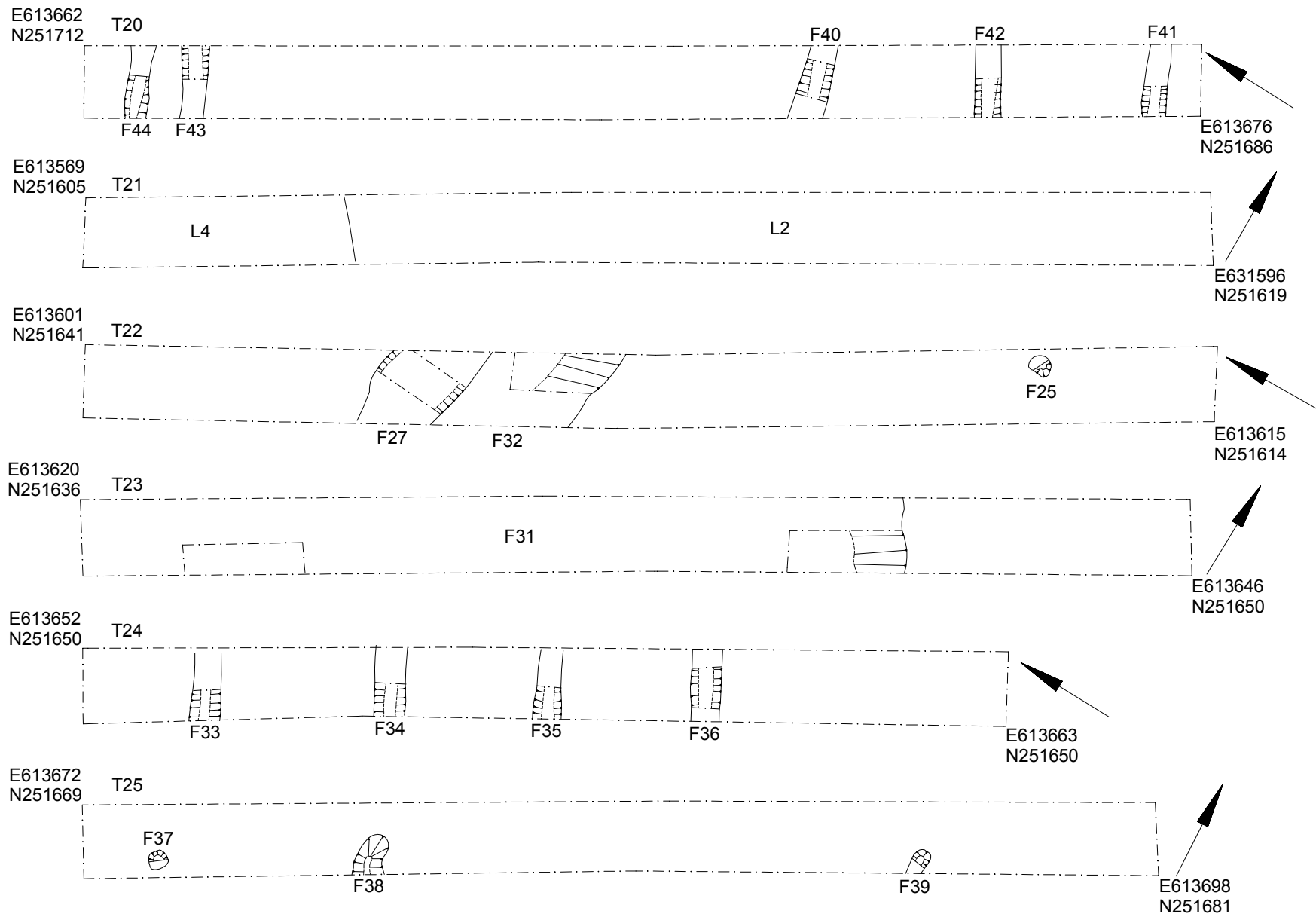


Fig 7 Detailed trench plans: T20-T25



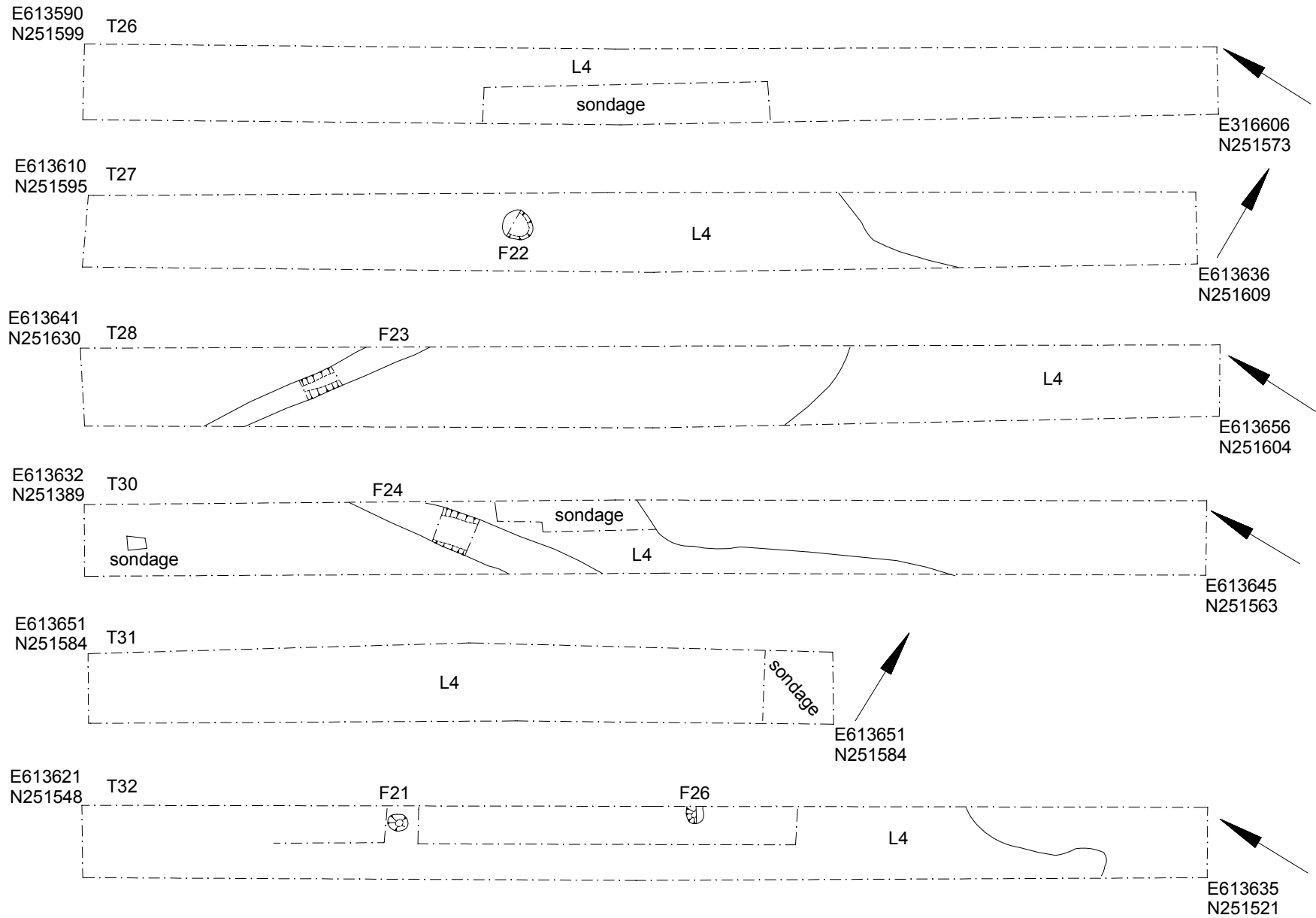


Fig 8 Detailed trench plans: T26-T28 and T30-T32

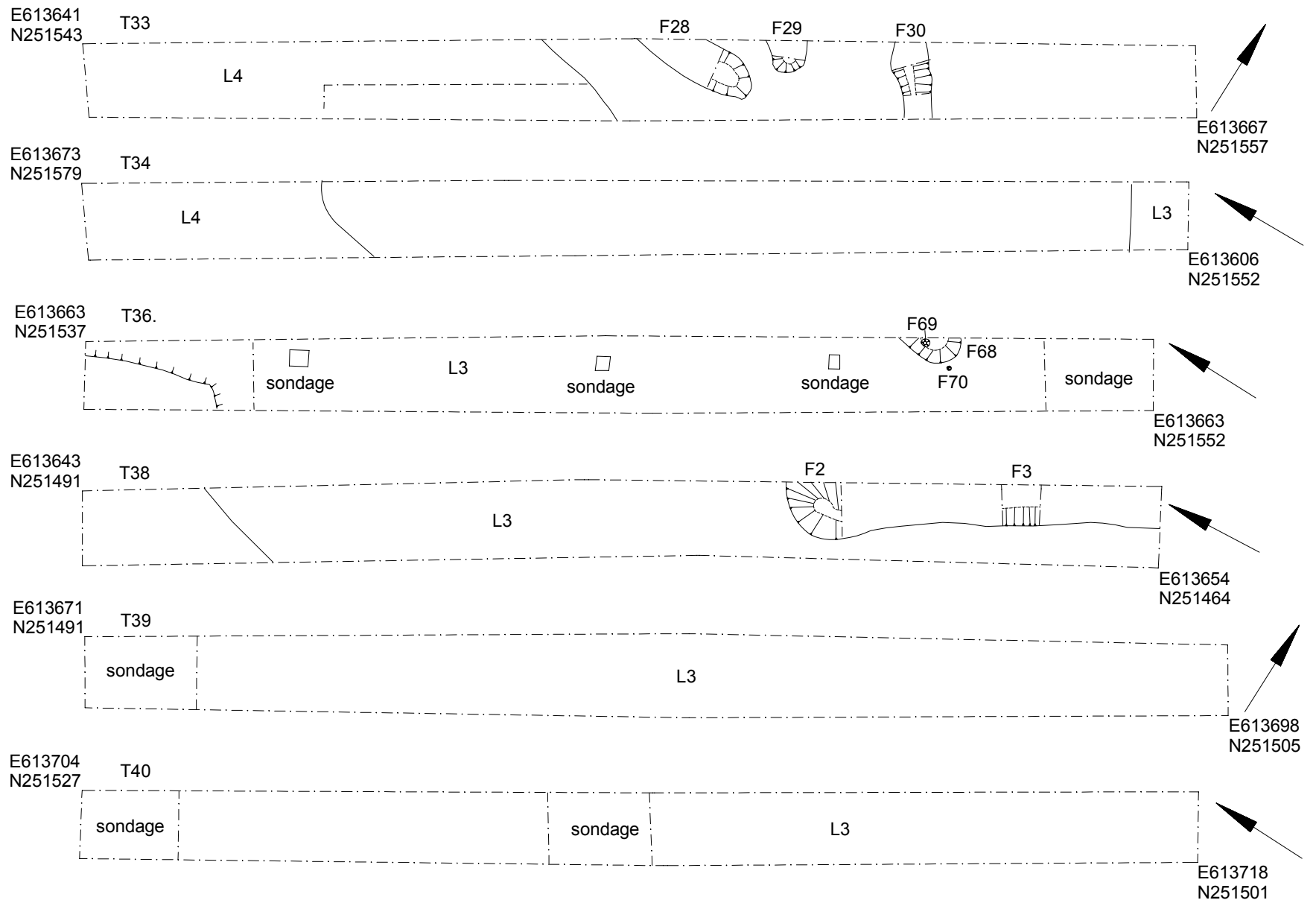


Fig 9 Detailed trench plans: T33-T34, T36 and T38-T40



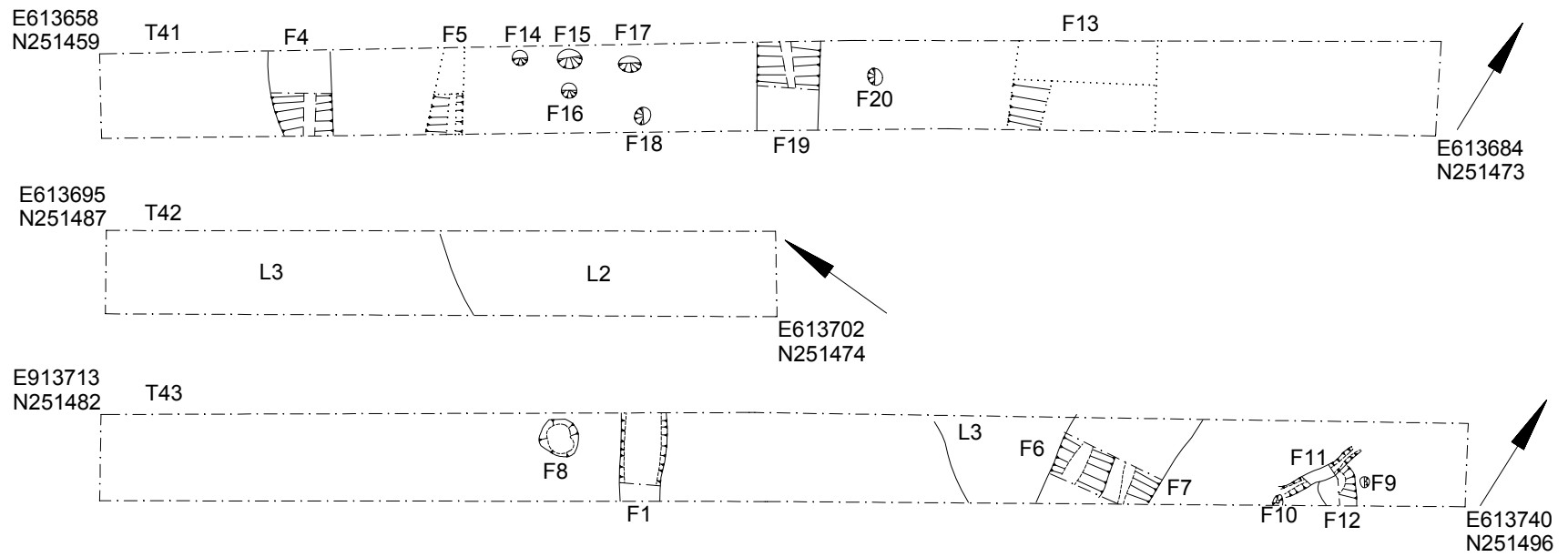


Fig 10 Detailed trench plans: T41-T43



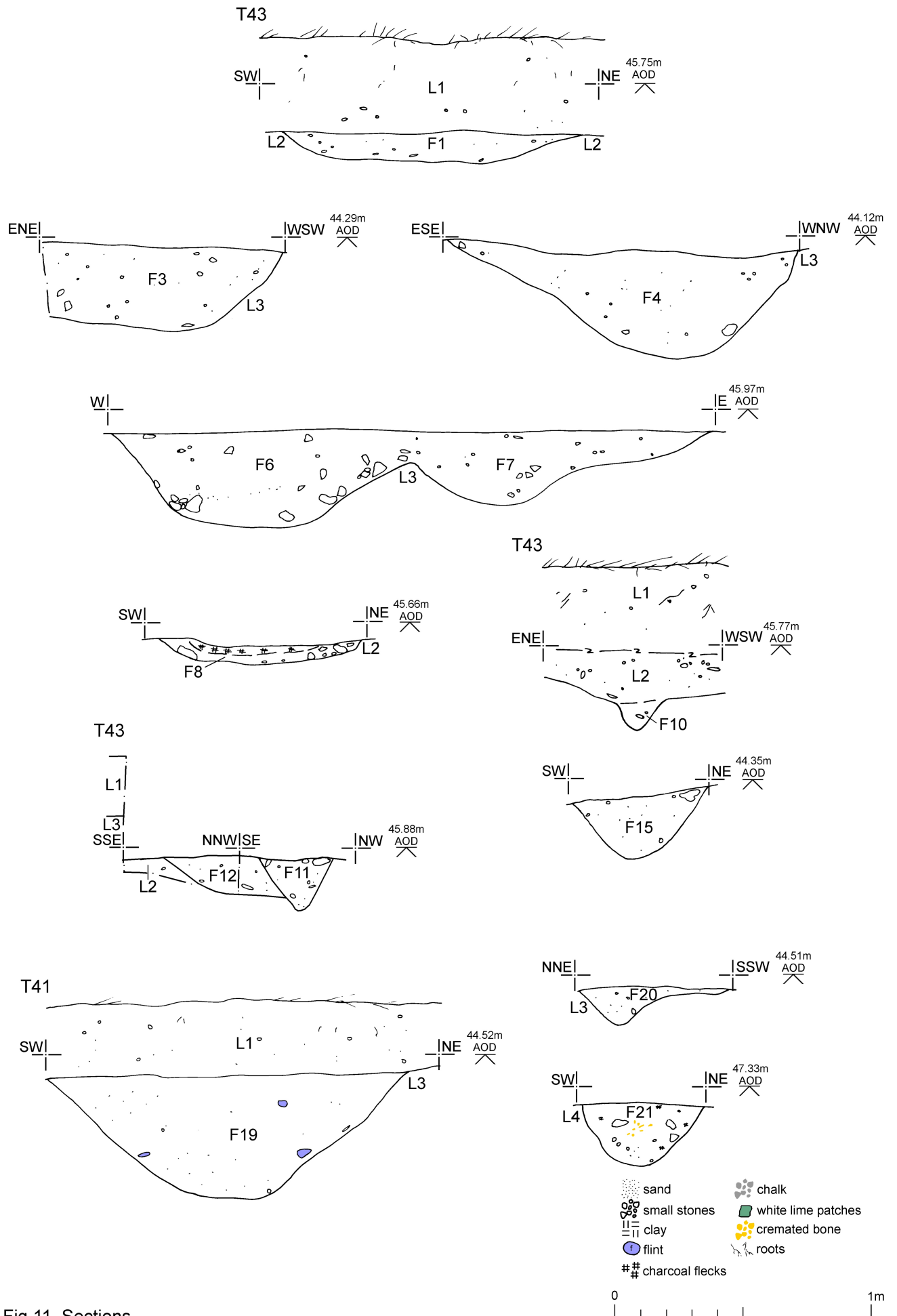


Fig 11 Sections.

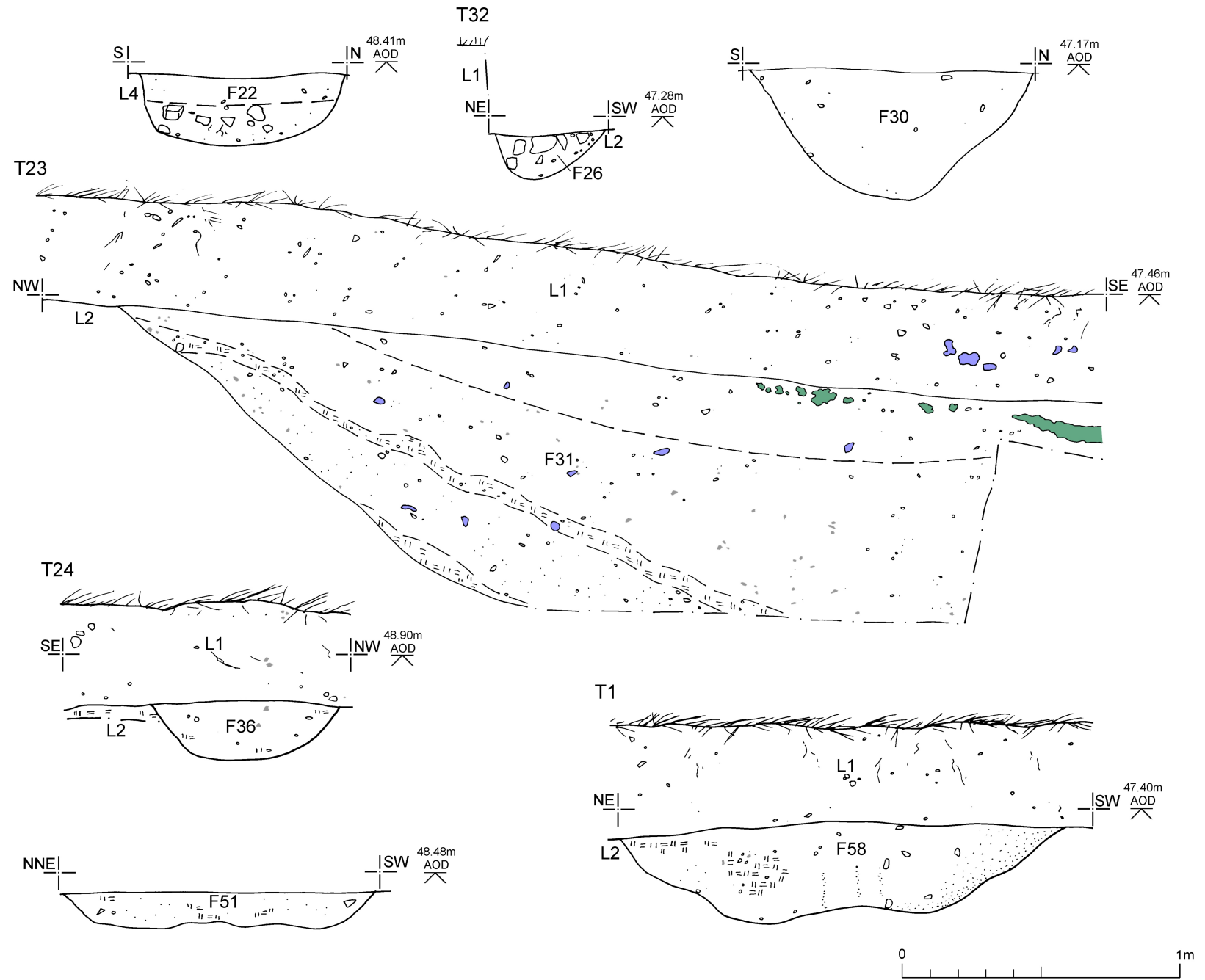


Fig 12 Sections.

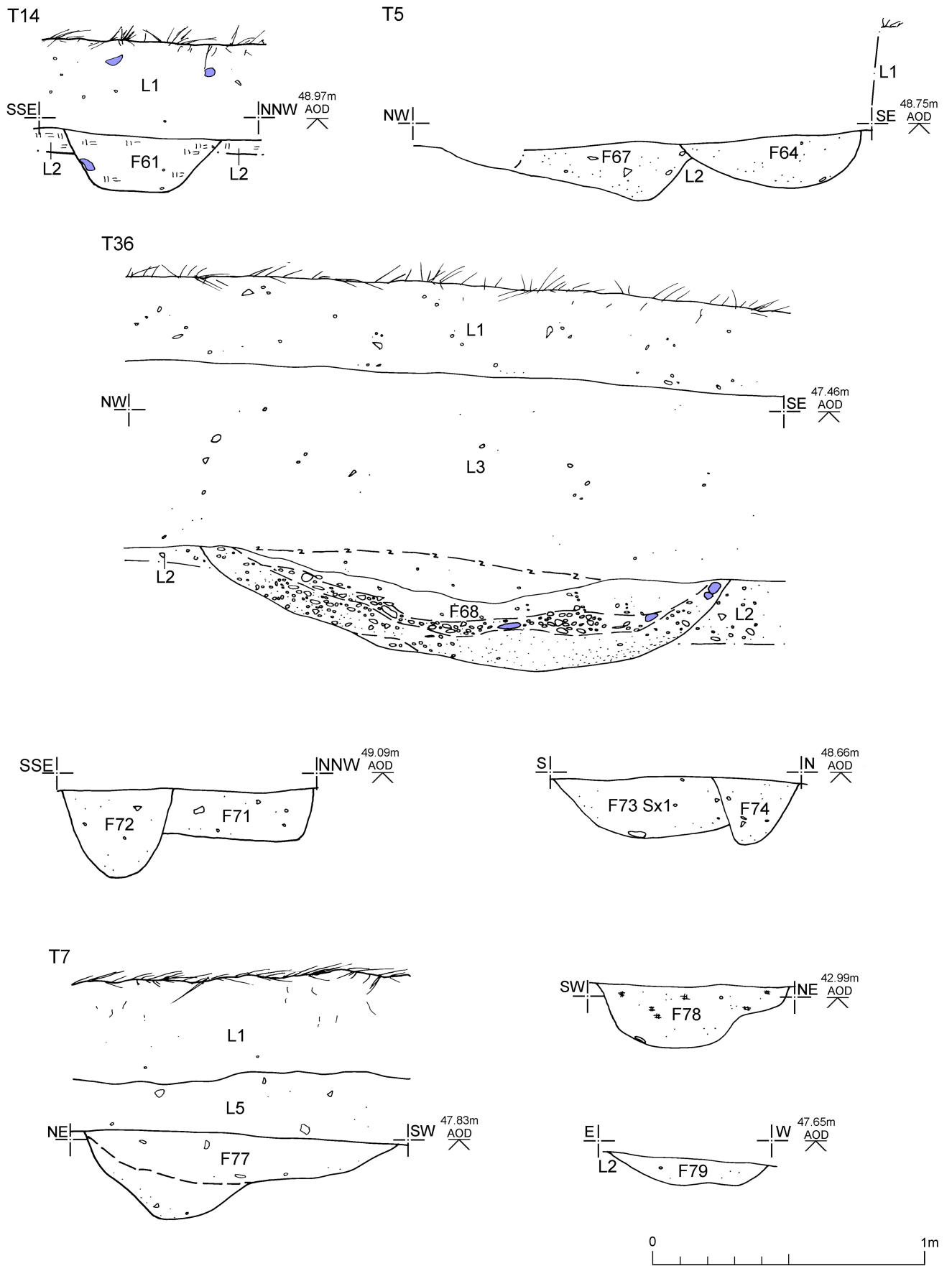


Fig 13 Sections.

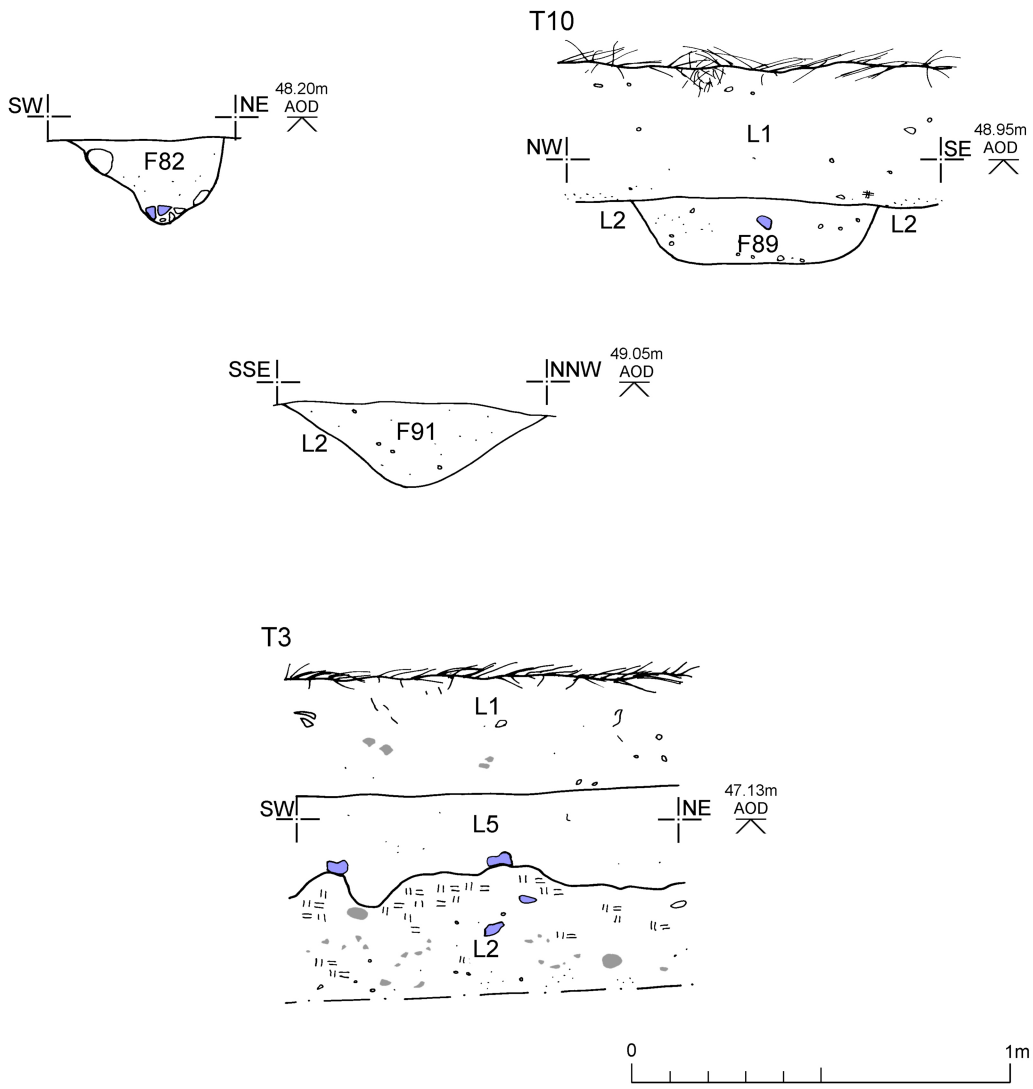


Fig 14 Sections.



Fig 15 Results in relation to previous archaeological excavations 2004-2009

Written Scheme of Investigation (WSI) for archaeological evaluation at Barham Quarry (Phases 6-10), Sandy Lane, Barham, Suffolk, IP6 0PB

NGR: TM 135 515 (centre)

Planning references: SCC\0145\17

Client: Andrew Josephs Associates

Curating museum: Suffolk County Council Archaeological Service

Suffolk HER parish code: BRH 080

CAT project code: 18/08a

OASIS reference: colchest3-325738

Site manager: Chris Lister

SCCAS/CT monitor: Rachael Abraham

This WSI written: 15.8.2018

Revised: 20.8.2018

Revised: 13.9.2018



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tel: 01206 501785

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Site location and description

The development site is located adjacent to the existing Barham Quarry, off Sandy Lane, Barham, Suffolk (Fig 1). Site centre is NGR TM 135 515.

Proposed work

The development comprises the extension of Barham Quarry: Phases 6-10.

Archaeological background (Fig 2)

The following archaeological background draws on information from the Suffolk Historic Environment Record (archaeology.her@suffolk.gov.uk), SCC invoice number 9216925.

Geology

The Geology of Britain viewer (1:50,000 scale¹) shows the bedrock geology of the site as 'Thanet Formation And Lambeth Group (undifferentiated) – Clay, Silt And Sand' with superficial deposits of 'Lowestoft Formation – Diamicton', 'Lowestoft Formation – Sands and Gravel' and 'Kesgrave Catchment Subgroup – Sand And Gravel'.

Historic landscape

Barham is in an area defined as *rolling estate farmlands* in the Suffolk Landscape Character Assessment². Within the Suffolk Historic Landscape Characterisation Map³ it is defined as landscape sub-type 10.1 (built up area -unspecified). The landscape immediately around the development site is primarily characterised as sub-type 1.1 (pre-18th-century enclosure – random fields), sub-type 2.1 (18th-century and later enclosure – former common arable or heathland), sub-type 3.1/3.2 (post-1950s agricultural landscape – boundary loss from random fields and rectilinear fields), sub-type 5.1 (meadow or managed wetland – meadow), sub-type 7.13 (woodland – park wood), sub-type 9.2 (post-medieval park and leisure – informal park), sub-type 11.1 (industrial – current industrial landscape), sub-type 11.14 (industrial – disused mineral extraction), sub-type 14.1 (communications – major road) and sub-type 14.2 (communications – railway).

Archaeology⁴ (Fig 2)

(All measurements are taken from the centre point of the development site to the centre point of the archaeological site).

In the immediate vicinity of the development site

Previous archaeological features and finds from the existing quarry to the west of the development site have included:

- Excavations in 1978 which revealed two large pits (Pit 1 being an oven or furnace which contained substantial fragments of a Late Bronze Age jar), a roundhouse of Early Iron Age date, and a small number of other features (BRH 015) (Martin 1993).
- An evaluation in 2001 which revealed features of Late Iron Age and Early Roman date, comprising enclosure ditches, pits and postholes (BRH 043) (Gardner & Sutherland 2001).
- Excavation of Phase 1 of the quarry extension in 2004 which revealed five substantial prehistoric (?Iron Age) vertical-sided pits or shafts, along with Roman boundary ditches and two granary-type features (Anon 2004).
- Excavation of Phase 2 of the quarry extension in 2005 which revealed a sub-rectangular Roman enclosure (containing dispersed pit groups, several post-built structures and internal divisions), along with a Roman pottery kiln and clay extraction pits. A number of late prehistoric features including a possibly Early Iron Age roundhouse were also identified (Anon 2005).
- Excavation of Phase 3 of the quarry extension in 2006 which revealed a number of ditches, pits, postholes and a roundhouse (Atfield 2006)

¹ British Geological Survey – <http://mapapps.bgs.ac.uk/geologyofbritain/home.html?>

² <http://www.suffolklandscape.org.uk/>

³ The Suffolk Historic Landscape Characterisation Map, version 3, 2008, Suffolk County Council

⁴ This is based on records held at the Suffolk County Historic Environment Record (SCHER).

- Excavation of Phase 4 of the quarry extension in 2009 which revealed enclosure ditches, pits and postholes.
- Finds consisting of Iron Age pottery sherds, bone and flint found over the area in the past (BRH 006, BRH 013).
- Human skeletons and medieval pottery (BRH 009) found periodically from the 1930s to the 1990s. This site has traditionally been thought of as the site of a battle between the Saxons and the Danes.

CAT will attempt to gain access to the site records and plans for the archaeological excavations of Phases 1-4 which have never been written up. It is hoped that a more detailed summary of this previous archaeological work on the development site will be incorporated into the report for this current evaluation.

To the south of the development site (300-700m) a range of features and finds have been recorded from the Bronze Age, Iron Age, Roman, Anglo-Saxon, medieval and post-medieval periods (BRH 007, BRH 016, BRH 017, BRH 018, BRH 030, BRH 045, BRH 078).

Undated cropmarks are located on the southern edge of the development site (BRH 028, sub-rectangular cropmarks of ?enclosures) and 600m south (BRH 055, enclosures, trackway, ring-ditch and linear features).

Further afield

Palaeolithic artefacts were recovered from Eastall's Pit (BRH 003, 1.63km W; BRH 023, 1.37km SW). Mesolithic and Neolithic flints were also recovered from Eastall's Pit. A Mesolithic transept axe was found 1.17km to the SW (BRH 012) and a Neolithic discoidal flint knife 1.26km to the SSE (BRH 004).

The scheduled Roman settlement identified with COMBRETIVVM is located c 2.5km NW (CDD 003). Quarry pits of Roman or medieval date are located 2.05km WSW (BLG 035). Medieval remains include the medieval Church and churchyard of St Mary (BLG 005, 2km WSW), ditches (BLG 013, 2km SW) and the site of a possible medieval moat (BRH 044, 1.32km SW). Scatters of Roman, Saxon, medieval and post-medieval finds have been identified across the landscape (BLG 003, BLG 006, BLG 008, BLG 009, BLG Misc, BRH 003, BRH 005, BRH 008, BRH 022, BRH 025, BRH 027, BRH 061).

Shrubland Hall and Park to the northwest is of post-medieval date and has an extensive Italianate garden (BRH 021). Post-medieval bridges over the River Gripping are located 1.8km W (BLG 014) and 1.9km SSW (BLG 015). The Bosmere and Claydon Incorporated Hundred Workhouse (BRH 038, 1.32km W) was erected in 1766 with pesthouse, hospitals and cemeteries (BRH 054). Also nearby are a demolished post-medieval corn mill (BRH 048, 1.8km W), post-medieval milestone (BLG 016, 1.95km SW), 19th century pond (BRH 049, 1.11km W) and Claydon railway station (BLG 021, 1.83km SW, erected 1846). Modern factories include Mason's Cement Works (BLG 022, 1.92km SW) and the former MOD fuel depot (BLG 025, 1.86km SW). A World War II pillbox is located 1.94km SW (BLG 032). The Ipswich to Bury St Edmunds railway line, which opened in 1846, is located 1.75km W (SUF 069).

Undated cropmarks and other monuments include:

- an extraction pit (BRH 056, 983m WNW),
- earthwork ditches at right angles to Norwich Road, possibly medieval tofts (BRH 037, 1km SW),
- a pit with charcoal and a layer of burnt flints c 40cm thick (BRH 014, 1.65km W),
- earthworks of linear banks (BRH 057, 1.17km SW)

Listed buildings⁵

A number of listed buildings (Grade II) dating from the late 15th/early 16th to the 19th century are located within 1km of the development site.

Geology and Palaeolithic archaeology

In 2018 a desk-based assessment was written to provide background information on the geology and Palaeolithic archaeological potential of the quarry extension (Bates 2018).

⁵ This is based on records held at the Suffolk County Historic Environment Record (SCHER).

The site is designated a geological SSSI because it contains one of the best developed sequences in the UK that records a unique succession of early middle-Pleistocene geological features, spanning the Beestonian-Anglian Stages. The sequence includes a palaeosol complex ('fossil' soil horizon), considered to have a composite origin dating from a number of temperate periods as well as the early Anglian (glacial) Stage.

Planning background

As the site lies within an area highlighted by the Suffolk HER as having a high potential for archaeological deposits, it was recommended by the Suffolk County Council Archaeological Service (SCCAS) that a trenched archaeological evaluation take place to enable the archaeological resource, both in quality and extent, to be accurately quantified.

Requirement for work (Fig 3)

Evaluation

The required archaeological work is for trenched archaeological evaluation. Details are given in the Project Brief (*Brief for a trenched archaeological evaluation at Barham Quarry: Phases 6-10*) written by SCCAS (2018).

Specifically, trial-trenches will be excavated to cover 5% of the 2250m² development site, laid out in a systematic grid array. This works out as 43 trenches (totalling 1250m linear), most of which will measure 30m long by 1.8m wide, but will include three shorter trenches (T24 (25m), T31 (20m) and T42 (15m)). See Fig 3.

Trial-trenching is required to:

- identify the date, approximate form and purpose of any archaeological deposit, together with its likely extent, localised depth and quality of preservation.
- evaluate the likely impact of past land uses, and the possible presence of masking colluvial/alluvial deposits.
- establish the potential for the survival of environmental evidence
- provide sufficient information to construct an archaeological conservation strategy, dealing with preservation, the recording of archaeological deposits, working practices, timetables and orders of costs.

All work will take place within and contribute to the goals of the Regional research frameworks (Gurney 2003, Medlycott 2011).

Decision on the need for any further archaeological investigation (eg excavation) will be made by SCCAS, in a further brief, based on the results presented in the report for this evaluation. Any further investigation will be the subject of a further WSI, submitted to SCCAS for scrutiny and formally approved by the LPA.

Palaeosol investigation

A complete palaeosol investigation will take place as a separate phase of assessment. CAT has been informed by the client that a number of trial-pits will be excavated within the footprint of CAT evaluation trenches that are either devoid of archaeological remains or have been excavated and signed-off by the SCCAS. See Method Statement provided as an appendix to this WSI.

If the above methodology changes, and the palaeosol trial-pits are excavated through undisturbed ground, CAT will maintain continuous archaeological monitoring and recording on this phase of work.

Staffing

The number of field staff for this project is estimated as follows: One CAT supervisor plus five archaeologists for six days.

In charge of day-to-day site work: Mark Baister

General methodology

All work carried out by CAT will be in accordance with:

- professional standards of the Chartered Institute for Archaeologists, including its *Code of Conduct* (CIfA 2008a, b, c)
- Standards and Frameworks published by East Anglian Archaeology (Gurney 2003, Medlycott 2011)
- relevant Health & Safety guidelines and requirements (CAT 2014)
- the Project Brief issued by SCCAS (2018)
- The outline specification within *Requirements for a Trenched Archaeological Evaluation* (SCCAS 2017a) to be used alongside the Project Brief.

Professional CAT field archaeologists will undertake all specified archaeological work, for which they will be suitably experienced and qualified.

Notification of the supervisor/project manager's name and the start date for the project will be provided to SCCAS ten days before start of work.

Unless it is the responsibility of other site contractors, CAT will study mains service locations and avoid damage to these.

Prior to the commencement of the site a HER parish code will be sought from the HER team. The HER parish code will be used to identify the finds bags and boxes, and the project archive when it is deposited at the curating museum.

At the start of work (immediately before fieldwork commences) an OASIS online record <http://ads.ahds.ac.uk/project/oasis/> will be initiated and key fields completed on Details, Location and Creators forms. At the end of the project all parts of the OASIS online form will be completed for submission to SCCAS. This will include an uploaded .PDF version of the entire report.

Evaluation methodology

Where appropriate, modern overburden and any topsoil stripping/levelling will be performed using a mechanical excavator equipped with a toothless ditching bucket under the supervision and to the satisfaction of a professional archaeologist. If no archaeologically significant deposits are exposed, machine excavation will continue until natural subsoil is reached.

Where necessary, areas will be cleaned by hand to ensure the visibility of archaeological deposits.

If archaeological features or deposits are uncovered, time will be allowed for these to be excavated, planned and recorded.

There will be sufficient excavation to give clear evidence for the period, depth and nature of any archaeological deposit. For linear features 1m wide sections will be excavated across their width to a total of 10% of the overall length. Discrete features, such as pits, will have 50% of their fills excavated, although certain features may be fully excavated. Complex archaeological structures such as walls, kilns, ovens or burials will be carefully cleaned, planned and fully recorded, but where possible left *in situ*. Only if it can be demonstrated that the complex structure/feature is likely to be destroyed by groundworks, and only then after discussion with the SCCAS, will it be removed.

Fast hand-excavation techniques involving (for instance) picks, forks and mattocks will not be used on complex stratigraphy.

The depth and nature of colluvial or other masking deposits will be established. Therefore, a sondage will be excavated in each trench to test the stratigraphy of the site. This will occur in

every trench unless it can be demonstrated that a feature excavated within a particular trench has clearly penetrated into natural.

A representative section will be drawn of each trench, to include ground level, the depth of machining within the trench and the depth of any sondages.

Trained CAT staff (including site supervisor Mark Baister and experienced archaeologist Adam Tuffey, 9 years and 4 years archaeological experience respectively) will use a metal detector to scan all trenches both before and during excavation. All finds will have their location recorded via GPS or with the Total Station. All spoil heaps will also be scanned and finds recovered.

Individual records of excavated contexts, layers, features or deposits will be entered on pro-forma record sheets. Registers will be compiled of finds, small finds and soil samples.

All features and layers or other significant deposits will be planned, and their profiles or sections recorded. The normal scale will be site plans at 1:20 and sections at 1:10, unless circumstances indicate that other scales would be appropriate.

The photographic record will consist of general site shots, and shots of all archaeological features and deposits. A photographic scale (including north arrow) shall be included in the case of detailed photographs. Standard "record" shots of contexts will be taken on a digital camera. A photographic register will accompany the photographic record. This will detail as a minimum feature number, location, and direction of shot.

Trenches will not be backfilled until they have been signed off by the SCCAS.

Site surveying

The evaluation trenches and any features will be surveyed by Total Station, unless the particulars of the features indicate that manual planning techniques should be employed. Normal scale for archaeological site plans and sections is 1:20 and 1:10 respectively, unless circumstances indicate that other scales would be more appropriate.

The site grid will be tied into the National Grid. Corners of excavation areas will be located by NGR coordinates.

Environmental sampling policy

The number and range of samples collected will be adequate to determine the potential of the site, with particular focus on palaeoenvironmental remains including both biological remains (e.g. plants, small vertebrates) and small sized artefacts (e.g. smithing debris), and to provide information for sampling strategies on any future excavation. Samples will be collected for potential micromorphological and other pedological sedimentological analysis. Environmental bulk samples will be 40 litres in size (assuming context is large enough)

Sampling strategies will address questions of:

- the range of preservation types (charred, mineral-replaced, waterlogged), and their quality
- concentrations of macro-remains
- and differences in remains from undated and dated features
- variation between different feature types and areas of site

CAT has an arrangement with Val Fryer/Lisa Gray whereby any potentially rich environmental layers or features will be appropriately sampled as a matter of course. Trained CAT staff will process the samples (unless complex or otherwise needing specialist processing) and the flots will be sent to VF/LG for reporting. Bulk samples will be a minimum of 40L, or 100% of smaller features.

Should any complex, or otherwise outstanding deposits be encountered, VF/LG will be asked onto site to advise. Waterlogged 'organic' features will always be sampled. In all cases, the

advice of VF/LG and/or the Historic England Regional Advisor in Archaeological Science (East of England) on sampling strategies for complex or waterlogged deposits will be followed, including the taking of monolith samples.

Human remains

CAT follows the policy of leaving human remains *in situ* unless there is a clear indication that the remains are in danger of being compromised as a result of their exposure. If circumstances indicated it were prudent or necessary to remove remains from the site during the monitoring, the following criteria would be applied; if it is clear from their position, context, depth, or other factors that the remains are ancient, then normal procedure is to apply to the Department of Justice for a licence to remove them. In that case, conditions laid down by the license will be followed. If it seems that the remains are not ancient, then the coroner, the client, and SCCAS will be informed, and any advice and/or instruction from the coroner will be followed.

All archaeological human remains excavated during the course of the evaluation will be sent to specialist Julie Curl for analysis and reporting.

Photographic record

The photographic record will consist of general site shots, and shots of all archaeological features and deposits. A photographic scale (including north arrow) shall be included in the case of detailed photographs. Standard "record" shots of contexts will be taken on a digital camera. A photographic register will accompany the photographic record. This will detail as a minimum feature number, location, and direction of shot.

Post-excavation assessment

If a post-excavation assessment is required by SCCAS, it will be normally be submitted within 2 months of the end of fieldwork, or as quickly as is reasonably practicable and at a time agreed with SCCAS.

Where archaeological results do not warrant a post-excavation assessment, preparation of the normal site report will begin.

Finds

All significant finds will be retained.

All finds, where appropriate, will be washed and marked with site code and context number.

Most of our finds reports are written internally by CAT Staff under the supervision and direction of Philip Crummy (Director) and Howard Brooks (Deputy Director). This includes specialist subjects such as:

prehistoric and Roman pottery: Matthew Loughton

post-Roman pottery: Howard Brooks

animal bones (small groups): Alec Wade / Adam Wightman

small finds, metalwork, coins, etc: Laura Pooley

flints: Adam Wightman

environmental processing: Robin Mathieson

or to outside specialists:

animal bones (large groups) and human remains: Julie Curl (*Sylvanus*)

environmental assessment and analysis: Val Fryer / Lisa Gray

conservation/x-ray: Laura Ratcliffe (LR Conservation) /

Norfolk Museums Service, Conservation and Design Services

Other specialists whose opinion can be sought on large or complex groups include:

prehistoric and Roman pottery: Stephen Benfield

Roman brick/tile: Ernest Black

Roman glass: Hilary Cool

Prehistoric pottery: Paul Sealey

Other: EH Regional Adviser in Archaeological Science (East of England).

All finds of potential treasure will be removed to a safe place, and reported immediately to the Suffolk FLO (Finds Liaison Office) who will inform the coroner within 14 days, in accordance with the rules of the Treasure Act 1996. The definition of treasure is given in pages 3-5 of the Code of Practice of the above act. This refers primarily to gold or silver objects.

Requirements for conservation and storage of finds will be agreed with SCCAS and carried out as per their guidelines (SCCAS 2017).

Results

Notification will be given to SCCAS when the fieldwork has been completed.

An appropriate archive will be prepared to minimum acceptable standards outlined in *Management of Research Projects in the Historic Environment* (English Heritage 2006).

The draft final report will be submitted within 6 months of the end of fieldwork for approval by SCCAS.

The approved final report will normally be submitted to SCCAS as both a PDF and a hard copy.

The report will contain:

- The aims and methods adopted in the course of the archaeological project
- Location plan of the area in relation to the proposed development.
- Section/s drawings showing depth of deposits from present ground level with Ordnance Datum, vertical and horizontal scale.
- Archaeological methodology and detailed results including a suitable conclusion and discussion and results referring to Regional Research Frameworks (EAA8, EAA14 & EAA24).
- All specialist reports or assessments
- A concise non-technical summary of the project results
- Appendices to include a copy of the completed OASIS summary sheet and the approved WSI

Results will be published, to at least a summary level, in the PSIAH (Proceedings of the Suffolk Institute of Archaeology and History) annual round up should archaeological remains be encountered in the evaluation. An allowance will be made for this in the project costs for the report.

Final reports are also published on the CAT website and on the OASIS website.

Archive deposition

The archive will be deposited with the Suffolk County Council Archaeological Service as per their archive guidelines (SCCAS 2017).

If the finds are to remain with the landowner, a full copy of the archive will be housed with the SCCAS.

The archive will be deposited with the SCCAS within 3 months of the completion of the final publication report, with a summary of the contents of the archive supplied to SCCAS.

Monitoring

SCCAS will be responsible for monitoring progress and standards throughout the project, and will be kept regularly informed during fieldwork, post-excavation and publication stages.

Notification of the start of work will be given SCCAS one week in advance of its commencement.

Any variations in this WSI will be agreed with SCCAS prior to them being carried out.

SCCAS will be notified when the fieldwork is complete.

The involvement of SCCAS shall be acknowledged in any report or publication generated by this project.

Education and outreach

The CAT website (www.thecolchesterarchaeologist.co.uk) is updated regularly with information on current sites. Copies of our reports (grey literature) can be viewed on the website and downloaded for free. A magazine (*The Colchester Archaeologist Vol 28* out now) summarises all our sites and staff regularly give lectures to groups, societies and schools (a fee may apply). CAT also works alongside the Colchester Archaeological Group (providing a venue for their lectures and library) and the local Young Archaeologists Club.

CAT archaeologists can be booked for lectures and information on fees can be obtained by contacting the office on 01206 501785.

References

- | | | |
|------------------------------|-------|--|
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| SCCAS | 2017b | <i>Archaeological Archives in Suffolk: Guidelines for preparation and deposition</i> |
| SCCAS | 2018 | <i>Brief for a trenched archaeological evaluation at Barham Quarry: Phases 6-10</i> |

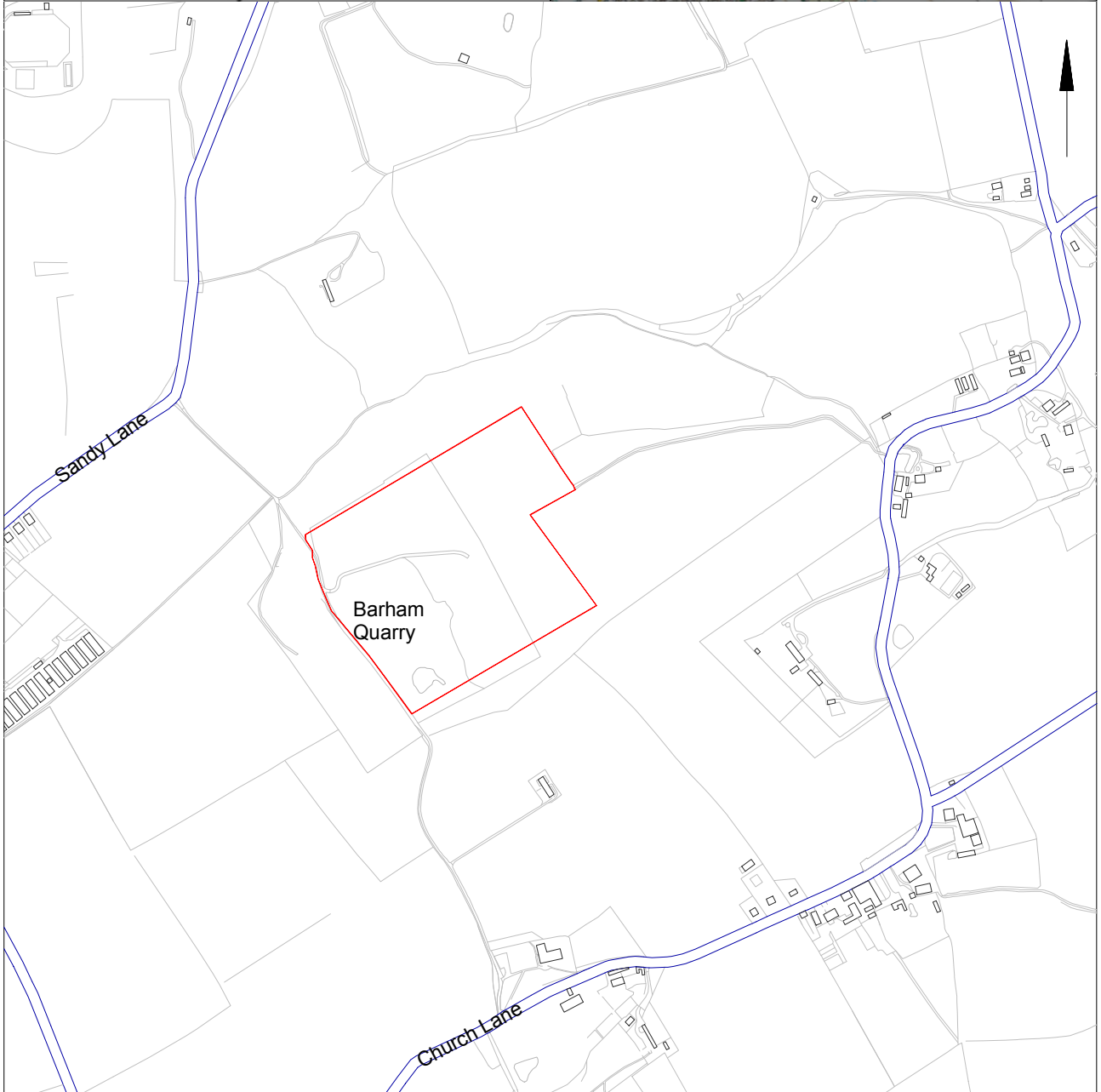
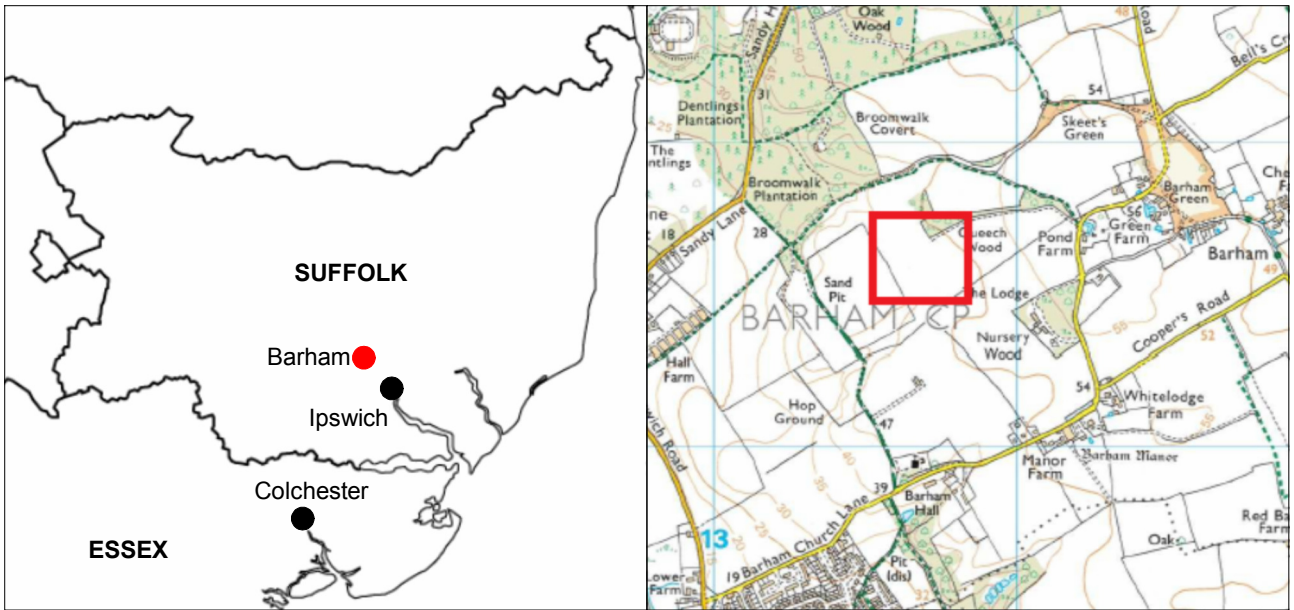
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Fig 1 Site location.

0 500 m

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Fig 3 Trench proposal.

Method Statement

by MARTIN ROGER BATES

Aims of the investigation

The site, having been established as a locality of regional scientific and archaeological importance, should be investigated ahead of development to meet the following research objectives drawn up in line with English Heritage Guidance notes for the management of Palaeolithic sites (1998):

- To map accurately the vertical and horizontal distribution across the site of the deposits.
- To assess the presence and context of the buried soils at the site
- To assess the sediments in terms of lithology and sedimentary structure in order to establish the overall stratigraphic framework of the sediments and correlation with other local sequences
- To assess the significance of each layer identified in terms of archaeological, palaeoenvironmental or palaeogeographic significance. Significance to be rated in terms of high, moderate, low or none.
- To sequence palaeoenvironmental evidence to effect both local characterisation and more effective inter-site correlation.
- To assess the potential the deposits hold for artefacts and ecofacts through sieving.

Methodology

Trench evaluation will be employed through the deposits in the area. The size and extent of evaluation trenching, and an accurate plan showing trench location, will be agreed with the client/SCC prior to the commencement of the works.

The trial pits will need to be excavated, in places, to approximately c. 4m in depth (or the maximum reach of the machine). Where possible, they will be excavated using a flat bladed ditching bucket. Trenches will not be entered below c1.2m depth and all recording will be undertaken by measurement from the surface downwards and the risings from the machine bucket.

The trial pitting will be supervised by recognised specialists in a) palaeolithic archaeology and b) pleistocene geology.

Within each trial pit, sediment will be removed by machine in spits up to 250mm thick and following the interfaces between sedimentary units wherever possible. Each spit and sedimentary unit will be numbered separately. Samples (100 litres) from each Pleistocene sedimentary unit will, where possible, be shaken through a 10mm mesh on site to retrieve

artefacts and coarse ecofacts. Where sedimentary units are divided into spits, samples will be sieved from each spit if appropriate.

Spoil from each spit will be kept separately to allow correlation of artefacts to spits. Any intact activity areas such as knapping floors, if detectable, will not be excavated or disturbed at this stage. If such remains are encountered the County Archaeologist will be informed immediately and arrangements may need to be made for the pit to be shored or stepped and for hand cleaning and detailed recording undertaken. Where deposits with potential for environmental and/or scientific analysis are noted, bulk samples will be taken, from the spoil or the section (if safe to do so) for subsequent laboratory analysis. Where possible, samples shall be taken for potential analysis of clast content, particle size, micromorphology, pollen, mollusc, ostracod, micro-mammalian and other micro-faunal remains, and for dating purposes as appropriate. Monolith samples will be taken as appropriate and if safe.

If suitable deposits are observed provision should be made for specific environmental sampling, as agreed with the County Archaeologist, the geoarchaeologist and the client.

The sedimentary sequence in each pit will be logged from the top of the pit or the adjacent; the pit or trial trench will not be entered unless it is safe to do so. At least one full and representative section of each pit will be drawn to a scale of 1:10. If necessary, more than one face will be drawn. The geological specialist will liaise regarding the recording of the sections; separate logs may be made in the field but an integrated record is required for the report. It is not intended at this stage that detailed sedimentological analysis is undertaken but where it is safe to do so selected sections should be carefully cleaned and orientations of sedimentary structures if present measured. If appropriate, further more detailed sedimentological recording will be arranged at a later date.

In the event of significant archaeological deposits being encountered the County Archaeologist is to be informed immediately. Further limited excavation may be required to clarify the nature, character and date of the archaeological deposits.

The above methodology can be varied if considered necessary by the geoarchaeological specialist. Any variations will be agreed with the County Archaeologist.

August 2018

CURRICULUM VITAE: MARTIN ROGER BATES

Qualifications: BSc Archaeology (London), 1 st class Honours 1984 PhD (London), 1990	
Areas of expertise and technical skills: Palaeolithic archaeology Environmental archaeological project management Engineering, shallow geophysics and archaeological projects Estuarine, coastal marine geoarchaeology Fluvial geoarchaeology Evolution of submerged landscapes Landscape heritage and conservation	Areas of specialist teaching: Quaternary environments Geoarchaeology of fluvial environments Palaeogeography Environmental archaeological techniques Palaeolithic environments
Current position: Lecturer in Geoarchaeology/Environmental Archaeology (teaching/research/administration) and Contract Researcher (project development and costings/project management, field work, laboratory work, project reporting)	
Career details 1997-present Lecturer in Geoarchaeology/Environmental Archaeology and Contract Researcher, Faculty of Arts and Humanities, University of Wales Trinity Saint David 1996-1997 Director, Geoarchaeological Service Facility, Institute of Archaeology, UCL 1992-1997 Lecturer (Part-time), Institute of Archaeology, UCL 1990-1996 Deputy Director, Geoarchaeological Service Facility, Institute of Archaeology, UCL 1990-1992 Lecturer (Part-time) in Archaeology, Dept. of Geography, University of North London 1988-1989 Environmental Archaeologist, Museum of London Archaeology Service 1984-1988 Study for PhD, Department of Geography, Royal Holloway, University of London 1981-1984 Study for BSc, Institute of Archaeology, University of London	
Summary history My career history to date has seen me develop a profile that places me at the crossroads of a number of disciplines including archaeology, quaternary geology, engineering geology and environmental science. It is this multi-disciplinary profile that allows me to provide a unique approach to archaeology that manifests itself through my teaching, research and contract work. From an early stage in my career the multi-disciplinary approach to archaeology has been central to my development. I was centrally involved in the discovery and excavation of the important Lower Palaeolithic site at Boxgrove in the 1980's and this interest in the Quaternary history of Sussex has continued to the present day. Since the mid 1990's there have been 3 threads to my career; teaching, research and contract archaeology. All three are currently run through the School of Archaeology, History and Anthropology at Lampeter. Presently I am involved in a number research projects. The archaeology of submerged landscapes is an on-going area of interest and I am part of a team looking at submerged landscapes around the Bay of Firth and the Loch of Stenness in Orkney.	

Additionally I am project geoarchaeologist for the Ice Age Island project in Jersey and am leading a new multi-disciplinary research excavation at La Cotte de St.Brelade in Jersey. I am also working as project geoarchaeologist on a research project at Isimila in Tanzania. I have also worked as a geoarchaeologist on project in Turkey, Lebanon, Qatar and Iran.

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OASIS ID: colchest3-325738

Project details

Project name	Archaeological evaluation at Barham Quarry (Phases 6-10), Sandy Lane, Barham, Ipswich, IP6 0PB
Short description of the project	An archaeological evaluation (43 trial-trenches) was carried out at Barham Quarry (Phases 6-10), Sandy Lane, Barham, Suffolk. Previous archaeological investigations at Barham Quarry (Phases 1-5) to the west of the current development site had revealed prehistoric pits as well as a substantial Iron Age and Roman settlement with features including enclosures, roundhouses, a Roman pottery kiln and clay extraction pits. The current evaluation revealed a Late Neolithic/Early Bronze Age pit, a Late Neolithic/Bronze Age pit, four Late Bronze Age pits, and eight ditches, pits and pits/tree-throws dating to the Late Iron Age/Romano-British period. Twenty-four agricultural ditches could be of Romano-British or possibly medieval date, and a large modern pit and several undated features were also present including a cremation burial. Among the finds were a number of pieces of residual prehistoric worked flint and Late Bronze Age pottery recovered from later features. Four layers of colluvium were also recorded. Thin layers to the middle and north of the site appear to be of later Roman or post-Roman date. However, a thick layer of colluvium in the base of the valley to the south of the site is potentially of significant prehistoric date and warrants further investigation. Large quantities of worked flint recovered from the colluvium is indicative of prehistoric activity on the brow of the hill and the valley sides.
Project dates	Start: 17-09-2018 End: 16-10-2018
Previous/future work	Yes / Yes
Any associated project reference codes	SCC\0145\17 - Planning Application No.
Any associated project reference codes	BRH 080 - HER event no.
Any associated project reference codes	18/08a - Contracting Unit No.
Type of project	Field evaluation
Site status	Site of Special Scientific Importance (SSSI)
Current Land use	Cultivated Land 4 - Character Undetermined
Monument type	PIT Late Neolithic
Monument type	PIT Early Bronze Age
Monument type	PITS Late Bronze Age
Monument type	DITCH Late Iron Age
Monument type	DITCH Roman
Monument type	PITS Roman
Monument type	AGRICULTURAL DITCHES Roman
Monument type	AGRICULTURAL DITCHES Medieval
Monument type	PITS Medieval
Monument type	PIT Modern
Monument type	DITCHES Uncertain
Monument type	PITS Uncertain
Significant Finds	WORKED FLINT Palaeolithic
Significant Finds	WORKED FLINT Mesolithic
Significant Finds	WORKED FLINT Early Neolithic
Significant Finds	WORKED FLINT Late Neolithic
Significant Finds	POTTERY Late Neolithic
Significant Finds	WORKED FLINT Bronze Age
Significant Finds	POTTERY Late Bronze Age
Significant Finds	POTTERY Late Iron Age
Significant Finds	POTTERY Roman
Significant Finds	CERAMIC BUILDING MATERIAL Roman
Significant Finds	IRON NAILS Roman
Significant Finds	POTTERY Medieval
Significant Finds	CREMATED HUMAN BONE Uncertain
Significant Finds	SILVER STRIP Uncertain
Methods & techniques	""Sample Trenches""
Development type	Mineral extraction (e.g. sand, gravel, stone, coal, ore, etc.)
Prompt	Planning condition
Position in the	After full determination (eg. As a condition)

planning process

Project location

Country England
Site location SUFFOLK MID SUFFOLK BARHAM Barham Quarry (Phases 6-10), Sandy Lane
Postcode IP6 0PB
Study area 4.2 Hectares
Site coordinates TM 135 515 52.119992165982 1.118986093198 52 07 11 N 001 07 08 E Point
Height OD / Depth Min: 45.62m Max: 47.75m

Project creators

Name of Organisation Colchester Archaeological Trust
Project brief originator HEM Team Officer, SCC
Project design originator Laura Pooley
Project director/manager Chris Lister
Project supervisor Adam Wightman
Type of sponsor/funding body Developer

Project archives

Physical Archive recipient Suffolk County Council Archaeology Service
Physical Archive ID BRH 080
Physical Contents "Animal Bones", "Ceramics", "Environmental", "Human Bones", "Metal", "Worked stone/lithics"
Digital Archive recipient Suffolk County Council Archaeology Service
Digital Archive ID BRH 080
Digital Contents "other"
Digital Media available "Database", "Images raster / digital photography", "Survey", "Text"
Paper Archive recipient Suffolk County Council Archaeology Service
Paper Archive ID BRH 080
Paper Contents "other"
Paper Media available "Miscellaneous Material", "Photograph", "Plan", "Report", "Section"

Project bibliography 1

Publication type Grey literature (unpublished document/manuscript)
Title Archaeological evaluation at Barham Quarry (Phases 6-10), Sandy Lane, Barham, Suffolk, IP6 0PB: September-October 2018
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