A Late Iron Age dyke, Roman and Anglo-Saxon burials, a Roman coin hoard, and a Civil War fort: Stage 1b archaeological evaluation and Stage 2 excavation at Colchester Garrison Alienated Land Area A1 (former Meeanee & Hyderabad Barracks) Colchester, Essex

> October-December 2010 January-March and July-September 2011



report prepared by Howard Brooks,

with contributions by Ben Holloway and Robert Masefield, and finds reports by Stephen Benfield, Nina Crummy, Adam Wightman, Val Fryer, Julie Curl, Joanna Bird, and Stephanie Shrubshall. Illustrations by Chris Lister, Mark Baister and Emma Holloway

on behalf of RPS and Taylor Wimpey

CAT project code: 06/10d Colchester & Ipswich Museums accession code: 2006.127 NGR: TM 0020 2430 (c)



Colchester Archaeological Trust Roman Circus House, Roman Circus Walk, Colchester, Essex CO2 7GZ tel.: 01206 501785 email: archaeologists@catuk.org

CAT Report 628 June 2016

Contents

1	Summary					
2	Introdu	ction	2			
3	Archae	ological background	2 3 7			
4	The 20	10 evaluation				
5	The 20	11 excavation	8			
6	Site A		9			
7	Site B		49			
8	Site C		51			
9	Site D		56			
10	Site E		57			
11	Site F		63			
12	Site G		75			
13	Site H		77			
14	Site I		83			
15	Site J		84			
16	Site K		111			
17	2010 evaluation features coinciding with Area A1					
18	Special	ist finds reports				
	18.1	Prehistoric pottery, by Stephen Benfield	118			
	18.2	Late Iron Age and Roman pottery, by Stephen Benfield	120			
	18.3	Roman pottery of intrinsic interest, by Stephen Benfield	127			
	18.4	Medieval and post-medieval pottery, by Stephen Benfield	128			
	18.5	Flint, by Adam Wightman	131			
	18.6	The Hyderabad Barracks coin hoard, by Nina Crummy	133			
	18.7	Small finds and bulk finds, by Nina Crummy	140			
	18.8	Animal bone, by Adam Wightman	180			
	18.9	Human remains and cremated bone, by Julie Curl	183			
	18.10	Charred plant and other remains, by Val Fryer	217			
19	Referer		221			
20	Abbrev	ations and glossary	229			
21	Archive	deposition	230			
Append	lix 1:	Catalogue of bulk finds, by SB	231			
Append		Catalogue of finds from dyke ditch JF2, by SB	251			
Appendix 3:		Catalogue of pottery from fort and siege ditches, SB	259			

Figures

after p 261

EHER summary sheet

List of Photos

Cover:

- Photo 6.1 rubble platform F158
- Photo 6.2 mausoleum AF158/188 after removal of rubble platform
- Photo 6.3 mausoleum at Vindolanda, for comparison with AF158/188
- Photo 6.4 inhumation F188. View W.
- Photo 6.5 the rubble platform AF199
- Photo 6.6 pit with pyre debris AF211
- Photo 6.7 Warrior burial AF 38 (spear, shield boss, iron knife)
- Photo 6.8 Warrior burial AF 38 detail.
- Photo 6.9 grave AF56
- Photo 6.10 inhumation AF57, female with beads R side of skull
- Photo 6.11 inhumation AF57 skull with beads.
- Photo 6.12 inhumation AF57 detail of beads
- Photo 6.13 cremation F204 (2010 evaluation T2)
- Photo 6.14 Civil war ditch AF117

- Photo 6.15 Extract from Colchester Siege Map, showing position of the newly-discovered fortlet
- Photo 6.16 Civil War ditch AF143
- Photo 6.17 Civil War ditch AF155
- Photo 6.18 lead artefacts from Civil War contexts
- Photo 15.1 Brick foundations of military prison over LIA dyke
- Photo 15.2 Excavation of Section 1 across LIA dyke
- Photo 15.3 Section 1, lower dyke section
- Photo 15.4 Dyke Section 1, showing position of coin hoard

List of figures

- Fig 1 Colchester Garrison Alienated Land (GAL), with Area A1 highlighted.
- Fig 2 GAL A1 combined plan showing 2002 and 2010 evaluation trenches and 2011 excavation sites A-K
- Fig 3 Site A overall plan, showing 2002 and 2010 evaluation trenches, Civil War ditch, inhumations and cremations
- Fig 3a Newly-discovered Civil War fortlet
- Fig 4 Site A west features, showing 2002 and 2010 evaluation trenches, ring-ditches, inhumations and cremations
- Fig 5 Site A east features, showing 2010 evaluation trenches, ring-ditch, inhumations and cremations.
- Fig 6 Site B features, showing 2010 evaluation trenches
- Fig 7 Site C features, showing 2010 evaluation trenches
- Fig 8 Site D features, showing 2002 evaluation trenches
- Fig 9 Site E features, showing 2010 evaluation trenches
- Fig 10 Site F overall plan showing Enclosures 1-3 and 2010 evaluation trenches
- Fig 11 Site F Enclosures 1 and 2
- Fig 12 Site F Enclosure 3 features
- Fig 13 Site F Enclosure 3 with interpretation of structures
- Fig 14 Comparison of prehistoric round-houses in Essex with GAL A1 and GAL Area 2
- Fig 15 Site G features, showing 2002/2010 evaluation trenches
- Fig 16 Site H features
- Fig 17 Site I features
- Fig 18 Site J features
- Fig 19 Site K features
- Fig 20 Coin hoard and hoard pot
- Fig 21 AF2, 5: burial plan
- Fig 22 Burial plan: AF9, 19
- Fig 23 Burial plan: AF20
- Fig 24 AF20: small finds and burial plan
- Fig 25 AF20: small finds
- Fig 26 AF21: burial plan
- Fig 27 AF22 : burial plan
- Fig 28 AF24, 29: burial plans
- Fig 29 AF33: burial plan
- Fig 30 AF38: burial plan, profile and small finds
- Fig 31 AF38: shield boss
- Fig 32 AF38: small finds
- Fig 33 AF45, 56: burial plan
- Fig 34 AF57: burial plan and profile, skull and beads
- Fig 35 AF57: small finds
- Fig 36 AF58: burial plan
- Fig 37 AF59-62 : burial plan
- Fig 38 AF65: burial plan
- Fig 39 AF67, 70, 73: burial plan
- Fig 40 AF75-6, 79: burial plan
- Fig 41 AF80: burial plan

Fig 42 Fig 43 Fig 44 Fig 45 Fig 46 Fig 47 Fig 48 Fig 49 Fig 50 Fig 51 Fig 52 Fig 53 Fig 54 Fig 55	AF81, 92-4: burial plan AF97, 100-1 : burial plan AF102-3, 106, 108: burial plan AF109-11: burial plan AF112-3: burial plan AF116, 122-3, 127: burial plan AF128-9: burial plan AF130, 134: burial plan AF135, 137-8: burial plan AF140, 144: burial plan AF146-7, 150 : burial plan AF151-2, 154: burial plan AF158: mausoleum rubble platform plan, profile and sections AF159: burial plan
Fig 56 Fig 57	AF160-1, 166: burial plan AF168, 178, 180: burial plan
Fig 58	AF183, 188 : burial plan
Fig 59	AF189-91: burial plan
Fig 60 Fig 61	AF192, 196: burial plan AF199: tomb-monument base
Fig 62	AF211-2: burial plan
Fig 63	AF215-6: burial plan
Fig 64 Fig 65	HF1, 2 HF3, 4
Fig 66	HF6, 9
Fig 67	HF10, 11, 14
Fig 68	HF15, 16
Fig 69 Fig 70	HF17, 18, 20, 21 HF22, 23, 25
Fig 71	HF26
Fig 72	HF27, 28
Fig 73	HF29, 30-33
Fig 74	HF34, 35, 37 HF38-40
Fig 75 Fig 76	Neolithic-Iron Age pottery, Neolithic flint
Fig 77-80	JF2 sx1 Late Iron Age - Roman pottery
Fig 81	JF2 sx1-2 Late Iron Age - Roman pottery, medieval pottery
Fig 82 Fig 83	T2 F204 unusual Samian base Non-burial small finds
Fig 83 Figs 84-6	Site A sections
Fig 87	Sites B, C sections
Fig 88	Sites D, E sections
Figs 89-94	Site F sections
Fig 95 Figs 96-7	Sites G, H, I sections Site J sections
Fig 98	Site K sections
Fig 99	Evaluation trenches 1-10: plans
Fig 100	Evaluation trenches 11-18: plans
Fig 101 Fig 102	Evaluation trenches 19-32: plans Evaluation trenches 33-41, 44-48
Fig 103	Evaluation trenches 42-43, 49-59: plans
Fig 104	Evaluation trenches 60-67: plans

1 Summary

The 13.39ha former Meeanee & Hyderabad Barracks, Mersea Road, Colchester, are referred to as Area A1 within the general Colchester Garrison redevelopment project. This is the report on archaeological evaluations (Stage 1b: October-December 2010) and excavations (Stage 2: January-July 2011) carried out by CAT on behalf of Taylor Wimpey. RPS were project consultants (Rob Masefield). Area A1 was excavated as eleven separate Sites (A - K). In many cases, the 2010 Sites overlapped the trenches of the two previous evaluation stages (2002: CAT Report 2002) and 2010 (reported on here).

Site A

A cemetery of fourteen cremations and seventy inhumations was first used in the mid Roman period, and then (on the evidence of the grave goods) continued in use, or was reused, in the late 6th century or early 7th century. Eight inhumations were within ring-ditches, and five contained grave-goods including Anglo-Saxon shield bosses, spear-heads, knives and beads. One ring-ditch enclosed burial was of a female with Mongoloid or Negroid characteristics. Similar characteristics were noted for a nearby Anglo-Saxon period burial. The question of whether the 'Anglo-Saxon' cemetery was connected with immigrant populations with complex ancestries is considered. Two substantial ditches and one smaller section are part of a previously-unknown fortlet and laager constructed in the Civil War of 1648, to the north of Fort Needham.

Site B

Characterised by a large Roman quarry pit.

Site C

Included a substantial WSW/ESE Roman ditch with a fence-line on north edge. Possible field gate.

Site D

Produced a N/S aligned Roman field boundary ditch (also in Site E).

Site E

A tree stump clearance pit was found containing sixty-one Early Neolithic Mildenhall style sherds and nine Neolithic flints is the earliest prehistoric finds assemblage found from a secure context in Colchester. A substantial N/S Roman ditch (also in Site D to the north) was investigated.

Site F

Two late Iron Age or early Roman stock enclosures and a third ditch and fence enclosed enclosure containing a circular post-built structure may have comprised a stock coral and shepherds hut. These were cut by later E/W Roman field ditch (also in Site D to the east and Site G to the west).

Site G

Included two intercutting ?Roman graves, and the Roman period E/W-aligned ditch (also seen in Site F to the west).

Site H

Included a cemetery zone including thirty-one grave cuts, seventeen with human remains and one with grave goods of probable late Roman date. The general absence grave goods and their east-west alignments may also indicate a late Roman (Christian?) date.

Site I

Produced a single E-W Roman field ditch.

Site J

Included the significant discovery of a previously unknown northern extension of the late Iron Age/early Roman Berechurch Dyke, 1000m north of the previously known northern extent at a junction with the 'Barnhall Sector' at Colchester Cemetery. This 'Hyderabad Barracks Sector' of the Berechurch Dyke contained significant dating evidence derived from an adjacent occupation site its southern side, confirming a Late Iron Age date for the dyke approximately contemporary with the Sheepen Dyke (ie, early 1st century AD). A kink north-east suggests the possibility of a protected quayside zone beside the River Colne. Inserted into the top (Roman period) fills was a hoard of 1244 antoniniani, the latest being an antoninianus of Tetricus I, AD 271-4.

Site K

Three phases of Roman field ditch, a possible grave, and an undated semi-circular gully (possibly part of a mortuary-related ring-ditch).

2 Introduction to the Meeanee and Hyderabad Barracks (GAL Area A1) 2011 evaluation and 2012 excavation

- 2.1 This is the report on two separate stages of archaeological work Stage 1b archaeological evaluation (October December 2010) and Stage 2 archaeological excavation (January to July 2011) carried out by CAT on behalf of Taylor Wimpey at the former Meeanee & Hyderabad Barracks (MHB), Mersea Road, Colchester. RPS were project consultants (Rob Masefield).
- 2.2 The *c* 13.39ha former Meeanee & Hyderabad site (GAL Area A1) within the general Colchester Garrison development, was formerly under the ownership of MoD/ RMPA and was passed to Taylor Wimpey for residential redevelopment. Most of the area comprised existing buildings and surrounding grass, car parking and vehicular access routes around a central parade ground. There were also some lawn and tennis-court areas. The archaeological mitigation works were undertaken during the demolition phase (removal of the modern garrison buildings by Wooldridge) with certain buildings demolished to ground level to facilitate archaeological works beneath (such as within part of Site A).
- 2.3 Area A1 was excavated as eleven separate Sites (A K) based on positive results from the trenching.
- 2.4 Some of the positive 2010 evaluation trenches were partially or wholly subsumed within the later excavated sites A-K. Since reporting separately on the evaluation trenching, and then on the excavations would lead to repetition (cross-referencing between evaluation and excavation) each Site excavation report includes relevant information from the evaluation trenches within and adjacent to the excavated Site. However, figures 99-104 illustrate the evaluation trenches in numerical sequence, since to arrange them otherwise would be more confusing.
- 2.5 Background to the project (geological, archaeological and historical) is given below. Then follows a description and discussion of each of the eleven sites (A-K) with a period-by-period discussion of results, encompassing both the evaluation and excavation stages, placing the results in a wider background in relation to the oppidum of Camulodunum, the Roman town and its associated cemeteries. A discussion of the significance of small ring-ditch defined barrows at GAL Colchester, including the Anglo-Saxon examples at Site A1 at GAL Area A, is provided as a separate report (Masefield 2016).

Geology

2.6 Drift geology of the area is predominantly sands and gravel. This is occasionally in a clay matrix, and is sometimes capped by cover loam. The A1 site is broadly flat at approximately 20m OD. The 2002 evaluation found that archaeological deposits were buried approximately 0.6m below present ground level in the eastern and western areas, slightly deeper in some northern and southern areas. Modern horizontal truncation was severe close to the site entrance off Mersea Road onto Roberts Road and beneath Roberts Road. Vertical truncation caused by existing and former garrison foundations and services was found to be moderate to severe across the entire area. The least truncated area was the former parade ground area in the centre of Area A1.

3 Archaeological Background

3.1 Prehistoric

- 3.1.1 The Neolithic and Bronze Age pits excavated during the Alienated Land project in Areas C1, C2 and Flagstaff Road (west of A1) indicate intermittent or seasonal occupation (CAT Report 361). The possible storage pits within C1 appear to be dated to the middle-late Neolithic since they contained both Mildenhall Ware and Peterborough Ware and may therefore be transitional between these middle and late Neolithic traditions. The associated pits were considered to represent the earliest Neolithic features from Colchester but a probable tree removal pit found within T23 of the 2010 Area A1 evaluation (investigated within Site E) is earlier. This interpretation at evaluation stage was based on an association of Mildenhall style plain ware Neolithic pottery, representing at least two vessels, in combination with several flint blades typical of the earlier Neolithic period. At least two further tree-holes or tree removal pits within the A1 evaluation trenches contained flint blades (one in each) and these finds may represent offerings made of cultural objects following initial tree clearance for early farming clearances (Neolithic farmers are considered to have undertaken swidden or 'slash and burn' farming with temporary clearances made for several seasons of arable before movement to a fresh clearance and reversion to scrub). Another early pit in Alienated Land Area C2 containing decorated Beaker pottery dates to the late Neolithic/early Bronze Age.
- 3.1.2 Other evidence from this period (3rd to early 2nd millennium BC) is extremely scant, and no features of this date were noted during the A1 evaluations. Middle to later Bronze Age features were similarly scant in A1, perhaps suggesting that the area was not occupied or farmed at this time (c 1400-800BC). However, a series of late Bronze Age pits and a four-poster further to the west, in Alienated Land Areas J1 and H, indicates one settlement focus. It remains possible therefore, that Area A1 was located within a contemporary farming landscape along the gravel ridge. One pit within T5 in the northern area of A1 produced a flint-tempered sherd which may date to the later Bronze Age or early Iron Age and may have been associated with this general phase of occupation. At evaluation stage it was unclear whether the feature was isolated or part of a wider scatter of features.
- 3.1.3 The site (like much of the land south and south-west of Colchester's modern town centre) falls within the area of the pre-Roman oppidum of Camulodunum. The only above-ground traces of this oppidum are the linear banks and ditches of the defensive dyke system that surrounded it. The Garrison area occupies the eastern edge of the oppidum, with the north-south aligned eastern defensive dyke (the Berechurch Dyke) intersecting its extreme south-eastern edge (east edge of the former Roman Barracks).
- 3.1.4 As presently understood, the oppidum had two main centres of activity: at modern Gosbecks Farm (2km south-west of the Garrison), which was a Late Iron Age (LIA) and Roman rural farmstead (and possibly the home of Cunobelin); and Sheepen (2km north-west of the Garrison), which was the industrial and trading centre. Apart from these two large centres (above), it is likely that there were a number of smaller domestic and farming sites in the

oppidum. One of these was identified by the field boundaries paddocks and other features recorded at Kirkee & McMunn Barracks in 1994 (Shimmin 1998: figs 8, 11 here). A large area of cropmarks is recorded over the southern part of the Garrison area. Geophysical survey has confirmed and added to the pattern of linear cropmark features (CAT Report 184). The open area excavations conducted in 2003 in Areas 2, 6 and 10 ahead of the construction phase for the New Garrison (CAT/RPS Report 292) have established that they are latest Iron Age prehistoric/early-mid Romano-British in date. They represent the trackways, paddocks and field boundaries of a rural settlement of that period. A late Iron Age to early Roman farmstead was located at the former Goojerat Barracks to the west of Abbey Field (GAL Area L/N) in 2010 (CAT Report 588).

3.1.5 Prior to the Area A1 mitigation excavations there were three locations within Area A1 that it was considered may have alluded to activity here. A possible Iron Age or Saxon cremation pot appears to have been found in the north-east area of the barracks in 1938 (UAD 935 at TL0024 2454) although suspiciously another reference to UAD935 has Saxon cremation pot in the north-west corner of the barracks, also found in 1938 (it is possible, however, that the two separate finds were allocated the same UAD reference if they were found at the same time). This suspicion is consolidated by a lack of any notable archaeological features in the 2010 trenches in the north-eastern zone of A1 features and the discovery of Roman burials in the north-western corner of A1 (trenches 1-3). UAD reference UAD1513 relates to a rare find of an Iron Age mirror thought to have been found at the northern edge of the parade ground in 1974 (CAT Report 97). The exact location was not recorded but it was considered of interest that the 2002 evaluation located a small Iron Age pit close to that location within trench A3 (c 80m to the north-west) whilst a sub-oval gully in 2010 T34 in the north-west area of the Parade Ground appears to have enclosed a structure represented by a series of post-holes (see Mitigation Site F below). Small quantities of Iron Age pottery were recovered from this group of features. There is a strong possibility that the mirror was derived from a destroyed funerary context and it was considered possible that the T34 mini-enclosure could potentially be associated. However, there were no further Iron Age contexts identified by trenches T22, T24, T23, T34, T35 or T37 within the northern area of the Parade Ground.

3.2 Roman

- 3.2.1 The line of Mersea Road almost certainly follows the course of a Roman road leading to the south-east gate of the Roman town (via St Botolph's Street). Roman cemeteries are found adjacent to the Roman road grid south of Colchester and this stretch conforms to this pattern. Several Roman burials were found recently on the line of Napier Road and 70 were excavated in Area C2 further to the west. The northern area of the Abbey was also built over a Roman cemetery area. A total of 34 Roman inhumations were found during excavations from 1971 to 1985 in the northern Abbey grounds. Other burials are known close to Mersea Road including UAD 1057 relating to a lead coffin opposite the Officers Mess found on Mersea Road in 1937 (Hull (1958) no.107) and UAD 1080 relating to two cremations found in the bank of Mersea Road against thee edge of the barracks (Hull no.146a). The possibility that a Roman cemetery extended beneath the adjacent barracks was apparently supported by 2002 trench A10, which produced a single poorly dated inhumation thought to be either Roman or Saxon in date. An adjacent Roman ditch and pit were also found within the trench.
- 3.2.2 The south and south-western area of Area B1b to the west of Mersea Road and Area A1 is now known to contain nationally important Roman archaeology. A stone-built monumental Roman circus, currently unique to Britain, has been discovered during excavations in Alienated Land Areas C1, C2 and J1 to the NE of Area J2 in 2004 and 2005, with further walls and a monument base uncovered during service works at Napier Road in 2006 (CAT Reports 361, 412). The circus is now a designated Scheduled Ancient Monument. The east-west orientated circus is approximately 450m in length and 70m wide with a central 'spina' barrier and was used for chariot racing. Elements identified include the seating cavea with internal and external (buttressed) walls, two entrance ways through the southern cavea, a lowered racetrack dirt surface (the removed topsoil was presumably used to construct cavea banks on which seating was constructed), a segment of the semi-circular end of the circus, a fragment

of the starting gates structures, a monument base on the line of the spina, and further elements of the spina including its western end and a fragment of a turning post pillar (metae).

3.2.3 Development areas J1 and C2, Napier Road, Circular Road North and investigation of Abbey Field have shown that areas around the circus were used as cemeteries (eg Area C2). However, significantly the area to the north of the circus in B1b and Area B1a, has indications of extra mural settlement instead, including pitting containing occupation debris and evidence of associated structures including painted wall plaster.

3.3 Anglo-Saxon

3.3.1 An Early Anglo-Saxon (AS) cemetery is suggested by fragmentary remains and grave goods was found in 1926 just east of Mersea Road and just north of the north-western corner of Area A1 (UAD 1113). Whilst this could allude to occupation in the vicinity there is currently no firm evidence. UAD 935 within the north-west corner of Area A1 reefers to a Saxon cremation (see also Iron Age above which suggests a Iron Age or AS cremation pot with the same UAD reference was found in the north-east corner of the barracks) which at face value confirms that Saxon burials were also associated with the former Roman road. In addition fragments of human bone were apparently identified in 2000 during test pitting by WS Atkins in the north-west area of the barracks (CAT 2000). Again there is no firm evidence these are Saxon but the likelihood is that they are either Roman or AS given the location adjacent to the former Roman road.

3.4 Medieval

- 3.4.1 The remains of St John's Abbey in GAL Area B (immediately north-west of Area A1) is the dominant medieval monument in the northern part of Colchester Garrison. The Abbey was built by the Benedictine Order by 1115 but burnt down in 1133. It was rebuilt in the early 13th century. Medieval burials associated with the Abbey have been recorded several times in this area. The church was added to and altered in the 14th and 15th centuries. To the north of the church were the cloister, chapel house and domestic buildings. Some of the domestic buildings were said to have been moved to the south side of the church after 1133 and this has been backed up by archaeological evidence. The Abbey and St Giles's Church were surrounded by a precinct wall with towers. The wall dates from before the 13th century and was refaced in parts in the 16th century. It was partly demolished when building St Botolph's roundabout in the early 1970s, but it was recorded before its destruction. Surviving stretches (some refaced in brick) can still be seen in various places. The surviving Abbey gatehouse was built in the 15th century as the main gatehouse, giving access to the town. The upper storey was blown up during the Siege in 1648 and was rebuilt, probably in the 1840s. The building is Grade 1 Listed and is also scheduled. It is possible that there was a second gatehouse, in the Flagstaff House area. The Abbey was dissolved in 1538 and started to fall down or be demolished at this time (CAT Report 97, CAR 9, 203-221, CAR 1, 28-30).
- 3.4.2 Parts of the Abbey walls survive, along with the magnificent Abbey gatehouse, and the site of the Abbey church has recently been located in the northern part of the abbey (within GAL Area B2).
- 3.4.3 There are currently no indications of medieval sites or finds within Area A1 and the likelihood is that area was within open farmland at this time.

3.5 Post-medieval

3.5.1 There was little evidence from the 2002 trial trenches relating to the early post-medieval period. The excavated sites were generally in the area of Colchester's southern Civil War defences (see below) but otherwise were rural in character. The siege of Colchester and the Royalist rebel army of Essex holed within, by the Parliamentarian 'New Model Army' under Fairfax, lasted 75 days over the wet summer of 1648 was one of the largest siege operations

ever conducted on English soil. It included the construction of at least one trench circuit with integral forts (including Fort Needham) and fortlets completely encircling the town. Canon fired from these positions destroyed much of the town. It is reported that the siege was so successful that the town's occupants (who were mainly employed in the textile trade) and the Royalist army were forced into eating cats, dogs and rats, and hundreds died from starvation and disease (Jones 2003, 10). Following the surrender, long-recognised codes of military honour were ignored by the New Model Army, and Sir Charles Lucas (whose residence was within the area later occupied by the Flagstaff compound (B1b)) was shot following court martial.

3.5.2 The earliest barracks covering Area A1 were constructed in their original form in 1855 as a temporary camp. The camp grew quickly and had doubled in size during the 1860s. CAT Report 97 (the desk-based assessment) states that:

'The field on which this barracks is located was bought by the Army in 1806 as an Ordnance Field...In 1855 six blocks of huts including a camp hospital were built here. These were built as temporary infantry barracks for 5,000 men and were built on the Aldershot model...The current Meeanee Barracks and Hyderabad Barracks were built from 1896 to 1904 to replace the huts. They were modernised between 1958 and 1961.'

3.5.3 Historic Maps: Speed's Map of Colchester (1610) shows the area to be open but has little detail. This situation is mirrored by the 1648 (Civil War) siege map of Colchester, although the siege defences are of some interest with regard to Area A1 since Fort Needham, though drawn schematically and not to scale, was thought to potentially encroach into the western area of A1 and apparently overlaid Mersea Road (to control the route). Erroneously the road to the east is labelled Mersea Road on the siege map, although this must be incorrect since St Johns' Abbey is not shown against it, but is instead on the west side of the actual Mersea Road, which is straddled by Fort Needham on the map. The French Map of Colchester (1650), Thomas Sparrow's map of Colchester (1767), Chapman & Andre's Map of Essex (1777), and Cole & Roper's Map of Colchester (c 1800-1815) all show the area as open farmland. Early drawings of the barracks, including a plan of c 1860, show 'Colchester Camp' comprised of 13 barrack blocks. The 'General parade Ground' was located in the western part of the barracks. A drawing of Meeanee and Hyderabad Barracks looking towards the Garrison Church of c 1890 shows a wide street flanked by timber barrack blocks. The OS 1st Edition 1:10,560 map (1874-1876) also shows the general layout of the new barrack blocks whilst the OS maps of the 20th century demonstrate the various alterations of layout resulting in the current layout (CAT Report 97). There are no original barracks buildings surviving in Area A1.

4 The 2010 evaluation

Introduction

- **4.1** The Stage 1b archaeological evaluation was undertaken between 25th October and 3rd December 2010. The requirements for the archaeological evaluation were included in a 2002 strategy document for the overall development (RPS 2002). The detailed methodology set out in the Stage 1b WSI (RPS 2010) as required by and agreed by Colchester Borough Council.
- **4.2** Figure 1 shows the location of Area A1 in the context of the Taylor Wimpey development area. Trial trenches undertaken in 2002 and 2010 are shown on Figure 2. Stage 1a trenching (in support of outline planning) in 2002 comprised 19 trenches providing a 0.39% (533m²) sample within available grassed and tarmac areas (CAT Report 206). To achieve the required overall 3% sample, a further 2.61% (3,495m²) was undertaken in the form of 1,942m of 1.8m-wide trenches in the early stages of the demolition in 2010 (T1-67). The information obtained from the combined Stage 1a and 1b evaluations was used to determine the requirement for further mitigation (Stage 2 excavation) to be conducted ahead of the construction phase.

Summary of Results

- **4.3** The evaluations produced several prehistoric features of interest including an early Neolithic tree-throw pit in T23 containing worked flint and Neolithic Plain Ware pottery. This feature probably represents early forest clearance for agriculture and may contain the earliest pottery from a secure context from Colchester. Other prehistoric pits were revealed and sampled in 2010 T5, and in one of the 2002 evaluation trenches in the centre of the site (adjacent to trench T19). These may date to the Iron Age and late Bronze Age/early Iron Age respectively. A ring-gully feature or small sub-oval enclosure containing a post-built structure was identified within T34 in the central area of A1. The function of this site was not clear at evaluation stage. There was little evidence of pre-Iron Age and Iron Age landscape features (ditches) but the Roman ditch layout (ie, ditches whose final fills contain Roman finds see below) perhaps appears less regular than would be expected if the landscape was laid out on a 'blank canvas' after the establishment of the colony. Therefore a pre-Roman origin for at least some of the represented landscape elements is suspected.
- The 2010 evaluation also demonstrated that despite the location of A1 from only around 400m 4.4 to the south of the Roman town (with its western edge flanked by the presumed Roman Road line leading to the south-east gate of the town, approximately along the line of Mersea Road) much of the central and southern area of the site were located within Roman agricultural landscape, as defined by a series of field boundaries. However, an inhumation burial adjacent to Mersea Road on the western edge of the site and two Roman quarries in the south-east corner and northern side of A1 show that other activities took place close to the Roman road (Figure 2). The field ditches contained abraded Roman pottery, tile and building stone in low density and may be within the farmland of the small 2nd -3rd century Roman 'villa' discovered in Alienated Land Area E within the former sports pitch on the west side of Mersea Road. Roman burial grounds are known to have flanked the Roman circus and it was not surprising to find evidence of another burial plot within the north-west corner of A1, the closest area to the circus, during the 2010 evaluation. An urned cremation, one definite inhumation and 6-7 more possible inhumations (typical rectangular cuts with vertical sides but with no bone survival) were found within Trenches 1-3. A ring-ditch of a possible burial mound was intersected by T1 and was considered of particular interest given the clutch of late Roman mortuary (small barrow) ring-ditches found within Alienated Land Area C1, with further examples beneath Circular Road North and within Area L/N.
- **4.5** There were no clearly Anglo-Saxon or medieval features and despite the reputed location of the 1648 English Civil War fort (Fort Needham) close to the south-western corner of the site, no clearly associated features were noted. Plate 6.15 shows a possible location of Fort Needham based on the siege map, the possible larger ditch on the west side of Mersea Road within Area E and negative evidence of fort related features in the south-west area of A1. The dashed area coincides with an area of significant ground reduction associated within the entrance area into the former Hyderabad Barracks (shown by truncation demonstrated within

the associated trenches and relative ground levels). It is possible that this truncation removed traces of the fort, although the alternative is that the fort lay just south of Hyderabad and the ditch in Area E was an advanced line or was not associated with the siege. A post-medieval ditch in the southern part of the site is aligned east-west, appears relatively late post-medieval in date and does not align with the ditch in Area E. It may therefore not be associated.

4.6 The results of the 2010 evaluation are integrated into the text on the 2011 excavations, where appropriate.

5 The 2011 Excavations

Introduction

Following discussions between RPS and the Colchester Borough Council Archaeological Officer (CBCAO), it was agreed that eleven areas totalling 1.06ha required mitigation (ie, excavation prior to development: Areas A to K on Figs 3-98), in order to target the main archaeological issues raised by the evaluation. Work was carried out in accordance with a *Written Scheme of Investigation* (WSI) which set out proposed methodology for the excavations, treatment of finds, production of a report, and deposition of the archive (RPS 2010). The WSI mirrored standards and practices contained in *Guidelines on Standards and Practices for Archaeological Fieldwork in the Borough of Colchester* (CIM 2002).

Roman pottery fabric concordance¹

Roman pottery was recorded using the Colchester Roman fabric type series (*CAR* **10**) supplemented by the *Camulodunum* fabric series (Hawkes & Hull 1947) and the National Roman Fabric Reference Collection (Tomber & Dore 1998). All Roman pottery fabrics referred to in this report are listed in a concordance in Table 5.1. Roman pottery vessel forms equate to the Colchester, *Camulodunum* (Cam) pottery type series (Hawkes & Hull 1947, Hull 1958).

Fabric code	Fabric name
AA	amphorae, all (excluding Dressel 20 and Brockley Hill/Verulamium region amphorae)
AJ	amphorae (Dressel 20)
BA(SG)	South Gaulish plain samian
BA(CG)	Central Gaulish plain samian
BA(RH)	Reinzarben plain samian
CH	oxidised Hadham ware
DJ	coarse oxidised and related wares
DZ	fine oxidised wares
GP	fine grey wares (Colchester, London-type and north Kent wares)
GAB TN	Gallia-Belgica (Vesle Valley) terra nigra
GAB TN 1	Gallia-Belgica (Vesle Valley) terra nigra 1
GAB TN 2	Gallia-Belgica (Vesle Valley) terra nigra 2
GAB TR 1	Gallia-Belgica terra rubra 1
GAB TR 3	Gallia-Belgica terra rubra 3
TR4	local/regional copies of terra rubra-type vessels
GTW	Grog-tempered ware
GX	other coarse wares, principally locally-produced grey wares
HD (ESH)	shell-tempered and calcite gritted wares (early shell-tempered ware)
HZ	large storage jars and other vessels in heavily-tempered grey wares
HZ(GT)	large storage jars with grog-tempered fabric
KX	black-burnished ware (BB2) types in pale grey ware
MQ	white-slipped fine wares and parchment wares
NOG WH	North Gaulish white ware
NOG WH 2	North Gaulish (Gallo-Belgic powdery) white ware 2
NOG WH 3	North Gaulish (Gallo-Belgic powdery) white ware 3
ON	mica-gilt wares
RCW	Romanising coarse wares
TZ	mortaria, Colchester and mortaria imported from the continent
UR	terra nigra-type wares

Table 5.1. Concordance or Roman pottery fabrics referred to in the report

¹ Roman fabrics are discussed in the following Sections - this table is given here for reference.

6 Site A (Figs 3-5, 21-63, 84-6)

6.1 Site A aims

The stripping of the western side of Site A in April 2011 followed the demolition of the 1930s military structure, whose original construction may have led to the discovery of the Anglo-Saxon cremation urn reported from this site (*CAR* **1**, 14, fig 17). The remainder of the area was not available until June 2011, following the demolition of the vehicle hangars on the northern wall of the barracks.

Site A was designed to incorporate 2010 trenches T1 to T3, which had revealed Roman burials and post-medieval ditches. A ring-ditch in T1 was thought to be either burial-related, or associated with a post-medieval post-mill.

Context numbers preceded by 'F' relate to evaluation stage (ie, 2010), whereas those excavated in 2011 are prefixed AF.

6.2 Site A summary

Site A (size: 2,580m²) contained an important group of eighty-four burials (fourteen cremations and seventy inhumations), nine of which (a cremation and eight inhumations) were within partial or complete ring-ditches. Five burials contained grave-goods including Anglo-Saxon shield bosses, spear heads, knives and beads. The cremations contained finds spanning the 1st-4th centuries, but may focus on the 2nd/3rd centuries. Two Roman burials (a cremation and a female inhumation) were underneath what appeared to be a robbed-out mausoleum, and a robbed-out tomb-base respectively. The ring-ditches formed a band across the northern side of Site A and where associated finds were recovered are of mid/late 6th to early 7th century Anglo-Saxon date.

The other finds in graves were not placed burial deposits, but unrelated residual pieces of pottery or tile in the backfill.

Given the date of the cremations, the absence of coffin stains, coffin nails and hobnails which are so commonly found in the late Roman phase at the large Butt Road cemetery (*CAR* **6**, 31), and the presence of the two mausoleum-like burials, and the Anglo-Saxon grave goods, there is no question that this cemetery was first used in the Roman period, and was then used again in the mid/late 6th century to early 7th century.

The prehistoric period is represented only by residual sherds and flints, the small quantity of which may indicate that this was open land in the medieval period.

Two very substantial ditches can be interpreted as part of a fort constructed in the Civil War of 1648. Finds in the ditches and the discovery of lead musket balls confirm this supposition. There is no fort in this position on the *Colchester Siege Map*, but it may be a forward position established to the north of Fort Needham. The site remained unused after the Civil War until the building of the garrison.

6.3 Site A concordance

Site A was evaluated by trial-trenching on two previous occasions, in 2002 (already reported in CAT Report 206), and in 2010 (reported here). The table below give details of any overlap the two evaluations and the Site A excavation (see table 6.1).

Concordance between excavated Site A, and 2002 evaluation trenches

The extreme northern N end of 2002 T1 was at the southern edge of Site A, but all the T1 features were south of Site A.

Trench no	area of T within Site A	features within Site A	area of trench outside Site A
_T1	all	Eval F197 and F200 are part of ring-ditch AF3. Eval F200 is grave AF38. T1 features not renumbered in excavation are post-med pits F198-9, and F201, which (although grave- shaped) produced post-med finds.	none
T2	all	Eval F206 and F211 equate to top fills of Civil War ditch AF155. Eval F207 is ditch AF117. Eval features not renumbered at excavation are cremation burial F204, and undated ditches F203, 208. F205 was grave-like, but had no finds.	none
Т3	all	Evaluation F187 is a Roman pit. Eval F172 is grave AF159. F181 is cremation AF157. F162, F180, F190 were undated pits. F184, 185, 189 were undated post-holes	none
T13	6m x 2m	F166, Roman post-hole	16m x 2m

Table 6.1 Concordance between excavated Area A, and 2010 evaluation trenches

Those evaluation trenches which were neither inside nor near the excavated Sites A-K are listed in Section 17 below.

6.4 Site A context list with finds dating (* = non-placed finds may be residual)

Cont	type	Finds	Period
no			
L1	hardcore		
L2	buried	284: pot Rom, p-Rom	med, L12-14C
	ploughsoil		
L3	natural		
AF01	concrete		
	foundation		
AF02	inhumation		
AF03	ring-ditch	SF 75: Gratian, Arles mint, AD 367-75 (369-70 or 374-5); 005: CBM peg-tile 007: CBM Roman	Roman 4th century coin*, intrusive peg- tile?
AF04	post-hole		
AF05	= F35		
AF06-7	cremation?		
AF08	post-hole		
AF09	inhumation	142: pot Rom. CBM ?Rom:	Rom
AF010	post-hole		
AF011	natural pit		
AF012- 18	post-hole		
AF019	inhumation		
AF020	inhumation	SF 40: shield boss Anglo-Saxon; SF 49: spearhead Anglo-Saxon; SF 50: shield boss Anglo-Saxon; 051: pot Rom, CBM RBT, ?p-Rom PT (intrusive); F020, 055-6 , 2 fe nail shaft?, in soil	Anglo-Saxon metalwork, intrusive ?peg- tile
AF021	inhumation	SF 78: strap slide; 053: CBM Rom	Rom
AF022	pyre debris	013: pot Rom; 015: glass Rom?; 021: pot Rom; 046: pot Rom; p- Rom (intrusive?); 047: pot Rom 13; 048: pot Rom 3 (burnt), 24 fe nails (Manning 1b); 049: glass Rom 6 (melted pieces)	17-18C (intrusive?) M1-2/E3C Rom M1?-2/3C M1-E2C
AF023	post-hole		

Cont	type	Finds	Period
no A Food	in human tin a		
AF024 AF025-	inhumation post-hole		
AF025- 7	post-noie		
, AF028	= F31		
AF029	inhumation		
AF030		078: pot preh 1 flint-temp; 171: pot Rom: CBM Rom RBT; 061: pot	preh 1-E/M2C;
		Rom; 062: pot Rom; 072: pot Rom: CBM RBT	Rom 1-2/3C
AF031	return of		post-medieval
	Civil War		
	ditch		
AF032	post-hole		Rom
AF033	cremation	SF69: 18 complete fe nails (Manning 1b); SF70-3, nails, Roman; SF074, rounded fe lump, Rom; 127: pot preh 1 HMF; Rom 62 (inc burnt); bt stone 2 flint;	Rom M1-E2C
AF034	natural pit		
AF035	inhumation		
AF036- 7	natural pit		
AF038	inhumation	070: pot Rom 1@65g Fabric AJ, CBM Rom: 3 RBT; SF42: Anglo- Saxon shield boss; SF43: Anglo-Saxon spearhead; SF44-6, fe objs corroded	Rom 1-2/E3C*
AF039-	post-hole		
44			
AF045	inhumation		
AF046- 8	post-hole		
AF049	natural pit		
AF050- 54	post-hole		
AF055	Civil War ditch	071: pot p-Rom 4 40; CBM p-Rom 23, PT, clay pipe, fe nail, shaft	p-med 17-18C
AF056	inhumation		
AF057	inhumation	179: pot Rom 1@5 Fabric GX; ?p-Rom Fabric ?20;	Roman*,
		SF 57: 23 'Anglo-Saxon' beads SF 59: blade; 092: SF 76 C3rd-C4th, corroded disc in Saxon burial with coloured beads)	Early Anglo- Saxon. intrusive med?
AF058	inhumation	SF 132: Anglo-Saxon? knife blade and handle (133)	Anglo-Saxon
AF059-	inhumation	ST 152. Anglo-Saxon: Khile blade and handle (155)	Angio-Saxon
61	Innamation		
AF062	post-hole		
AF063	inhumation		
AF064	pit		
AF065	inhumation	098 : pot Rom 1@5g Fabric GX, abr SF60: tanged fe knife, complete, tip broken	Rom*
AF066	pit	99: pot Rom 5; CBM Rom: 3 T(F) (?1-2C), RBT	Rom, ?1-2C
AF067	inhumation		
AF068	ditch	101: pot p-Rom 1 Fab 40; CBM p-Rom 3@73g PT	p-med 17-18C
AF069	natural pit		
AF070	inhumation		
AF071- 2	post-hole		
AF073	cremation	092-3 fe, nail, ae rod frag ; 106: pot Rom 10 107: glass Rom 10@3g frags, pale green; 241 6 fe hobnails	Rom, 3C
AF074	ditch	095: pb small round lead ball (ie, shot); 103: pot Rom 6; p-Rom 1 Fab 40B; IA (prob) or A-SAX; CBM p-Rom: 7@96g PT; bt stone 1@37g flint	p-med, 17-18C
AF075- 6	inhumation		
AF077- 8	natural pit		
AF079	inhumation		
AF080	cremation	 52: glass Rom 5 - melted unguent bottle? 096: small Roman ae bird figure on top of broken pin?; 097: melted? ae frag, 1; 098-100: ae nail/tack, slightly bent, 3; 101: Roman ae decorative strip; 102: large flat fe strip/bar shape, curved at one end, 1; 107: ae nail head; 114: CBM 1@14g RBT cream; 118: molten glass Rom 6@99g blue-green; 132: glass Rom 1 blue-green, part molten, unguent bottle neck?; 134: fe nail, Manning 1b, 27; 148: pot 	Rom 1-E2C?, 1-M2C, intrusive modern
		Rom 6; intrusive? p-Rom 1 48D; glass Rom 2 melted; 149: pot Rom	

Cont no	type	Finds	Period
		9 (some brt/scorched); bt flint; 152: pot Rom 4@52g Fabrics GX Cam 243-244/246	
AF081	inhumation		
AF082	natural pit		
AF083- 91	post-hole		
AF092	inhumation	157: pot Rom 1@8g, Fabric GX, abr	Rom*
AF093-	inhumation		
4 AF095-	post-hole		
6	in humantiana	101. net much 1 UMC. Dens. 10DM, DDT 4	Dom*
AF097 AF098	inhumation post-hole	181: pot preh: 1 HMF; Rom: 1CBM, RBT 4 184: CBM:; PROM GL BR 1@9g	Rom*
AF099	natural pit?		
AF100	pyre debris	183 : 12 fe nails; 193 : pot Rom: 2@2g GP (Cam 122-123); 195-6 : ae nail heads; 240 : 6 fe hobnails	RomL1/E2-2C
F101-3	inhumation		
AF104	pit	185: pot Rom: 1@7g GX; CBM PT 1@8g	med-p- med/mod
AF105	natural linear		
AF106 AF107	inhumation ring-ditch		
AF108	inhumation	186: CBM: Rom RBT 1@4g	Rom*
AF109	inhumation		_
AF110 AF111-	inhumation inhumation	187: CBM:; PROM (?) 1@6g	p-Rom
13			
AF114 AF115	natural pit		
AF115	natural wash?	188: 2 fe nails	
AF116 AF117	inhumation siege ditch	189: CBM: Rom RBT 3@13g 121: ae washer (very post-med); 139: pb grooved window leading	Rom*
		(came) med+; 190: pot p-Rom: 40 40B 45; CBM: Rom IM 1; PROM PT 40, BR 2; 191: RBT8@440g; PROM PT 20, BR 2; C pipe 1; 238: pb strip, part melted; 242: shale? frag; 243: pot p-Rom: 15 21A 40 40B 42 45 46; CBM: Rom RT 1, RBT 4@219g; PROM PT 16, GLTile 1; c pipe 2 <i>c</i> 1640-1660; coal 4; 255: pot Rom: 2; p-Rom:40; CBM: RBT; PROM PT 15; c pipe 1, 6 fe nails; 268: CBM: Rom RB 20, RFT(C) 1@87g	L16/17-18C
AF118- 21	natural pit		
AF122	inhumation	195: pot Rom: 1; CBM: Rom RBT 1; 1 fe nail	Rom*
AF123 AF124	inhumation natural pit		
AF124 AF125	pit	196: pot p-Rom: 2@15g 40 46; CBM: PROM PT 4@129g	p-med L16-18C
AF126	natural pit		
AF127 AF128	inhumation inhumation	122: ae, rod/pin, thin rod/pin shaft; 199 : 3 fe nails; 200: pot Rom: 1; CBM: Rom RBT(?) 1; PROM PT 1@2g	Roman, intrusive peg- tile
AF129	inhumation	100.0.0 as stud/asile.110. as stud, demand based, 115. as stud	Denst
AF130	pyre debris	136-8: 3 ae stud/nails; 140: ae stud, domed head; 145: ae stud, domed head; 147: ae nail/tack attached to fe nail; 148: 2 fe hobnails; 149: ae, frag; 151, 158-62, 168, 181, 185, 239: 12 ae studs and nails; 209: 152 fe nails; 261: CBM: Rom RBT(?) 1@16g	Rom*
AF131 AF132	pit natural pit	245: CBM: PROM PT 1@16g	
AF133	pit		
AF134	inhumation	205: pot Rom: 1; CBM: RBT 4; PROM PT(?) 1@22g	Rom*
AF135 AF136	inhumation pit		
AF137-	inhumation		
8 AF139	pit	211: pot Rom: 1@4g GX (abraded)	Rom*
AF140	inhumation		
AF141- 2	natural pit		
AF143	Civil war ditch	212: pot Rom: 1; p-Rom: 55 - 40 40A, 40B 42 43 45 46; CBM: Rom IM 1, RBT15; PROM PT, BR; c pipe 7; flint 1; 2 window glass; 220:	p-med L16/17-18C

Cont	type	Finds	Period
no	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
		pot Rom: 2; p-Rom: 32- 20 40 40B 42 45 46, CBM: Rom FT, RBT, Tess PROM PT, BR; c pipe 3 bowls c 1610-40 1 is Type 4 c 1640- 1660; 235: pot p-Rom: 9 40 43: glass 1 bottle, CBM: RBT, PROM PT 42, BR 1, Floor tile 1; glass 1, c pipe 5 c 1640-1660; 296: pot Rom: 1; p-Rom 43: 20 21A 40 40B 42 45, CBM: RT; RI, RBT; PROM PT, BR, c pipe 6@20g bowl Type 3 c 1610-1640; 22 fe nails; 222: 76 fe nail/tacks; SF 119 Edward III, long-cross penny prob 1351-61 SF 120:152: dress pins (I med-pmed) SF 123: lead firearm ball (pmed) SF 124: pb window leading? (came) SF 125: plain ae strip/sheet piece	
		SF 126: small worked bone, tapers to point, broken; SF 127: p-med folded and cut lead strip/sheet; SF 152: ae dress pin, L med-p-med; SF 197: fe plate with rivet(?); SF 198: fe, obj	
AF144	pyre debris	146, fe ?brooch 199-12, 215-19: 19 ae nails 213-14: 3 fe hobnails 222: pot Rom: 1@13g GX; (burnt?) 240: glass 1@1g pale green 241: pot Rom: 23 (inc burnt)	RomM2-3C
AF145	ring-ditch		
AF146- 7	inhumation		
AF148- 9	natural pit		
AF150	inhumation	234: CBM: Rom RBT 1@9g	
AF151- 2	inhumation		
AF153	natural pit		
AF154	pyre debris	237: 3 fe nails	
AF155	Civil War ditch	251: pot p-Rom 12@168g: 21A 40 40B 45 46; CBM: Rom RI 1@195g, RBT (abr) 2@71g; PROM PT 26@1494g, comp end 160mm wide 2 round holes 12mm dia; 2 fe nails; 252: CBM: Rom RBT 1@19g; PROM PT 3@45g; 302: CBM: Rom RBT 1	
AF156	pit	252: slate 1@15g	_
AF157	pyre debris	248: pot Rom: 1@2g GX; 134 (SF?): worked bone piece; 143 (SF?): ae nail	Rom
AF158	robber trench	265: pot Rom: 19 dated 2C+ : CBM RBT 1@210g cream; 272: pot Rom: 5; 273: CBM: Rom RI, RFT(C), RB; PROM (?) CBM (mod?); 287:CBM: Rom FT(comb) 1, IM 2, RBT 3; PROM PT, BR; SF 135: pb cloth seal (pmed)	Rom E/M2- E3C– what???
AF159	inhumation	254: pot Rom: 2@5g GX: glass 1@10g – blue green; flint 1@1g SF 131: complete fe Anglo-Sax spear head	Rom*, Early Anglo- Saxon
AF160- 1	inhumation		
AF162	fill of F155		
AF163	natural pit	257:pot Rom: 1	RomE/M-L2C
AF164 AF165	natural pit pit	259: pot p-Rom: 1 40; CBM; PROM PT 3; glass 1@1g	p-medL16/17- 18C
AF166	inhumation	189: pot Rom: 1	Rom?
AF167	robber trench	281: CBM: Rom IM, RB, RBT, RT	Rom
AF168	inhumation	266: slag 1@52g	
AF169	quarry pit	267: pot p-Rom: 1@12g 40; CBM: Rom RBT 2@16g; PROM PT	p-medL16/17- 18C
AF170	modern foundation		
AF171	demolition debris	no?.: CBM: Rom RB 10, RBT 1; 142: ae frag; 268: pot preh Neo; pot Rom: 2 Roman CBM (FT, RB); 292: pot Rom: 9; Other: tarmac 1@39g; CBM: Rom RFT(C) 4, RB 79; CBM: Rom RT(?) 1: 3 fe nails	modern, with residual Neolithic, Roman
AF172	pit	283:1 fe nail	
AF173- 5	natural features		
AF176	ring-ditch	285: pot Rom: 1	Rom*
AF177	pit		

Cont no	type	Finds	Period
AF178	inhumation	141: fe, obj (?), corroded rect. lump; 150: fe, poss hobnail; 177: fe, hobnail	Rom?
AF179	post-hole	300: CBM: PROM PT(?) 1@2g	med-mod
AF180	inhumation	286: CBM: Rom RBT 1@1g	Rom
AF181- 2	pit		
AF183	pyre debris	288: 7 fe nails	
AF184	pit		
AF185	natural linear		
AF186	pit	301: CBM: Rom RBT 1@13g	Rom
AF187	natural pit		
AF188	inhumation	295: 36 fe nails; 299: pot Rom: 5; CBM: Rom RBT 2 ; PROM PT(?) 1; 306: SF 144: Roman coin inside jaw, corroded, most likely mid-1st to early 2 nd	Rom M1-E2C?
AF189	inhumation	237: fe nail ; 302: pot Rom: 12@76g BASG DJ GX	Rom* (notes say 'F176 sx 3')
AF190- 2	inhumation		
AF193- 4	post-hole		
AF195	natural pit		
AF196	inhumation		
AF197	pit		
AF198	natural pit	100. as well, 001. ODM, Daw DD 00. DET(0) 0. 000. ast D	Dam
AF199	mausoleum foundation	163: ae nail; 321: CBM: Rom RB 28, RFT(C) 2; 328: pot Rom: 3@75g GX	Rom
AF200	post-hole		
AF201	pit		
AF202- 4	post-hole		
AF205- 6	natural pit		
AF207- 8	inhumation		
AF209	natural pit		
AF210	pit	304: F clay 17 vessel(?)	_
AF211	pyre debris	164-74, 179-80, 182, 191, 221-233, 236, 28 ae nails ; 153-7, 175-6, 178, 183-4, 186-8, 189-90, 192-3, 234-5, 89 fe hobnails 329: pot Rom: 3@7g GX; SF 171 coin, copper-alloy <i>as</i> , ?Trajan (AD 98-117)	Rom
AF212	inhumation		
AF213	ring-ditch	314: pot Rom: 2@11g GX (abraded); CBM: Rom RBT 1 SF 194: fe obj – nail?	Rom*
AF214	ring-ditch		
AF215	inhumation		
US		 089: Rom pot, 8, and top of broken ae ring with socket for stone/glass setting; 221: pot Rom: 5@8g GX ; p-Rom: 1@10g 20?; CBM: Rom RBT 3@35g 	med? 12-14C?
		ures coinciding with Area A	
F198	pit	pot 2@6g; CBM 15@463g stone 3@295; bone 5@21g; clay pipe 3 stem frags @ 8g; w flint piece with flake removed 1 @ 15g mortar 3 @ 21g	post-med/mod (clay pipe)
F199	pit?	CBM 1@23g	Rom
F200	ditch	СВМ 3@90g	med/p- med/mod (p- tile)
F201	pit	pot 1@3g; CBM 3@29g	p-med, pottery . 17-18C
F202	grave	CBM 1@10g	Rom*
		ures coinciding with Site A	
F204	burial	pot 1@2205g burial urn, near complete, band of rouletting on shoulder cremated bone 31@16g (plus bag 135?)	Rom CBM L1C+ Rom, pottery .
		Fe nail & frags 4 @ 67g; pot 1@13g GTW; CBM Roman 14@6000g	2/3-4C

Cont no	type	Finds	Period
		RB RI FT (combed) Stone 3@331g sep	
F206	linear	pot 1@6g	med, pottery . L12-13C
F207	linear	CBM 10@1055g	p-med/mod, (brick)
F209	ditch	pot 10@150g; CBM 81@3308g; stone 2@674: bone 5@129g; clay pipe stem frag 2 @ 12g; coal 2 @ 3g; Fe nails 2 @ 32g mortar 1@ 34g	p-med/mod, pottery . 17- 18C
F210	gully	pot 1@4g CBM 2@59g w flint flake 1 @ 8g	Rom/med, pottery . L12- 13C or poss Rom
F211	ditch	pot 2@15g	p-med/mod, pottery . 17- 18C
	2010 T3 feat	ures coinciding with Site A	
F172	pit/grave	pot 4@50gglass, window frag ?med/post-med 1 @ 2gFe obj, SF 3; obj(s), SF 4	?med/post- med, pottery . Roman ?1-2C*
F178	grave	pot 1@1g	Rom*
F181	grave?	pot 1@1g burnt flint 1 @ 63g	Rom*
F187	pit	CBM 5@138g	Rom
	2010 T13 fea	atures coinciding with Site A	
F166	p-hole	CBM 1@5g	Rom

Table 6.2 Site A context list with finds dating

6.5 Site A discussion

6.5.1 Prehistoric

There was surprisingly little prehistoric material here. There were residual hand-made prehistoric sherds in cremation AF33 (curated?) and in inhumation AF97, and a flint-tempered sherd in the fill of ring-ditch AF30. The only closely-dated prehistoric sherd was a possible Neolithic sherd from modern demolition debris AF171. Two flints, probably prehistoric, came from 2010 evaluation trench T1 post-medieval pit F198, and from evaluation trench T2 Roman or medieval gully F210.

6.5.2 The Roman and Anglo-Saxon burials

There were eighty-three burials (fourteen Roman cremations and sixty-nine inhumations including at least one Roman burial and at least five Anglo-Saxon inhumations). Nine burials (one cremation and eight inhumations) were within ring-ditches, and five contained Anglo-Saxon (late 6th to early 7th-century) grave-goods including shield bosses, spear heads, knives, and beads. The remainder of inhumations could be Roman or Anglo-Saxon given an absence of grave goods with some containing occasional residual Roman artefacts accidentally included in the grave fills (Table 6.2). The burials are discussed below in the following categories:

- 6.5.2.1 the mausoleum
- 6.5.2.2 the tomb-monument base
- 6.5.2.3 inhumations surrounded by ring-ditches suggesting small barrows
- 6.5.2.4 inhumations surrounded or bracketed by larger ring-ditches/ partial gullies
- 6.5.2.5 other burials: inhumations
- 6.5.2.6 other burials: cremations
- 6.5.2.7 the development and nature of the cemetery

6.5.2.1 The mausoleum AF158/AF188 (plates 6.1 - 6.4)

Inhumation burial AF188 and robbed structure AF158 are interpreted as a mausoleum.



Plate 6.1: rubble platform F158

Rubble platform AF158, measuring 3.3m E-W x 2.7m N-S, consisted of almost 80kg of Roman brick and tile (plate 6.1). Removal of the rubble (plate 6.2) showed that the mausoleum originally had a perimeter wall F167 around a central rubble pad, although both were robbed out. The ground-plan of the surviving mausoleum at Vindolanda shows the perimeter wall which may be comparable to our example (plate 6.3). There was no trace of the superstructure, either as standing fabric or among the rubble fragments. There were twenty-four Roman sherds, and the overall date for Roman material is E/M2-E3C Given the presence of a post-medieval lead cloth seal (SF 135), and of post-medieval peg-tile and brick, the most likely date for foundation robbing is post-medieval.



Plate 6.2: mausoleum after removal of rubble platform, showing robber trench of perimeter wall AF167.



Plate 6.3: mausoleum at Vindolanda, for comparison with AF158/188



Plate 6.4: inhumation F188. View W.

Removal of the remains of the rubble platform F158 and robbed-out perimeter wall F167 revealed inhumation F188 (plate 4). This adult male burial was the most complete body from this site. It contained no grave goods, but a corroded coin inside its jaw (payment for the ferryman Styx) was an *as* of 1st-3rd century date, and very worn (old) when deposited, places this burial in the 2nd century or later. The grave fill contained six Roman sherds, and two Roman tile fragments.

6.2.2 Tomb monument base and cremation AF171/AF199/AF211 (plates 6.5, 6.6)

On a smaller scale than the mausoleum AF158/AF188 was a robbed tomb base AF171/AF199 which covered a pit containing pyre debris AF211. The top layer of AF171 consisted of an approximately rectangular platform of Roman brick/tile debris measuring 1.8 x 1.8m. The presence of tarmac in this layer indicates recent (Garrison-period) disturbance. Removal of the rubble exposed a smaller rubble platform AF199, measuring approximately 1m square. This contained Roman brick/tile, three Roman sherds, and a bronze nail.



Plate 6.5: the rubble platform AF199



Plate 6.6: pit with pyre debris AF211

Removal of the rubble platform AF199 exposed a small patch of pyre debris F183 containing the cremated remains of an unsexed adult, seven iron nails (not shown), and as well as the pyre debris AF211. The burnt ground around AF211 may show that this was the spot where the cremation took place, but the generally jumbled nature of the contents of the pyre indicate that it has probably had other material mixed in with it before being deposited. The principal contents of this cremation burial was a group of twenty-eight bronze tacks or nails (from a casket or box) and eighty-nine iron hobnails from a pair of shoes or sandals.

The robbing of the tomb-base is not dated any closer than 'Roman' (or possibly post-Roman) by any of the brick and tile rubble in the upper or lower platforms, but the underlying pyre deposit (ie, AF211) contained a coin SF171 which probably dates to the mid-1st to early 2nd.

6.5.2.3 Inhumations surrounded by 'small barrow' ring-ditches (plates 6.7, 6.8)

Five inhumations were inside ring-ditches.

Ring-ditch AF3 and grave AF38 (plates 6.7-8)

Ring-ditch AF3 (5m internal and 6.9m external diameter: ditch 0.67m wide, 0.16m deep) was the largest and most regularly cut of the complete annular and penannular ring-ditches. The coin of Gratian (369-75) dates the infilling of the ring-ditch convincingly to the late 4th or later. The ring-ditch also contained Roman brick/tile and intrusive peg-tile. Its northern edge was identified as F197 and F200 at evaluation stage.



Plate 6.7: Warrior burial AF 38 (spear head right of skull, shield boss on chest, iron ?knife at left side. Scale bar is 20cm long)



Plate 6.8: Warrior burial AF 38 – detail. Scale bar is 20cm long

The body in inhumation AF38 (assumed to be male sub-adult or adult, because of grave goods) consisted of a skull, and parts of upper arm and leg bones, all in a poor state of preservation. The surviving elements suggest an individual about 1.5 to 1.6m tall. The head was located at the south end of the grave. The metalwork in AF38 is of exceptional interest, including a circular dome- or cone-shaped shield boss, with a small spike protrusion at its apex and a perimeter flange, a shield boss (one of two on this site), a spearhead (again one of two), and an iron knife (one of three). Assuming minimal movement of these items, the spear was by the right side of ?his head, the shield on his chest, and the knife by his left hip (and presumably on a waist belt). The knife on the left hip implies a right-handed person. As in the majority of burials in Site A, there was no sign of a wooden coffin or coffin nails. Other finds in the grave fill were residual Roman brick/tile pieces and a Roman sherd.

A circular pyre pit AF33 was found 1.5m east of AF38, and within ring-ditch AF3. It contained Roman pottery and nails, and was similar to the cremation pyre pits found on Area C2 in 2005.

Ring-ditch AF30 and inhumations AF56, AF79, AF81 (plate 6.9)

The ring-ditch (5.3m external and 4.0m internal diameter: ditch 0.35m wide, 0.11m deep) is not closely-dated, containing Roman 1st-3rd century pottery. Unlike AF3, this had a south facing entrance (ie, it was a penannular gully). It enclosed three graves (AF56, AF79, F81). The NNE/SSW-aligned AF56 contained a mostly-compete body, but no grave goods or evidence of a coffin. The other two graves were completely empty (AF79, E/W-aligned, and AF81 aligned similarly to AF56). The absence of weapons in AF56 may indicate a female burial, and a preliminary skeletal assessment indicates that she has Negroid or Mongoloid features, perhaps mixed with a Caucasoid influence (see Julie Curl's bone report, Section 18.9 below).



Plate 6.9: grave AF56

Unlike AF03 with its obvious central burial AF38, this ring-ditch has no obvious central burial. It is difficult to argue that one grave is original, and the others later additions, because the original burial would surely have been central. Unless all three are later insertions, the only logical explanation is that all three are *contemporary*, and the ring-ditch was dug to surround three burials at once. If this hypothesis is correct, then the two large and one small inhumations may be a family group (parents and child?).

Ring-ditch AF176 and inhumation AF180

The ring-ditch (4.3m external and 3.1m internal diameter: ditch 0.23m wide, 0.11m deep) contained only a Roman sherd. The position of inhumation AF180 at the extreme northern edge of the ring-ditch is curious, and may imply that the two are not contemporary. The inhumation had no body or grave goods, and its fill contained only a scrap of Roman brick. The fact that this ring-ditch cut grave AF193 may be more evidence that it is not contemporary with the burial, but built later over an existing cemetery.

6.5.2.4 Inhumations surrounded/bracketed by large irregular ring-ditches

Although not strictly annular or penannular in the form of AF03, AF30, or AF176 (above), there were other ditches which appear to have surrounded or bracketed groups of burials.

Ditch AF107 and burials AF106, AF166

Insufficient survives of ditch AF107 to establish its size (surviving dimensions: internal maximum measurable diameter 7.5m, width 0.88m, depth 0.18m), and its fill contained no finds. Two graves were 'enclosed' by the ring-ditch, AF106 and AF166. Neither grave contained a body, grave goods, or evidence of a coffin. There was a single ?Roman sherd in the fill of AF166. AF107 seems to have been placed to the east of ring-ditch AF30,

and perhaps the open side of AF107 on that side is deliberate, as though AF107 were deliberately placed to link it with burials AF30 to the west.

Ditch AF213, and grave AF127

Ditch AF213, the most complete of the larger irregular ring-ditches, measured 6.3m x 8m internally (ditch 0.25m wide and 0.08m deep). It contained one completely empty grave AF127. Ditch AF213 contained two Roman sherds, one fragment of Roman tile, and an iron nail.

6.5.2.5 Other burials: inhumations

The table below gives an overview of inhumations and their contents, including the seven enclosed by ring-ditches (AF38, AF56) and the Roman mausoleum inhumation (AF188), which have been discussed above.

Of the sixty-nine inhumation burials, excluding the Roman mausoleum burial, only five contained grave goods or other placed deposits, all of Anglo-Saxon date, and fourteen others contained residual Roman finds in their fills – although whether the material was accidentally incorporated in the fills in the Roman or early Anglo-Saxon period is difficult to determine (see table below). Thirty-nine were empty grave cuts (listed below table). The state of preservation of bodies was very poor, with largely complete bodies in only two graves. In the table below, those with Anglo-Saxon finds are italicised. It is of particular interest that a preliminary analysis of the ?female skull from AF56 show that it had Negroid or Mongoloid features. It is anticipated that two lines of enquiry will be pursued. First, isotope analysis on a tooth will determine the likely region of origin of the body. Second, depending on the results of the isotope analysis. C14 dating will be used to determine the date of the burial, and whether this ties in with other dating evidence from this cemetery. For more details of the finds associated with the burials, see the reports by Stephen Benfield (below sections 18.2, 3), and the specialist reports on the finds by Nina Crummy (18.7) and Julie Curl (18.9).

Context no.	age/sex	small finds	pottery	nails (H- hobnails)	СВМ	intrusive finds	associated ring- ditch?	finds date
AF020	juvenile or sub-adult (male? – weapons)	\checkmark	~	\checkmark	\checkmark	\checkmark		shield boss - second half 6th or into 7th century. Intrusive ?peg-tile
AF038	subadult or adult (male? - weapons)	\checkmark	~				AF03	Ring-ditch burial. shield boss second half 6th or into 7th century, spearhead second half 6th or into 7th century., knife
AF057	female adult (and beads)	\checkmark	V					Anglo-Saxon beads, blade, C3rd- C4th, corroded disc
AF058	?female, adult							Anglo- Saxon? knife blade and

Context no.	age/sex	small finds	pottery	nails (H- hobnails)	СВМ	intrusive finds	associated ring- ditch?	finds date
15005								handle
AF065	?	\checkmark	V					Tanged fe knife, tip broken away. AS?
AF009	unsexed juvenile				\checkmark			Roman only
AF021	?							Roman, also strap slide
AF024	unsexed adult							
AF056	?female adult, mongaloid features						AF30	
AF059	unsexed adult							
AF079	?						AF30	
AF081	?						AF30	
AF092	?							Roman
AF097	?							Roman
AF102	?							
AF106	?						AF107	
AF108	?							Roman
AF110	?							
AF112	?							
AF116	?							Roman
AF122	?							
AF123	?							
AF127	?						AF213	
AF128	?							
AF134	?					V		Roman, with intrusive
AF139	?							Roman
AF150	?							Roman
AF159	?							Roman
AF166	?						AF107	Roman?
AF178	?			H√				
AF188	female adult	V	V		\checkmark			Mausoleum. Rom M1- E2C?, with intrusive
AF189	?							Roman

Table 6.3: contents of Site A inhumations



Plate 6.10: inhumation AF57, female with beads R side of skull



Plate 6.11: inhumation AF57 skull with beads.



Plate 6.12:inhumation AF57 detail of beads

Inhumations without associated or residual finds include AF19, AF25, AF29, AF35, AF45, AF60-1, AF63, AF67, AF70, AF75-6, AF93-4, AF101, AF103, AF109, AF111, AF113, AF129, AF135, AF137-8, AF140, AF146-7, AF151-2, AF160-1, AF168, AF180, AF190-2, AF196, AF207-8, AF212, AF215, AF217.

6.5.2.6 Other burials: cremations and pyre debris deposits

There were twelve cremations or pits containing pyre debris: AF22, AF33, AF73, AF80, AF100, AF130, AF144, AF154, AF157, AF183, AF211 and F204. One of these was excavated at evaluation stage (2010 T2 F204). There were also two patches of burnt soil, which may have been pyre sites (AF6-7). They had no associated finds or cremated bone, and are not discussed below.

Discussion of Site A Roman cremations (plate 6.13)

Stephen Benfield provides a complete list of the finds of each cremation burials below, which is summarised here as table 6.4. The aim here is to discuss some of the main themes of cremation burial as they appear on this site. The only cremation with a complete pottery vessel was F204², recovered at evaluation stage (plate 6.13). The others, best described as pits with pyre debris, had relatively few sherds, up to 62 in the case of AF33, but less than a handful in three examples, and none at all in another three examples.

Context	cremated bone	Age	pottery	hobnails	Nails	glass	other and notes
AF22	30		19 sherds		24	7	
AF33	195		62 burnt sherds		21		fe lump
AF73			10 sherds	6	0	10	
AF80			13 sherds		1	13	ae bird on pin, 4 ae tacks
AF100	102		2 sherds	6	12		2 ae tacks
AF130	214	adult	-	2	152		16 ae tacks
AF144	14		24 sherds	3	19	1	19 ae tacks/nails, fe brooch
AF154	13		-		3		
AF183	11		-		7		
AF211	2905	adult	3 sherds	89	-		tomb monument base: 28 ae nails, ae coin 1st- 3rd
F204	213	adult	complete but damaged	-	-		evaluation find
Totals	3697			106	240		

Table 6.4: contents of Roman cremation burials (including the tomb monument base AF211)



Plate 6.13: cremation F204 (2010 evaluation T2)

The Handford House (HH) site, which is located in Colchester's Western Cemetery, was excavated prior to development work in 2007 (CAT Report 323). The fifty-eight cremations

² the top of the pot was damaged during machining.

from HH offer a reasonable comparison for the twelve Site A cremation burials. Of the fiftyeight HH cremations, twenty-two contained hobnails, at an average of eighteen per burial. The twelve Site A cremations had a total of 106 hobnails, at an average of nine per burial, and four had only between two and six, well below the average for HH. The largest group of hobnails is from the tomb monument base AF211, which had eighty-nine. Although it is impossible to make a direct comparison, this seems close to the number which would be expected from a pair of hobnailed sandals³. Why were so few hobnails present in other cremations? It is probably not the case that that are residual from earlier graves, because in no case does a cremation burial cut any other burial, and the graves on this site are fairly well spread out, so the chance of one incorporating earlier finds seems remote. The most obvious conclusion is that the tomb-monument base cremation displays a much more careful collection of items from the pyre site (perhaps reflecting the relatively high status of the buried person), whereas the other cremations display a much less careful collection.

Only nine had cremated bone, and in only one case AF211 (the tomb base deposit) was it approaching a large quantity – the others had between 11g and 214g - from a few flecks up to a handful. Discounting the urned cremations, which had an average cremated bone weight of 473g, the unurned HH cremations had an average of 217g. The unurned Site A cremations had an average weight of 316g of cremated bone, above the HH average, but discounting the large group in the tomb monument base, the average is only 58g. Whereas approximately 45% of the HH cremations could be aged or sexed, only 25% of the Site A cremations could be aged (all unsexed adults). The low volumes of cremated bone and hobnails support the idea that only *parts* of the cremation groups were gathered from the pyre site and deposited in the cremation pits. These are typical of 'token cremation burials' where only a small sample of the cremated material was selected for symbolic deposition.

Two aspects stand out: approximately half (five) had bronze tacks derived from a decorated wooden box or casket had been burnt on the pyre, and again only partially deposited. Such caskets may be described as moderately high-status, but this status is not reflected in other finds, as only two had potentially higher-status finds (a bird-headed bronze pin in AF80).

The most noticeable element is the large groups of nails. Seven of the eleven cremations were accompanied by iron nails which, in three cases had moderate amounts (19-24), but in one case was an astonishing 152. This quantity of iron nails in a cremation is unparalleled in Colchester. By comparison the Handford House site had 58 cremations, 26 of which contained structural nails, averaging 11 per burial. By contrast, there are no iron nails in any of the cremation burials at King Harry Lane in Verulamium (Stead and Rigby 1989, 107)⁴. The nails may be derived from pieces of furniture burnt on the pyre, or (more likely) from the actual pyre structures themselves.

6.5.2.6 The development and nature of the cemetery

6.5.2.6.1 Position and alignment of mausoleum and tomb base

There are parallels for mausolea in Colchester. On the Butt Road cemetery site, William Wire recorded a *'tomb constructed after the manner of the town walls'*. This was almost certainly a mausoleum (*CAR* **9**, 5). Another probable mausoleum was uncovered during the 1970s excavations at Butt Road, where a rectangular structure measuring $4.8m \times 5.7m$ externally and defined by rubble wall and patches of tile debris contained three inhumations (possibly a mother and her two children), one of which contained a buckle dated *c* 370-390 (*CAR* **9**, 99, and fig 2.46). There is reason to believe that this mausoleum was close to and aligned on one (if not two) Roman roads. The road heading slightly south of east from the complex Roman road junction under the modern Colchester Royal Grammar School (CRGS) would have passed south of the Roman cemetery church at Butt Road. On such an alignment, it matches very closely the alignment of a ?road-side ditch found at the southern end of the Butt Road

³ the impression of a hobnailed shoe in a tile in the CAT collection has 80 hobnails, and three published examples from the Butt Road cemetery have 50, 74 and 86 respectively (*CAR* **2**, fig 56).

⁴ this cemetery is dated AD1-60, so may be slightly earlier than ours.

site (AF152: *CAR* **9**, 55). The Butt Road mausoleum was only 3.5m to the north of this projected road-side ditch, thus occupying a prominent road-side position similar to that of the recently-discovered Roman temple-tomb at CRGS (which is also 3m from a road edge: CAT Report 345), and to a lesser extent by the walled cemetery (also at CRGS) and the famous tombstones of Facilis and Longinus on Lexden Road. Given the presumed direction of the Roman road leaving Headgate, the Butt Road mausoleum may also have been aligned on it, or perhaps on the junction between the two roads in question. There are exceptions to the roadside rule, however, including the mausoleum found at GAL Area C2 to the south of the Roman circus, although simple metalled track has been identified in several locations around the circus circuit, including at Area C2 (CAT Report 412).

The mausoleum and tomb-monument base were located just to the south of the southern extent of the (probably) later inhumation cemetery. F158 was 15m south of the southern edge of the main burial group, and (with the exception of grave cut F215, 6m to the north) cremation burial F199 was 20m south of the southern edge of the main burial group.

Given the proximity of the proximity of these two structures on an east-west axis, it seems likely that they were connected to the nearby north/south-aligned Roman road (Mersea Road) via a minor cemetery path. However, there is no other evidence for the path/track, such as metalling or flanking ditches, either from the excavation or within T1, T13 or T14 to the south of the excavation area. This confirms that there was no significant Roman road running through this zone.

6.5.2.6.2 The problems of dating the cemetery

The cremations, mausoleum and tomb-base would appear to be among the earliest elements of the cemetery, and their potential alignment on an E-W cemetery path leading from the main Roman road (beneath Mersea Road) might explain the position of the last two. The mausoleum burial F188 had a corroded mid-1st to early 2nd century (or later) coin inside its jaw (payment for the ferryman Styx to convey the body to the underworld), and the tomb-base pyre deposit F211 contained a mid-1st to early 2nd (or later, especially given its wear), coin, as well as greensand pieces which probably post-date the early-2nd century (ie, circus derived material). The most directly-dated cremation is F204, whose urn is dated 3rd to 4th century. Other cremations contain potsherds of M1-E2, M1-M2, and M2-E4 date. These burials may therefore span the $2^{nd}/3^{rd}$ to 4^{th} century or might be more closely dated to a period within that broad time range.

Apart from the probably residual coin of Gratian, a *nummus* of AD 367-75, from ring-ditch AF03, there is a distinct lack of dating evidence from the inhumation cemetery, with the notable exception of the shield bosses and spear-heads (AF20, AF38), iron knives (AF58, AF65), and glass beads (AF57). These are dated to the mid/late 6th or early 7th century AD. Unfortunately, there is no dating evidence from the grave with the female skull bearing Mongoloid and Negroid traits (apart from M1-M2 sherds in the surrounding ring-ditch AF30, which are almost certainly residual. However, given the Anglo-Saxon weapons grave AF38 was buried within the adjacent ring-ditch it must (pending radiocarbon dating) be considered most likely that ring-ditch AF30 and the associated graves, including AF56, are of the same period. It might be expected that the indications of mixed racial traits suggested by Julie Curl's human bone analysis (below) would be more typical of a cosmopolitan Roman town cemetery. However, Curl notes the presence of a 'Saxon negroid woman' identified from the Anglo-Saxon cemetery at North Elmham, Norfolk (see below) whilst, perhaps significantly, she also notes the female burial AF57, with its apparently Anglo-Saxon necklace, may have been a direct relation of the A56 burial since her skull shared similarly unusual morphological traits.

There are a few more aspects which will have a bearing on the cemetery date. First, two of the ring-ditches cut graves, and three are cut by graves. This means that the ring-ditches are mid-way in the sequence of inhumation graves.

Second, the larger ring-ditches appear to have been laid out close to ring-ditch AF30, in a deliberate attempt to link them to AF30. If this is so, then the smaller and better-defined ring-

ditch AF30 (and by analogy AF03 and AF176) may be early in the sequence of ring-ditches, with the larger ring-ditches laid out afterwards (ie, as a 'founder' small barrow related ring-ditch).

Third, the graves contain no coffin outlines or coffin nails (a few nails were found residually but do not appear to be coffin related). At the large late Roman Butt Road cemetery excavated in the 1970 and 80s, coffins are absent in the pre-Christian phase (Period 1.3, up to c 320/340), then overwhelmingly present in what may be described as the Christian phase (Period 2: c 320/340 – end of 4th century: *CAR* **9**). Therefore some or most of the undated Site A burials, or burials with a few Roman finds, were of late Roman date, the absence of coffins should therefore denote a pre- or post-Christian date (ie, up to E4, or 5).

Fourth, at Butt Road, and following normal conventions, the pre-Christian graves were aligned N-S, and the Christian-period W-E. Therefore alignment may be an indicator of date. Unfortunately, alignment does not appear to have been a significant factor at Site A, and burials are randomly aligned (of the sixty-three graves whose alignment can be determined, 41% approximate to N-S, 30% to NW-SE / SW-NE, and 29% to W-E). This lack of common alignment and of coffins might therefore suggest they were actually mainly of Anglo-Saxon date (although many of the mid-late Roman inhumations at nearby Area C2 were also variously aligned). In sum given the above and the presence of definite Anglo-Saxon inhumations at both the eastern and western ends of the cemetery distribution, it is perhaps safest to conclude that most of the inhumations at Site A were of the early Anglo-Saxon period. However, interestingly it appears their ethnicity was not wholly 'Germanic'.

6.5.2.6.3 Family groups, and referencing the past?

Before further discussing the phasing of the cemetery, there is one aspect to consider. Given the small number of burials along the southern edge of site A, this appears to have been a relatively open plot. There was therefore no reason why a shortage of space would necessitate graves being placed over earlier graves. Yet at several places on the site there are sequences of intercutting graves. Rather than dismissing these as accidental intercutting, we should consider that the intercutting may be deliberate. Given normal considerations of cemetery management, and of the custom of families marking the graves of ancestors, it must be the case that graves were marked by mounds, or by other indicators such as posts. If this is so, then when one grave overlies another, then this may be a deliberate attempt to place one burial over the top of the grave of a family member. There are two particularly striking occurrences of this. On the western edge of the site, there are two small child's graves AF19 and AF94, overlain by a large adult grave AF 20. Might this be a parent's grave placed over the graves of infant mortalities? In the centre of the site, three intercutting adult graves AF 150-152 may be a family group, and there is a large group of intercutting graves on the N site edge – AF 97, 98, 134, 135, 137. On the east site edge, AF159 is deliberately placed over AF160, and AF161 over AF168, and the huge amount of empty space around these graves means there is absolutely no reason to regard the intercutting of these graves as accidental.

There are also groups of burials within ring-ditches, which are presumably family groups: AF30 (three graves), AF145 (seven graves). Ring-ditch AF213 is unusual in only containing one grave (AF127). The possible family relationship of the two well preserved female graves AF56 and AF57 is also suggested by Julie Curl's analysis (below).

6.5.2.7 Cemetery Phasing

The following sequence fits the dating evidence.

Phase 1 - 2nd - 3rd/4th century

The first burial was probably the Mausoleum inhumation, with its coin date of M1 -E2 (although the worn nature of the coin could suggest later – perhaps 3rd century – deposition). This was then followed by (or contemporary with) the tomb-monument base in the M2-3 century and the other cremations/pyre pits of broad 2nd to 4th century date. In addition it is possible that at least two of the inhumation burials cut by the later ring-ditches are of late Roman date, although this is difficult to substantiate (as is the date of many of the other unfurnished inhumations, some of which may date to the period).

Phase 2 – 4th/5th to mid 6th century)

This was a probable period of disuse. However, again it is not possible to determine whether some undated or poorly dated inhumations (such as those truncated by the ring-ditches) might date to the latest Roman or early post-Roman periods).

Phase 3 - Late 6th – Early 7th century

The well-defined ring-ditches AF03, AF30, AF176, containing one, three, and one primary burials respectively. Ring-ditch AF03 contained a coin of AD369-375. This is probably a residual or curated coin since the shield boss and spear in the central burial date to the late 6th-7th. Of the same period are other burials outside ring-ditches containing AS metalwork (AF20, AF58, AF57, AF65), other ring-ditches laid out next to AF3 and AF30 (ie, AF 107, 114, 145, 213, and three burials cutting the ring-ditches (AF189, AF129, AF108-09, AF138). Many or perhaps the majority of the undated inhumations my well date to this period, as they cluster around the small barrows.

Referencing the past?

As mentioned above, this appears to have been a relatively open plot. In the early phases, there appears to have been a mausoleum and tomb-base to the south, and widely spaced cremations to the north. Following a possible period of disuse, the inhumations and ringditches were laid out. Given the amount of open ground, there were plenty of options over where to bury people. Therefore it may not be a coincidence that two of the ring-ditches were laid out to enclose earlier (Roman) cremations. It is thus likely that the cremation burial sites will have been marked with mounds, stones or other forms of marker, and had not disappeared from view. It is normal behaviour for families to maintain graves, sometimes for generations, and in some cases burial clubs may have been involved. There may have been civic staff given that task (*aediles* maintained public buildings, aqueducts and roads).

It can reasonably be postulated that those burying AF38 cut the ring-ditch AF03 in such a way to *deliberately* enclose the old cremation burial site. Also, the ring-ditch was made close to two other cremations (not enclosed by the ditch, for whatever reason). Similarly, ring-ditch AF 214 encloses cremation AF130. It can be seen reasonably clearly that the most isolated ring-ditch (AF176, which is 20m east of its nearest fellow) has been positioned close to the relatively-isolated cremation AF157.

Further discussion of the problematic dating of the Site A cemetery (after Masefield 2016)

The southern edge of the cemetery area was marked by the two Roman mortuary structures, a inhumation mausoleum and a monument for a cremation burial. Mersea Road (the former Roman Road) no doubt defined the western extent of the Roman and early Saxon cemetery, whilst a Roman quarry found on the eastern side may represent an eastern extent of burials. The northern extent no doubt continues beyond the present investigation and Area A1, merging with the poorly provenanced Anglo-Saxon burials found in the 19th century east of Mersea Road.

A few of the Roman cremations and eleven Roman 'pyre pits' may fall within the third to fourth century range, commensurate with the late third- to early fourth-century ring-ditches and cemeteries to the west, at Napier Road and at Area C2. The form of the mausoleum/ monument structure provides further firm evidence of the Roman nature of elements of the burial ground. These high-status burials were of significantly earlier date than the barrow burials, probably dating to the second, or more probably the third century.

Of the *c* 73 inhumation graves only 17 contained ceramic artefacts and although most of these were Roman, they were found in low density and are likely to be residual. The early Saxon glass bead necklace and Roman coin from burial AF57, between the barrows (but possibly pre-dating them) is notable. A possible familial link is noted between barrow burial AF56 and AF57 (Curl below). The placed artefacts, including weapons within three graves (one directly associated with a ring-ditch) confirm the presence of early Anglo-Saxon burials of mid/late 6th to early 7th century date, but how many of the poorly-dated inhumation burials were also of this date is less clear.

Unlike the other Colchester Garrison Roman cemeteries (with the notable exception of the nearby probable late Roman 'Christian' burial ground at Area A1 Site H just to the south of the Site A cemetery), there were no complete Roman vessels within the inhumations. This, combined with their disorganised alignments, tends to suggest that the undated inhumations may be mainly, or entirely of post-Roman/early Anglo-Saxon date. Furthermore, although the Area A1 shield bosses are of dissimilar form, but are broadly contemporary with two of the 'early Saxon' shield bosses found in the late 19th century within burials to the north of the A1 burials (one of angular form SB3 of the sixth century and one of seventh century domed form SB5-b/c). Those poorly provenanced/recorded 'Anglo-Saxon' graves also contained at least eight spearheads and three complete handmade Anglo-Saxon vessels (Crummy 1997; 2011b). This area of burials has generally been thought to represent use from the fifth/sixth to the seventh century.

However, this is not to suggest all the undated inhumations at Area A1 at the southern extent of the Anglo-Saxon cemetery are necessarily post-Roman. The conventional statement that 'it is easy to differentiate between fifth century 'Anglo-Saxon' cemeteries and fourth century Romano-British ones...' (eg, Fleming 2010, 47) may be challenged by the unusual nature of the Colchester Area A1 'sub-site A' cemetery, and in particular by the combination of certain clearly Roman burials (including at least one of the inhumations within a mausoleum) and 'Germanic style' weapons burials. In particular it is notable that there are no Anglo-Saxon pottery vessels in this area of the cemetery and that there is an absence of the 'ubiquitous' buckles, brooches, dress pins and girdle hangers of early Saxon cemeteries, although the one bead necklace (AF57) appears to be of 'Anglo-Saxon' type. Robin Fleming (2010, 41-47) noted that in the fifth century, inhumations were rarely coffined but instead we find that some men were buried with weapons (mostly spears but sometimes shields and swords). At A1 although some of the inhumation burial pits did contain occasional nails that might indicate coffins but there were too few to confirm that this was so. It is therefore is unclear whether those graves were actually coffined.

An analysis of the percentages of furnished graves in relation to other inhumations and other comparisons between late Roman and 'Anglo-Saxon' cemeteries might further assist the discussion of its likely date and cultural context. Fleming (ibid, 69) stated that 'more than half of all adults buried in fifth-century eastern Britain had either jewellery or weapons.' This is not the case at Colchester Area A1. However, she qualified the statement with; 'Early on and in some places, a dearth of grave goods may reflect a continuation of the late Roman practice of unaccompanied inhumation'. Whilst she continued that 'before c 525, just under a third of all inhumed adult women were buried with clothes fasteners, jewellery and/or girdle-hangers...Over 40 per cent of all men inhumed before 525 were buried with spears. From 525 to 625 only about a third were honoured in this way...'

Such broad analyses are of some interest as they confirm that, although the A1 cemetery does not conform with the normal profile of late Roman cemeteries in terms of its disordered

layout and low levels of grave goods, neither does it entirely conform with the normal profile of fifth and sixth century Anglo-Saxon cemeteries. Even assuming only 40 of the graves were of adults (which is probably an underestimate, but cannot be confirmed due to generally very poor bone preservation), and that they were approximately 50% male and 50% female, only one female was buried with jewellery (ie, 5%) and only three males were buried with weapons (ie, 15%). Such notional percentages, therefore, may support the suggestion that this cemetery was not a *normal* Anglo-Saxon cemetery. Although sixth century graves were clearly present the remainder of the cemetery is not typical of the sixth century either. For example, of 260 broadly sixth-century inhumation graves at Dover Buckland, two thirds contained grave goods (ibid, 70-71). The percentage at GAL Area A1 Site A is much lower.

Logically one element of the answer may lie in the layout of the cemetery, which strongly infers that many of the unfurnished inhumations were clustered around and between the barrows and that therefore the barrows were earliest. This suggests burials around ring-ditch AF30 were sixth century or later. However, even if this were the case only one of the barrows was definitely of sixth century date and others and the associated clusters, could, in theory, be older. Also, although there are examples of barrow ditches being cut by later unfurnished inhumations, which support this clustering model, there are also two examples of a barrow ditches cutting earlier inhumations. Therefore, it is not unreasonable to suppose that barrows here, and notably the well-dated circa sixth-century barrow, were integrated into a longer period of inhumation burial pre-dating the weapons graves. Therefore was this a transitional phase cemetery that continued in use until the mid 6th to 7th century? If so the cemetery may have been used by some of the latest occupants of the town in the post-Roman fifth to early sixth centuries. Conversely, it is also worth considering whether the later unfurnished graves may even be of the Anglo-Saxon Conversion Period and hence the absence of gave goods.

Finally, if the inhumation cemetery at Area A1 did stretch as far back as the early fifth century there is some doubt whether the town was still in use. Although there are no convincing examples of very late Roman occupation from the larger excavations at Colchester, Philip Crummy (1997, 129) has cited the hoard of 15 coins of Constantine III (407-411) found near Artillery Folly in 1964, some 300m south of the town as suggestive evidence stating: that 'the coins have been heavily clipped which suggests that the hoard post-dates the break with Rome. The clipping of the coins...was forbidden and punishable by death. Although lightly clipped coins did occur in Britain before 409, heavy clipping, such as occurs on the coins in the Artillery Folly hoard, suggests that they were still in circulation after this date when...Britain seems to have ceased to obey the Roman rule of law.' Probable evidence for post-Roman urban collapse is found in the form of burials and unburied bodies within the Roman town walls, the former including two decapitation graves adjacent to East Hill House found in 1983 and the latter two bodies found within a fourth-century barn in Culver Street (ibid, 129-130). In addition there is tantalising evidence for the late Roman or post-Roman burning of Duncan's Gate, although the evidence is not strong enough to provide any certainty regarding the circumstances and precise date (ibid 130-1). There is also a very late Roman military buckle (type II A) from an unknown location at the town.

The Anglo-Saxon metalwork in five of these graves (and in one ring-ditch), along with the possible mongoloid or negroid cranial characteristics of two burials are suggestive of immigrant populations coming into Colchester. One possible explanation is that these graves were associated with federate troops (*foederati*) and their families being given land nearby in exchange for protecting the citizens of post-Roman Colchester against attack from other Germanic settlers. Such populations would naturally wished to be seen to integrate with locals, rather than being seen as outsiders. It is contended here that they buried their dead in an old Roman cemetery (possibly out of use for a century) in order to associate themselves with local families. Further, they deliberately enclosed older burials within their own burial sites in order to strengthen this association. The habit of Anglo Saxon ring-ditch burials being placed around prehistoric mounds is well testified in British Archaeology (Bell 1977, Parfitt and Brugmann 1997, Reynolds 2011, Welch 2007). In this case, it is Roman cemeteries and their barrow burials which may have served this function.

Finally it is intriguing that, according to Julie Curl, some of the burials were potentially of mixed race (ie, cranial attributes derived from of Mongoloid and/or Negroid ancestry), atypical of expected genetic ethnicity of western European Saxons, Angles and Jutes. However, such expectations may not take into account the complexities of the long lasting effects of eventual integration into post-Roman/'Anglo-Saxon' populations of people derived from diverse regions, including from those descended from the latest Roman military as regular troops or laeti, perhaps via the Danubian and Rhineland limes frontiers. Though speculative, perhaps some of the Germanic groups entering Britain wished to retain some previous familial and/or group connection with Germanic elements in the late Roman military. Just to the west of the Site the later Roman small ring-ditch defined barrow burials of Area C2, and elsewhere in the GAL sites, probably reflect the former presence of late Roman Germanic people, associated with the military at Colchester in some form such as laeti or regular troops (CAT Report 412). Perhaps the location of this cemetery close to those late Roman barrows, with their suspected military family association was pertinent for the burial location of some of the Site A1 inhumations. The complexities of these themes are discussed in more detail in a separate discussion paper on the late Roman and Anglo-Saxon small barrows of the GAL project (Masefield 2016).

6.5.3 The medieval period

There were no features of this period, and the small number of finds (mainly residual sherds in later features) indicates that this land was not settled to any great extent. Possible uses were as woodland or pasture adjacent to St John's Abbey. There were thirty-one natural features on Site A. Whereas many of these are pre-Roman (ie, they are cut by Roman graves), some may be medieval, and may represent medieval woodland clearance. Other Site A features included a shallow medieval quarry (AF169) in the northern part of the site.

6.5.4 The Civil War period offensive line and fortlet

Site A also produced the significant discovery of part of a system of post-medieval ditches which probably formed components of the 1648 English Civil War siege works.

On the western side of Site A a large post-medieval ditch can be assigned to the Civil War period. It was initially intercepted in evaluation T2 as F209. In 2010, it was sectioned in three places, clockwise as AF55, AF143 and AF155. Its ground-plan, resembling an indented rectangle (or four pronged star), can be projected to form the form shown on Fig 3a. The two complete sections across the ditch (ie, AF143 and AF155) are respectively 3.7m and 3.6m wide respectively, and 1.1m and 1.3m deep. Allowing for the (unknown) distance between our site level and 1648 ground level, it may be suggested that the ditch was originally dug 5 feet deep and 15 feet across. Logically, a bank would have been thrown up on the inside, and the tip-lines in the fill of AF143 (showing soil thrown in from the southern side) and in AF155 (from the west) demonstrates quite clearly that this was the case.

Finds in AF143/155 have been discussed by Stephen Benfield in some detail in his finds report (Section 18.4). However, a few points can be made. The potsherds are generally of post-medieval date, but dating from the clay-pipes⁵ is very precise - the fourteen clay-pipe bowl fragments are of types dated 1610-1640 (9 examples), and 1640-1660 (5 examples). There could hardly be better dating of a ditch which should have been dug and rapidly infilled *circa* 1648. Other finds are instructive – 98 nails or tacks, perhaps from the nailed wooden elements of fence on the bank, and the pieces of lead which were probably to be melted down for shot (one of which was found in the ditch). Some of the lead from a window framework (correctly, a 'came'), and the pieces of window glass may hint at a building nearby being ransacked or even demolished in the military emergency. There was also 2.5kg of residual Roman brick and tile, and a coin of Edward III (1351-61).

Ditch AF117, 1.75m wide, 0.55m deep was traced for 50m WSW- ENE (the longest feature in Area A1). Finds in its fill are similar to those in AF143//155 – pieces of lead, post-medieval pottery and tile, and mid-17th-century clay pipe. There is little doubt that AF 117 was

⁵ in this report, clay-pipe means clay tobacco pipe, and not drainage pipes.

contemporary with AF143/155, running east from the fortlet defined by AF143/155. Logically there should have been a bank on its southern side, but no trace survived.



Plate 6.14 Civil war ditch AF117

As both the enclosure and the connecting ditch contained material specifically dated to the mid 17th century, they were almost certainly specifically associated with the 1648 siege of Colchester, and part of the siege works forming the southern part of the circumvallation. Material recovered from the fills included pottery, peg-tile, musket balls and quantities of scrap lead, in small fragments, probably salvaged to melt down for munitions such as musket balls.

It was initially speculated that the large ditch AF143/155 was the ditch of Fort Needham. On reflection, the documented dimensions of the fort make this impossible as the ditch is too close to the wall of St John's Abbey, and would have placed the fort within the precinct of the abbey. It seems more likely that Fort Needham is farther south on Mersea Road (possibly associated with a possible east-west aligned laager ditch found during the Area E evaluation (St John's Primary School site) in 2011 (CAT Report 607), and more fully excavated in 2013 (CAT Report 778). Based on the siege map and the Area E possible laager ditch it seems possible that this apparently substantial fort and laager would have straddled Mersea Road and entered the south-west area of A1. However, modern truncation of Area A1 around the former entrance zone to Hyderabad Barracks in this zone was severe and no fort earthworks were identified by the evaluation trenching.

These new siege works are more likely to be a previously unknown advanced fortification at the crest of the ridge - either a fortlet or a gun position constructed as the circumvallation closed in on the town to the north (with a direct sight-line to it along Mersea Road) in the middle and later stages of the siege. The forts, and other strong points constructed by the besieging parliamentarian forces were linked together series of communication trenches, forming a laager. This probably explains AF117, which connects with the fort ditch on its eastern edge (although a precise relationship is difficult to establish due to modern disturbance). The ditches do not appear to have been open for very long, as both contain large amounts of re-deposited natural material in their fills.

It only became apparent when reconstructing the likely extent of the new fortlet that ditch AF31, in the extreme NW corner of Site A, must be the return of the Civil War ditch. Specifically, it is the eastern edge of the northern half of the western fort ditch. No other parts

of this fortlet were revealed by evaluation or excavation in Site A, as they lie beneath retained buildings.

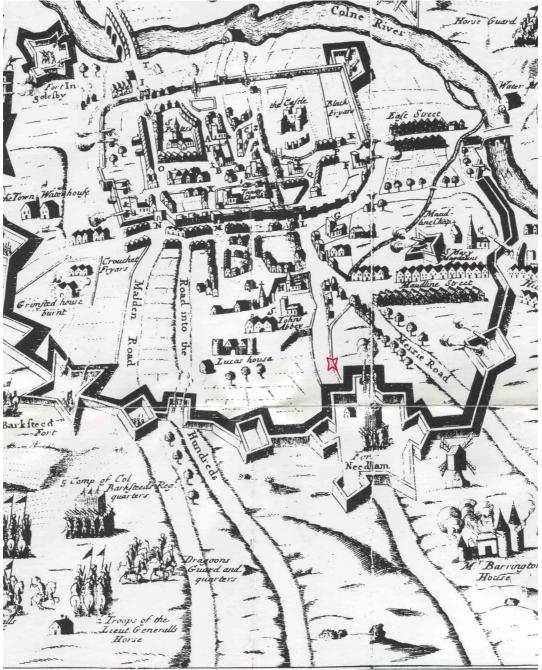


Plate 6.15 Extract from Colchester Siege Map, showing in red the position of the newly-discovered fortlet

The approximate position of the fortlet is depicted as a red symbol on Plate 6.15. The siege map is extremely stylised, is not drawn to scale and therefore cannot be considered accurate. This is further stressed by the incorrect labelling of Military Road as 'Mersie Road'. It is, however interesting to note the similarity in form to the four-pronged star-shaped fortlet of

'Barkfreed Fort' to the west and more significantly with another of this form within the main offensive line, to the east of St John's Abbey. Both fortlets are depicted with canons.

The association with the north-east-east aligned probable laager ditch is of considerable interest. A potentially corresponding ditch was located on the west side of Mersea Road in 2011 during the Napier Road northern car park works, suggesting a continuation of the laager over Mersea Road and further west (see Fig 3a).

John Mabbitt (pers comm. with RM), who has recently completed a PhD thesis on the Siege of Colchester, has confirmed that there is documentary evidence for the line being advanced closer to St John's Abbey where Royalist forces were holed up in the middle stages of the siege. Of particular interest is the short distance of c 30m between the fortlet's north-west side and the north-east corner of the St John's Abbey precinct wall - whilst the possible laager ditch through the B1b (Napier Road) car park and the south facing southern wall of the Abbey precinct wall was c 34m. Given the documentary evidence confirming that the Abbey precinct was defended by the Royalists (it contained the residence of Lucas as depicted on the map) there is a probability that, at least for a short time there may have been close contact fighting between the opposing forces at this location. The precinct wall was no doubt used as a defensive position whilst the opposing laager ditch was part of the presumably continuous offensive line that was also designed to prevent breakouts by the Royalists. As canon had an accurate range of approximately 400m, the new line would also have brought the canon within range of much of the interior of the Abbey and its defences as well as the town wall defences to the south, which the new position on the crest of the ridge now overlooked (ibid, Mabbitt 1998).



Plate 6.16: Civil War ditch AF143, view WNW. The internal bank would have been behind Brian.



Plate 6.17: Civil War ditch AF155, view NE. Tip lines show that bank was on the left side (NW)

6.5.5 Modern (barracks)

Modern activity consisted of foundations associated with the modern barracks, specifically the old mailroom and workshops and storage used by the REME detachment. There were also a number of service runs (drainage).

Some foundations were parts of the late 19th- to early 20th-century barracks (remodelled in the 1960s), including original stable floors on the northern side of the site. These had been overlaid in concrete and converted into vehicle workshops, but the original brick floors and the cut-off bases of the cast Iron supports were still in position.

6.6 Site A Roman finds and Roman and Anglo-Saxon burials reports by Stephen Benfield

6.6.1 Cremation burial F204 and pits with pyre debris

There is a single pottery vessel used as a cremation urn from F204(T2) and small quantities of pottery (some burnt) was recovered from a number of pits containing pyre debris, AF22, AF73, AF80, AF100, AF130, AF144, AF157, AF183 & AF211. One of the pits (AF211) was located beneath the partly robbed foundation of a masonry funerary monument (AF171/199).

Neither the cremation or pyre debris from any of the pits is closely dated by the pottery; although the pottery associated with the pyre debris in several of the pits suggests a date range of mid 1st-3rd century. The cremated remains in burial F204(T2) had been placed inside a narrow-necked, greyware jar of form Cam 280-281 (plate 6.13). This pot can be broadly dated to the period of the mid-late 2nd-4th century, although the ovoid shape suggests a 3rd-4th century date may be more likely. A number of the pits with pyre debris

produced small groups of sherds from individual vessels. A few of these are able to be linked to the pyres themselves as they are burnt or scorched by heat. Sherds from two pits (AF80 & AF22) indicate an early Roman date. Pyre debris in AF80 produced sherds, from a Cam 243-244/246 bowl dated mid 1st-early/mid 2nd century; also, sherds from amphora and burnt sherds from an oxidised fine ware pot, both of which (while not closely dated) suggest an early-mid Roman, rather than late Roman date. Pyre debris from AF22, produced sherds from a Cam 266 jar, dated mid 1st-early 2nd century and sherds from an amphora and a coarse oxidised ware vessel which indicate an early-mid Roman date. Pyre debris from AF144 produced sherds from a jar of form Cam 268, current over the period of the mid 2nd-late 3rd/early 4th century, which can be closely associated with the pyre as they are burnt. The latest closely dated pottery is associated with pyre debris from AF73 and consists of sherds from a rolled stamped pot which is probably of 3rd century date.

The large number of nails and tacks/studs from some cremations suggest that furniture or biers and possibly boxes used for personal possessions were being burnt along with the bodies. While some iron nails might derive from old structural timbers used to make pyres a numbers of iron nails or tacks/studs which are more decorative. These would probably have been used for furniture or boxes and indicate the former presence of these items, possibly also funeral biers. It is noted that a number of the iron nails have little or no evidence of significant corrosion. The reason for this, while the majority are very corroded so as to be irregular, swollen and blistered, is not clear. That the depositional environment may have been slightly different for these nails and is probably the most likely cause, although the quality or make-up of the iron may also be slightly different.

Evidence for the date of construction of the funerary monument (AF171/199) consists of pieces of limestone (Kentish ragstone) which were recovered among the robbing debris. Assuming that the appearance of Kentish ragstone at Colchester, certainly in any significant quantity, is directly related to the construction of the circus (Crummy 2008, 19), these suggest an early-mid second century date or later for its construction. However, this is not certain as they are associated with the robbing (AF171) and none is recorded from the unrobbed part of the base (AF199). A small quantity of pottery recovered from the robbing (AF171) and the unrobbed base (AF199) cannot be closely dated although the more closely datable sherds (both from AF171), from an amphora and large storage jar, are likely to date to the early-mid Roman period but may well be residual. A small number of pieces of combed flue tiles, assuming they are debris from the robbing and not residual inclusions among the robbing debris, would suggest a date in or after the late 1st century.

6.6.2 Cremation burial AF211 (329)

Pottery Roman 3 sherds 7 g, Fabric GX (c 43-410 AD).

Small finds SF171(337) Copper-alloy coin, Roman, corroded (dated mid 1st-early 3rd century, probably mid 1st-early 2nd century). Copper-alloy nails/tacks from furniture(?) SF164-67, 169, 170-74, 179, 180, 182, 191 & 221-33. Iron nails 153 & 236 (SF163 from AF199 probably part of this group). Iron hobnails SF154-55, 156-57, 175-76, 183-84, 186-87, 188-89, 190, 192-93 & 234-35.

6.6.3 Tomb monument base AF171 / AF199

A significant quantity of Roman CBM came from the partly robbed base of the monument. In total there are 317 pieces with a combined weight of just under 80kg (79,175 g). Almost al of this is Roman brick (RB) which accounts for 94% by count and 95% by weight of all the CBM (Table 6.5). A small quantity of (combed) flue tile (RFT) pieces was also present; but roofing tile (*tegula & imbrex*) is virtually absent, being represented by a single piece which is possibly from a *tegula* (TEG) base. Several part bricks from AF199 were complete enough to allow a number of measurements (Table 6.6). The thickness of the bricks varies between 25-30 mm with most being 280 mm wide (although one had a width of 265 mm). No complete lengths remained to be recorded, but the longest surviving piece is 255 mm. All are in orange/red coloured fabrics.

CBM type	no	wt/g
RBT	1	390
RB	297	75376
TEG(?)	1	449
RFT	18	2960

Table 6.5 Roman CBM from the mausoleum robber trenches (AF171/199)

max surviving length	complete width	thickness	mortar over break	marks
190		26	*	
200	265	25		
180		28		
195	280	27	*	
220	280	30		hob-nail print
250	280	28		
255	270?	25-30		

Table 6.6 Measurements of bricks from burial monument base AF199

None of the Roman bricks is complete. This appears to indicate that they were not whole when originally laid in the monument and this is certainly so for two of the bricks as they have mortar on broken edges. However, the large pieces of tiles recovered suggest that they probably represent the use of new bricks rather than salvage. This is also supported by the lack of other tile types; although that some salvage material may have been used is suggested by the small quantity of (combed) flue tile pieces. If these were part of the of the monument base they would indicate that it was not built before the late 1st century as they probably date to after c 60-75 AD (Black 1992 268).

Finds list AF171(268, 286, 292 & 298)

Pottery Prehistoric 1 sherd 6 g Fabric HMF/S; Roman 11 sherds 225 g Fabric AA, Fabric GX, Fabric HZ. CBM Roman 287 pieces 55,955 g; post-Roman 4 pieces 232 g. Stone limestone (Kentish ragstone) 14 pieces 1395 g; Septaria 34 pieces 42,765 g; Chalk 6 pieces 631 g; other (quartzite(?)) 2 pieces 916 g. Mortar (op. sig.) 111 pieces 27322 g. Animal bone 2 pieces 12 g. Shell (oyster) 3 pieces 32 g. Other: tarmac 1 piece 39 g Small finds Small, flat copper-alloy fragment SF142

Finds list AF199(307, 321 & 328)

Pottery Roman 3 sherds 75 g, Fabric GX. CBM Roman 30 pieces 23,220 g. Mortar (op. sig. & white lime) 28 pieces 2,187 g. Stone (Septaria & Chalk) 12 pieces 2,756 g Small finds Copper alloy nail, probably from same furniture(?) piece as in cremation burial AF211, SF163

6.6.4 Cremation burials

Cremation AF33(127) (located within ring ditch AF3)

Pottery *Prehistoric* 1 sherd 1 g, Fabric HMF; *Roman* 62 sherds 468 g Fabric AF, Fabric GX, Fabric DJ Cam 156 (E2-E3C), fragmented, abraded, burnt/scorched (residual from cremation?). **Burnt stone** 2 pieces 14 g (burnt flint and sandstone/quartzite)

Small finds SF 74 corroded iron lump; SF61-70 copper-alloy nails; SF69 & 71-73 iron nails

F204 (124, 13) (Evaluation T2)

Pottery Illustrated Fig 82.2 Burial urn (F204), near complete narrow-necked jar of form Cam 280-281 which can be identified specifically as Cam 280 (weight 2205 g). Band of rouletting on shoulder, base whole, upper half broken into medium-large sherds with approximately half of rim present (Eve 0.50). Dated M/L2-4C but ovoid body shape suggests a slightly later date of 3rd-4th century. There is an example with

shoulder rouletting from Kiln 25 (Hull 1963, fig 89, no. 23). Also residual sherd (13 g) Fabric GTW.

CBM *Roman* 14 pieces 6000 g (Roman brick, imbrex, combed flue tile, other le)

brick/tile)

Stone 3 pieces 331 g, Septaria Iron nails nail and fragments 4 @ 67 g Recovered from inside cremation urn Nails/tacks Total 93 made up of Copper-alloy 12; Iron 81 Cremated bone 31@16 g (plus bag 135?)

AF130(261)

Pottery Roman 1 sherds 13 g Fabric GX, burnt CBM Roman 1 piece 16 g, RBT Iron nails Total 152 (AF130(201, 210, 225, 227, 229, 258, 260, 263 & 270)) Small finds Copper-alloy nails/studs Total 20: Copper-alloy studs/tacks SF136-37, 140, 145 147, 151 & 239. Copper-alloy nails SF138 158-62, 168 & 185. Iron hobnails, two shanks SF148

6.6.5 Pits with pyre debris

AF22 (13, 15, 21 & 46-49)

Pottery *Roman* 11 sherds 752 g; Fabric AJ, Fabric DJ, Fabric GX Cam 266 (M1-E2C) includes burnt sherds from base of a pot; *post-Roman* 1 sherd 17g Fabric 40, burnt (16/17-18C). **Glass** *Roman* 7 sherds 17 g, pale green and pale blue green, includes melted pieces. **Heat altered stone** 1 piece 18 g (burnt flint). **Bone** 1 piece 2 g (burnt, crazed).

Iron nails Total 31 (includes SF79, 80-82, 84, 86 & 87) (AF22(10-12, 14, 16-20, 24, 26, 41-43, 45, 48))

Small finds Copper-alloy nails 4 total (SF83, 85, 88 & 108)

AF73 (106 & 107)

Pottery *Roman* 10 sherds 43 g, Fabric GX roller stamped vessel (3C). **Glass** *Roman* 10 sherds 3 g small fragments in pale green glass Iron nails Total 23 (includes SF92) (AF73(102, 105 & 106)) Small finds Copper-alloy rod/wire piece SF93. Iron hobnails, 6, SF241

AF80 (114, 116, 118, 126, 132, 138, 148, 149 & 153)

Pottery Roman 19 sherds 171g Fabrics AA, DZ (some burnt/scorched) Fabrics GX, Cam 243-244/246 (M1-E/M2C); post-Roman 1 sherd 2g, Fabric 48D (modern). Glass Roman 14 sherds 132 g blue-green, melted pieces with part melted vessel neck probably from an unguent bottle(?).CBM 1 piece 14g RBT (cream). Slag 1 piece 8g, light slag. Heat altered stone 1 piece 19g (burnt flint). Charcoal 16 pieces 35g Iron nails Total 27 (AF80(111-12, 115, 119, 120-126, 133, 134-137, 139-40, 148-9) Small finds Copper-alloy pin, small bird figure on top, shaft broken SF96 (See *CAR* 2 fig 31, 501). Copper-alloy nails SF98-99, 100 & 107. Copper-alloy decorated strips, 4 pieces, SF101. Copper-alloy fragment, melted(?) SF97. Iron object, large, flat strip/bar shape, curved at one end, SF102.

AF100 (193)

Pottery Roman 2 sherds 2 g Fabric GP, Cam 122-123 (L1/E2C-2C) Iron nails Total 12 (AF100(183)) Small finds Copper-alloy nails SF195 & 196. Iron hobnails 6 SF240

AF130 (261)

Pottery Roman 1 sherds 13 g Fabric GX, burnt Iron nails Total 152 (AF130(201, 210, 225, 227, 229, 255, 258, 260, 263 & 270)) **Small finds** Copper-alloy nails/studs Total 20 (SF136-38, 140, 145, 147 149, 151, 158-62, 68, 181, 185, 239). Iron hobnails Total 2 (SF148)

AF144

Pottery Roman 24 sherds 35 g Fabric BA(SG) (M-L1C), Fabric GX Cam 268, part pot, burnt (M2-L3/E4C). Glass 1 sherd 1 g pale green. Charcoal 5 pieces 5 g Small finds Iron Object 1 (SF146). Copper-alloy nails Total 20 (SF199, 200-13, 215-19) . Iron hobnails Total 3 (SF213 7 214)

AF157 (248)

Pottery Roman 1 sherd 2 g, Fabric GX **Small finds** worked bone piece (SF134); Copper-alloy nail (SF143)

AF183 (290)

Mortar 18 piece 629 g Iron nails Total 7 (AF183(288))

AF211

Pottery Roman 3 sherd 7 g, Fabric GX Iron nails Total 226 Small finds Copper-alloy nails/tacks Total 30 (SF153, 164-67, 169-74, 179-80, 182, 191, 221-233, 236) Iron nails Total 76 (SF154-57, 175-76, 178, 183-84, 186-90, 192-93, 234-35) (AF211(307))

6.6.6 Site A Inhumation burials Finds

Evaluation stage

F178(T3) small (child) grave. This was excavated as AF161 (below). F202(T1) excavated as AF38 (below)

AF188

A single Roman coin (SF144) from the mouth of one inhumation is dated 1st-early 3rd century but is most probably of mid 1st-early 2nd century date. There are also a few residual finds from the grave fill consisting of Roman pottery and Roman CBM, but these are not closely dated within the Roman period. One piece is possible peg-tile and if so must be intrusive.

AF188 (299)

Pottery Roman 5 sherds 31 g Fabric GX, Fabric GX(BSW). **CBM Roman** RBT 2 pieces 28 g, **post-Roman**(?)1 piece 19 g, possible peg-tile(?). **Animal bone** 1 piece 5 g.

Iron nails Total 36

Small finds SF144(306) Copper alloy Roman coin (10.2 g) from inside mouth (reverse stuck to skeleton mandible) (dated 1st-early 3rd century, probably mid 1st-early 2nd century).

6.6.7 Mausoleum robber trench AF158/167

The robber trenches of the mausoleum produced a significant quantity of broken pieces of Roman brick and tile and a small quantity of pottery. In total eighty-six pieces of brick and tile were collected (Table 6.7). These have a combined weight of 12,544g and an average weight of 146g. The majority of this is Roman brick (RB) which accounts for 36% of the Roman CBM by count and 48% by weight, and non-specific Roman brick or tile (RBT) which makes up 45% by count and 28% by weight. There are also small numbers of pieces from *tegulae* (TEG), *imbrex* (IMB) and (combed) flue tiles (RFT). Almost all of the tile is red or orange in colour, but two pieces are in a cream fabric. The largest surviving single piece, a corner from a Roman

brick, had a maximum length of 155 mm. Nine pieces of limestone (Kentish ragstone) also came from the robber trenches.

CBM type	no	wt/g
RBT	39	3505
RB	31	6035
IMB	7	977
TEG	6	1159
RFT	3	868

 Table 6.7 Roman CBM from the mausoleum robber trenches (AF158/167)

There is little which might help directly date the structure. The inclusion of greensand probably indicates a date in the 2nd century or later as the nearby circus was built almost exclusively with this type of stone (Crummy 2008, 19). The tile also suggests a 2nd century date or later for the construction. This is because combed flue tiles probably date to after *c* 60-75 AD (Black 1992, 268) and the pieces here appear to have been salvaged from elsewhere and were old when incorporated in the mausoleum. Most, if not all of the other Roman brick and tile also appears to be reused pieces collected from elsewhere. While the few pieces of *tegulae* and *imbrex* might possibly come from a tile roof covering the mausoleum, this cannot be the case for the combed flue tiles which (unless they were waster pieces broken during manufacture) must be salvage. All of the brick and tile was recovered from the robber trenches of the footings so that the nature of the walls can only be surmised, but the finds suggest they were almost certainly of mortared tile and stone.

Although the pottery recovered from among the robbing debris is entirely of Roman date, it is residual. It includes samian from Central Gaul (Fabric BXCG) which can be dated to c 120-200 AD and the jar form Cam 268 which dates to the period c mid 2nd-late 3rd/early 4th century. However, the robbing is dated by a significant quantity of CBM of medieval or later date, all of which comes from AF158. This consists of thirty-five pieces of peg-tile (1166 g), with two pieces of probable post-medieval or modern brick (108 g) (AF158(287)) and one modern brick piece (131 g) (AF158(273)). There is also a pst-medieval lead cloth seal in thr robbing debris (below).

AF158 (265, 272-275 & 287)

Pottery Roman 24@1341 g Fabric AJ (2C+) Fabric AA Fabric BXCG Fabric DJ Fabric GX (Cam 268 dated early-mid 2nd to late 3rd/early 4th century) Fabric KX. **CBM Roman** 71 pieces 10804 g; **post-Roman** 38 pieces 1405 g. **Mortar** 5 pieces 10913 g. **Stone** limestone (Kentish ragstone) 9 pieces 13500 g. **Slag** 2 pieces 1599 g. **Animal bone** 1 piece 8 g. **Shell** 4 pieces 13 g.

Small finds SF135(271) One half of a lead cloth (Dutch bay) seal (6.3 g), pierced by two holes, tab on back (see *CAR* **5**, 33 no. 1942). Dated post-medieval.

AF167 (281)

CBM Roman 15 pieces 1740 g.

6.6.8 Site A Ring ditches and graves

Introduction

Several inhumation burials were associated with small penannular or part encircling lengths of ditch. Some of these, and other inhumation burials on this Site, were accompanied by knives (AF65) or weapons (AF20, AF38, AF159) which can be dated to the Anglo-Saxon period. Beads from one burial (AF57) are also dated as Anglo-Saxon. It should be noted that no Anglo-Saxon pottery was recovered.

Burials accompanied by knives have been encountered among Late Roman inhumations at Winchester, and the provision of small penannular ditched enclosures or monuments is known from several cemeteries primarily associated with the Roman military in the area of Hadrian's wall and with inhumations dated to the Late Roman at Kempston in Bedfordshire. As such it might be possible that some of the burials could represent *feodorati* or *laeti*. However, the close dating of the weapons and beads would suggest the inhumation burials here associated with the penanular ditched enclosures are Anglo-Saxon.

Cremation AF33 is located within the area enclosed by ring ditch AF3 but is presumed to be an earlier feature and its location with regard to the ring ditch is probably coincidental.

Ring ditch AF3, enclosing grave AF38 (5, 7 & 9)

CBM Roman 1 piece 160 g, RBT **post-Roman** 1 piece 45 g, peg-tile. **Animal bone** 2 pieces 10g **Small finds** SF75(6) Copper-alloy Roman coin, rev. standing figure (emperor) with labarum standard (left) & shield (right), legend GLORIA NOVI SAECVLI, obv. emperor head facing right, poor condition, edges degraded and cracking, nummus of Gratian AD 367-75 (either AD 369-70 or 374-75).

Grave AF38 (70 & 97) F202 (Evaluation T1)

Pottery Roman 1 sherd 65 g Fabric AJ. CBM Roman 3 pieces 49 g Roman brick/tile (abraded), (1 piece 10 g RBT (F202))

Small finds SF42(66) iron shield boss, low cone type, edge breaking away in places. SF43(65) iron spearhead, corroded, complete. SF44(67) iron object. SF45(69) iron object. SF46(68) iron object.

Ring ditch AF107, enclosing grave AF166 & probable grave AF106

AF106 - no finds

AF166 (189)

Pottery Roman 2 sherds 9 g, Fabric GX (abraded) **?post-Roman**(?)1 sherd 7 g, bowl rim possibly med? **Slag** 1 piece 52 g

Ring ditch AF30, enclosing graves AF56, AF79, AF81

Ring ditch AF30 (61, 62, 72, 78 & 171) **Pottery** *Prehistoric* 1 sherd 6 g; *Roman* 4 sherds 20 g, Fabric DJ, Fabric GX, Cam 243-244/46 (dated M1-E/M2C). **CBM** *Roman* 5 pieces 108 g, *Imbrex*, RBT

AF 56, AF79, AF81 - no finds

For human bone in AF 56, see report, below Section 18.9.

Ring ditch AF176, enclosing grave AF180

Ring ditch AF176(283 & 285) Pottery *Roman* 1 sherd 2 g, Fabric GX (abraded). Animal bone 2 pieces 2 g

Grave AF180(286)

CBM Roman: 1 piece 1 g RBT

Ring ditch AF213, enclosing grave AF126 (314)

Pottery Roman 2 sherd 11 g Fabric GX. **CBM Roman** 1 piece 20 g, RBT **Small finds** SF194(315) iron object, incomplete, survives as semi circular iron band with iron end cap(?) perforated by an iron metal rod(?), possible (nail?) frags present

AF 126 - no finds

5.6.9 Unmarked inhumation burials

Grave AF20 (51)

Pottery *Roman* 1 sherd 5 g, Fabric DJ. **CBM** *Roman*: 2 pieces 53 g RBT; *post-Roman*(?) 1 piece 14 g, peg-tile(?)

Small finds SF47(31) iron shield boss, low cone type. SF48(32) iron bar handle, corroded and attached to back of boss, probably shield strap handle. SF49(33) iron spearhead? corroded, complete, position in relation to burial suggests a spear. SF50-53(35-38) iron, large circular studs, from shield board(?). SF54(34) iron object, corroded. SF55-56(39-40) iron nail shafts?

Grave AF21 (53)

CBM Roman: 1 piece 60 g RBT **Small finds** Iron object corroded, broken end SF77(59). Copper alloy strap slide, small rectangular SF78(63)

Grave AF24(180)

Iron(?) 1 piece 1 g, fragment, possibly a natural concretion

Grave AF29 (30)

Animal bone 2 pieces 12 g

Grave AF57 (179)

Pottery Roman 1 sherd 5 g Fabric GX; **post-Roman**(?) Fabric 20(?) (**Small finds** SF57(93) beads, 23 small beads, yellow, white, blue, red, red & white, some patterned, one broken, probably of Early Anglo-Saxon date; SF76(92) Coin, corroded subcircular copper-alloy disc, probably a Late Roman coin; SF59(94) iron blade or blade piece? SF58(95) small unidentified object

Grave AF65 (98)

Pottery Roman 1 sherd 5 g Fabric GX (abraded) **Small find** AF60 iron tanged knife, complete, but in two pieces, tip broken away

Grave AF92 (157)

Pottery Roman 1 sherd 8 g Fabric GX (abraded)

Grave AF108 (186)

CBM Roman 1 piece 4 g, RBT

Grave AF110 (187)

CBM post-Roman(?) 1 piece 6 g

Grave AF112

(No finds)

Grave AF113

(No finds)

Grave AF116 (189) CBM Roman 3 pieces 13 g, RBT

Grave AF122 (195)

Pottery Roman 1 sherd 2 g, Fabric GX (abraded). CBM Roman 1 piece 39 g, RBT Other finds Small iron nail (find 195)

Grave AF128 (200)

Pottery *Roman* 1 sherd 2 g, Fabric GX. CBM *Roman* 1 piece 15 g, RBT; *post-Roman* 1 piece 2 g, peg-tile

Iron nails 3 (AF128(198a, 198b & 199))

Small find SF13 two joining base pieces from a small metal container (box or tin) like object (20 g), estimated dia. 55 mm (Dated medieval?)

Grave AF134 (205)

Pottery Roman 1 sherd 12 g, Fabric GX (abraded). CBM Roman 4 pieces 96 g, RBT; post-Roman(?) 1 piece 22 g, PT(?)

?Grave AF139 (211)

Pottery Roman 1 sherd 4 g, Fabric GX (abraded)

Grave AF150 (234)

CBM: Roman 1 piece 9 g, RBT

Grave AF159 (254)

Pottery Roman 2 sherds 5 g, Fabric GX. Glass Roman 1 sherd 10 g, blue green. Worked flint 1 piece 1 g

Small find SF131 iron spearhead, corroded, complete, length 350 mm (Dated ?Anglo-Saxon)

Grave AF161 /(F178 (Evaluation T3) pot 1@1g) small (child) grave?

Grave AF178 (278)

Animal bone 50 pieces 105 g

Small find SF414 iron object, corroded rectangular lump (82 g); SF150 iron fragment; SF177 iron hobnail, corroded onto small stone

Grave AF180 (286)

CBM: Roman 1 piece 1 g, RBT

F189 (302) (F176 sx 3)

Pottery Roman 12 sherds 76 g, Fabric BA(SG), Fabric DJ, Fabric GX **Small find** SF273 iron object, corroded (listed as a nail)

6.7 Civil War fort ditches and the siege ditch (1648).

6.7.1 Introduction

A significant quantity of finds were recovered from the fort ditch, the majority of which are sherds of pottery and ceramic building material (CBM) mostly pieces of peg-tile. A lesser quantity of finds were recovered from a length of the siege ditch to the east of the fort. Apart from a few residual Roman sherds, the date ranges of the pottery and the fact that it was recovered from the fill of the siege ditches suggests that, with reservations, it can be treated as an assemblage dating to the siege of 1648. This supported by a few clay pipe bowls from the fort ditch which can be closely dated to c 1610-1640 and to c 1640-1660. The pottery and other finds from the fort and siege ditches are of some significance because of the closely dated context and the pottery represents the first quantified assemblage to be recovered from the siege works.

Of interest are a number of small pieces of lead scrap, some of which can be identified as window leading which were recovered both from the fort ditch and the siege ditch (SF124, SF127, SF139 & SF238). As the window strip pieces have clearly been taken from a building it seems likely that these are discarded pieces of material originally looted with the intention of using them to manufacture pistol, carbine or musket balls. It can be noted that a lead ball from a handheld firearm, flattened from impact was recovered from the fort ditch (SF123).

A significant quantity of CBM of post-Roman date (507 pieces weighing 18,482g) was recovered from the fort ditch and siege ditch. This consists of 413 pieces (15,420g) from the fort ditch and 94 (3,062g) from the fill of the siege ditch. Of the total pieces from peg-tiles make up approximately 93% by count and 84% by weight with almost all of the remainder consisting pieces from bricks at approximately 6% by count and 14% by weight. There is one piece from a floor brick, one piece of glazed brick and two pieces from glazed tiles. All of this material consists of broken pieces and none of the tiles or bricks are whole. The inclusion of this material in the fill of the ditches most likely implies that unwanted demolition from damaged buildings close by was put into them. That the CBM consists mostly roof tile with little other building material suggests that this either derived from timber framed buildings, or that broken roof tiles were the least useful building material as salvage, other building material having been selectively removed for reuse.

6.7.2 Finds from the fort ditch AF55(71)/AF143(212, 220, 235, 292, 296)/AF155(251)

Pottery: *Roman* 4 sherds 33 g; *post-Roman* 184 sherds, 2308 g (post-medieval with some residual medieval) (Fabrics 13, 20, 21A, 23A, 31A, 40, 40A, 40B, 42, 43, 45, 45A, 45C, 45D, 45F, 46). **CBM:** *Roman* 59 pieces 2585 g, Teg. (Warry type B6), Im, FT, RBT, Tess.; *Post-Roman* 413 pieces 15420 g, PT BR FI.T with GI.BR (1 piece). **Mortar** (lime) 3 pieces 196 g. **Clay pipe** 28 pieces 102 g, includes 3 bowls Type 3 c 1610-40 & 4 bowls Type 4 c 1640-1660 (*CAR* 5). **Glass** *post-Roman* 4 pieces 17 g (window & bottle). **Flint** 1 piece 14 g. **Coal** 3 pieces 26 g. **Slag** 1 piece 92 g. **Stone** 9 pieces 1158 g (Sep., limestone (Kentish ragstone) & chalk). **Animal bone** 65 pieces 731 g. **Shell** 33 shells/pieces 245 g (oyster with 1 whelk). **Irons nails** 24 (AF143(191, 205, 212, 220, 235 251 & 296))

Small finds SF119(218) silver coin; worn long-cross penny of Edward III, probably 4th coinage (dated AD 1351-61); SF120 small copper-alloy dress pin, round head, shank bent 180 deg (dated late med-p-med); SF123 lead ball, small firearm ball (weight 5.4 g), flattened on one side from ?impact (dated post-med); SF124 lead strip ?window leading; SF125 copper-alloy, plain strip/sheet piece, one flat edge, other edges cut, one edge piece folded over; SF126 small, worked bone piece, tapering to point, broken at other end; SF127 folded, cut lead strip/sheet, poss glass in between folds, ?window leading (one small loose piece); SF152 copper-alloy dress pin, wound wire head; SF197 iron plate piece with ?rivet; SF198 iron L or U shaped piece or object

6.7.3 Finds from the siege ditch AF117(190, 191, 243, 255 & 268)

Pottery Roman 1 sherd 5 g; post-Roman 9 sherds, 60 g (Fabrics 40, 40B, 45D). CBM: Roman 37 pieces 7160 g, Teg., IM., FT(C), RB, RBT; post-Roman 94 pieces 3062 g, PT, BR, also GL.Tile (black/olive glaze) (1 piece). Clay pipe 4 pieces 16 g, (bowl Type 4 *c* 1640-1660). Stone 2 pieces 617 g. Coal 4 pieces 3 g. Slag 2 pieces 119 g. Animal bone 14 pieces 118 g. Shell 7 pieces 69 g. Irons nails 6 (AF143(243 & 255))

Small finds SF121 copper alloy washer with round central hole and irregular angular edges; SF139 lead, small, grooved piece of window leading; SF242 shale(?) piece; SF238 lead, part melted? strip from a window(?)

6.7.4 Pieces of lead and lead objects from the fort ditch, siege ditch and other features (Plate 6.18)

Four small pieces of lead were recovered from the ditch of the fort (SF124 & SF127) and from the siege ditch (SF139 & SF238). Two pieces (SF124 & SF139) and possibly a third (SF238) are identifiable as lead cames from windows. These could indicate salvage from looting damaged or abandoned buildings or the commandeering of useful material for the siege. The lead could be used to manufacture ammunition, most probably ball shot for small arms. However, the quantity of building material (CBM) recovered from the ditches shows that the demolition material dumped into them might have included pieces of lead window cames or other fragments of lead fittings.

A small lead ball (SF123) was recovered from the fort ditch. This is flattened on one side by an impact and is almost certainly a small bore shot fired in the siege.

A small number of finds of pieces of lead from other features on the Area are, or are possibly also remnants of the Civil War siege. Two lead balls, almost certainly small shot, were recovered from the linear feature AF74(SF95) and from JL5(SF23). Also, there are two further pieces identified as lead window cames similar to those from the fort and siege ditches; one from pit AF117 (SF139) and one from the fill of a quarry pit BF3 (SF38).



Plate 6.18: lead artefacts from Civil War contexts (from top left, clockwise: two pieces of scrap lead possibly for reuse - AF 143 and AF117; three window lead fragments - AF147, AF143, BF3; two lead shots - AF74, AF143)

7 Site B (Figs 1, 2, 6, 87)

7.1 Site aims

Site B (size: 495m²) was designed to investigate the large Roman quarry pit which covered the entire length of 2010 T4 in the northern part of Area A1. At evaluation stage, the upper 1.2m was excavated by hand, and then the feature was traced by augering along its length from the excavated level. This process demonstrated that the centre of T4 was above the deepest area of the quarry pit, and gravel encountered by augering at either end of T4 confirmed that the quarry edges were probably just beyond the ends of T4. Therefore a quarry diameter of 25-30m was envisaged. Given that quarries excavated in Area B1b car park (Flagstaff House: 350m to the NW) and in Area J1 (former Cavalry Barracks: 750m WNW) contained Roman inhumations and cremations (which had presumably been inserted into the quarry pits after extraction had come to an end), the key issue for the Site B excavation was to confirm the size of the quarry pit, to determine whether burials had been inserted into it, and (if so) to fully excavate them. No burials or coffin nails were found in 2010 T4.

Context numbers preceded by 'F' relate to evaluation stage (ie, 2010), whereas those excavated in 2011 are prefixed BF.

7.2 Site B Summary

Site B was dominated by large Roman quarry pit (BF3). Finds from it included Roman pottery, CBM, and a coin of the House of Constantine. Other features included a Roman gully, pit and small pit, and four undated or natural features. Post-medieval material was intrusive in the top fill of the Roman quarry pit. There were no Roman burials.

In many cases, the 2010 Sites overlapped the trenches of the two previous evaluation stages (2002, 2010). This overlap is explained in the two tables below.

7.3 Site B concordance

Concordance between excavated Site B, and 2002 evaluation trenches None

Concordance between excavated Site B, and 2010 evaluation trenches

Trench	area of trench within	features within	area of trench outside	features outside
no	Site B	Site B	Site B	Site B
T4	16 x 1.8m	L5 in eval is fill of BF3 in ex stage.	2.5 x 1.8m	-

7.4 Complete Site B context list with key finds dating.

Context	descript	dated finds	finds date	period
BF1	natural pit			undated
BF2	post-hole			undated
BF3	quarry pit	 pot p-Roman: CBM Rom; p-Roman SF 94, coin, copy House of Constantine, 341-6/7. SF 38, pb window flashing (intrusive post-medieval) T: pot preh; Roman, ?p-Roman; CBM Rom: 90, p-Roman S: pot Roman; CBM Roman 	Roman, with intrusive mod pot 17-18C brick	Roman
BF4	gully	11: pot Roman	Roman	Roman

BF5	pit		-	undated
BF6	pit	2: CBM ?Rom	Roman	Roman
BF7	natural pit		-	undated
BL1	hard crush		-	modern
BL2	topsoil		-	modern
BL3	accumulation		-	post-
				Roman
BL4	natural		-	-
BL5	fill of BF3	finds in BF3 above	Roman with intrusive post-medieval	Roman
BL6	lower fill of BF3	finds in BF3 above	Roman	Roman
	2010 T4 featur	es coinciding with Site B		
L5	L5 = fill of BF3	Finds CBM: pot, Roman or med? - Roman preferred because of other Roman finds here	Roman	Roman

7.5 Site B discussion and phasing

Prehistory

There were no prehistoric features, but there was a residual sherd of hand-made prehistoric pottery in L5 (the fill of post-medieval quarry pit BF3).

Roman

Site B was dominated by a large quarry pit BF3, whose lower fills contained large quantities of Roman CBM, Roman flue-tile, and a Roman coin (SF 94: probably House of Constantine, 341-6/7, but later copy). There was intrusive post-medieval material in it top fill. The northern and part of the eastern edges of the quarry pit were defined, but (due to constraints) not the southern and western edges. However, the quarry was probably *c* 25-30m in diameter, based on the curvature of the exposed edges. There was no evidence that Roman burials had been inserted in the quarry pit. There were two other Roman features, gully BF4 along the north edge of (and partially cut by) pit BF3, and feeding into the quarry pit on its north side, and pit BF6. The material extracted from BF3 is likely to have been used in local construction works or road building. Unlike other quarry-pits (eg, at Site J North, off Butt Rd: CAT Report 361, 40), no burials had later been inserted into the (empty) quarry-pits.

Medieval

There was a sherd of Fabric 21 sandy orange ware, which can be described as a late medieval /early post-medieval transitional ware.

Post-medieval/modern

Large Roman quarry pit BF3 had intrusive post-Roman pottery, CBM and lead window flashing (SF 38) it its top fill, which was cut by modern service runs (not numbered) associated with the now-demolished military buildings.

Undated and natural

Undated features north of BF3 were small pits BF1 and small pit BF2. Natural pit BF7 was close to the terminal end of BF4. Profiles, leached-out fills and charcoal flecking in some of their fills may be evidence of tree-felling and stump-removal as part of land clearance.

8 Site C (Figs 1, 2, 7, 87)

8.1 Site aims

Site C (475m²) was positioned to intercept a ENE/WSW-aligned Roman field-ditch, an adjacent ?prehistoric pit, and a 6.5m-diameter circular foundation (WW II defensive structure?) found in 2010 evaluation T5. The Roman ditch CF3 had previously been seen in T12, 80m to the south-west, with possible a pit alignment along its northern edge, as in T5.

8.2 Site C summary

The principal features uncovered in Site C were the substantial Roman ditch aligned WSW-ENE, and a row of fourteen undated pits or large post-holes (CF6-7, 9, 18, 20-1, 24-5, 27-33) aligned precisely with its inner edge. A 3m gap between ditch CF3 and ditch CF22 (at right-angles to it) may have been a gate between Roman fields. Post-medieval features included a ditch and a circular feature associated with the barracks.

In some cases, the 2011 Sites overlapped the trenches of the two previous evaluation stages (2002, 2010). This overlap is explained in the two tables below. Context numbers preceded by 'F' relate to evaluation stage (ie, 2010), whereas those excavated in 2011 are prefixed CF

8.3 Site C concordance

Concordance between excavated Site C, and 2002 evaluation trenches None

Trench no	Area of trench within Site C	features within Site C	area of Trench outside Site C	features outside Site C
T5	18.5m	post-holes F150, F152. Ditch F151 (renumbered CF3)	11.5m	post-holes F154 (part), F155
T66	13.5 x 1.8m (all of it)	ditch F182 and post-hole F183. F182 is same ditch as Site C CF3 and T5 F151	none	none

Concordance between excavated Site C, and 2010 evaluation trenches

8.4 Site C Contexts and key finds dating

(including finds from 2010 evaluation Trenches 5 and 66 which are within Site C)

Context	descript	dated finds	finds date	period
CL1	topsoil	modern brick (not retained)	mod	modern
CL2	accumulation	-	-	post-Roman
CL3	natural	-	-	-
CF01	concrete foundations	-	-	modern
CF02	robber trench	14: pot p-Roman: CBM Rom: p-Roman	med/p-med/ mod (pot 15-16C)	med/p-med/mod
CF03	Ditch	5: CBM Rom:	Roman	Roman
CF04	ditch	1: pot p-Roman: CBM Rom, p-Roman	p-med/mod 17-18C ?mod brick,	post-medieval or modern

Context	descript	dated finds	finds date	period
		, clay-pipe 2: SF 41: post-med	with residual Roman	
		coin 3: pot LIA/Roman; p-		
		Roman; CBM		
		Roman; p-Roman, clay-pipe		
CF05	pit	-	-	Roman or pre- Roman
CF06	post-pit (eval F152)	evaluation finds are prehist pot, and p-	-	?Roman (aligns with F18, F20, F21,
		Roman glass (residual?)		F9, F25, F27-33)
CF07	natural pit	-	-	-
CF08	natural pit	- 8: CBM ?p-Rom	- CDM (mad n mad)	- 2Domon (oligno
CF09	post-pit		CBM (med-p-med) presumably intrusive – this row of posts must be Roman	?Roman (aligns with F6, F18, F20, F21, F25, F27-33)
CF10	circular ditch, flat bottomed and filled with compact coarse gravel.	4: clay pipe; CBM p- Rom	p-med/mod Ben - modern	barracks : p- med/mod
CF11- 16	natural pit	-	-	-
CF17	unused context number			
CF18	Pit/post-hole	-	-	?Roman (aligns with F6, F20, F21, F9, F25, F27-33)
CF19	Pit/post-hole	-	undated	
CF20	Pit/post-pit	7: flint, smashed piece	flint presumably prehistoric, but p-hole most likely to be Roman	?Roman (aligns with F6, F18, F21, F9, F25, F27-33)
CF21	Pit/post-pit	9: pot Roman	Roman	Roman post-hole, aligns with ditch F3 and post-holes F6, F9, etc
CF22	ditch	10: pot Roman11: pot LIA, Roman12: flint flake	Rom	
CF23	Pit/post-hole	-	-	-
CF24-5	Pit/post-pit	-	Roman	?Roman (aligns with F6, F18, F20, F21, F9, F27-33)
CF26	pit	-	military burns pit cutting F27	-
CF27 -33	Pit/post-pit	-	Roman	?Roman (align with F6, F18, F20, F21, F9, F25, F24)
CF34	natural feature		-	-
E150	2010 T5 features coinc		Noo ElA	nroh
F150 F151	Pit Ditch	44: pot preh 1@3g CBM 8@859g w flint struck flake	Neo-EIA Rom	preh Roman
F152	Pit/post-pit	pot 1@8g	preh	preh, pottery . ?LBA/EIA
F153	Gully	CBM 2@35g	med/p-med/mod	med/p-med/mod (p- tile)
	2010 T66 features coir	ciding with Site C		
F182	ditch (= CF3)	pot 2@9g	Rom, pottery M1-2/3C	Roman
1102		Por - C o g		Homan

Context	descript	dated finds	finds date	period
	2010 T66 Evaluation tr	ench features north of	Site C	
F154	Pit	w flint ?core	preh	preh
F155	Pit		?	?

8.5 Site C discussion and phasing

Introduction

This section includes discussion of the 2011 excavation of Site C and also of those 2011 evaluation trenches which coincided with the later Site C. Context numbers preceded by 'F' relate to evaluation stage (ie, 2010), whereas those excavated in 2011 are prefixed CF.

Prehistory

The only prehistoric feature was evaluation T5 pit F150, which contained a sherd with a date range of Neolithic to Early Iron Age. Pit CF05 was cut by undated but probably Roman pit CF25, and may therefore also be prehistoric (or early Roman).

Possibly residual prehistoric finds were flints from ?Roman post-pit CF20, ?Roman ditch CF22, and ditch F151 (ie, CF3).

Iron Age/Roman

The major activity on Site C was probably of Roman date. This consisted of a 26m length of ditch CF3 within Site C itself. This ditch, 1.9m wide and 0.5m deep, was also identified as F182 in 2010 T66, on the east side of Site C and as F151 in 2010 T5 to the immediate west. The same ditch alignment was traced as CF3 80m to the SW (F213 in T12), and 130m to the WSW in the Site K excavation as KF17 (see below), giving a total ditch length of at least 160m WSW – ENE.

It can be seen from the site plan (Fig 7), that the ditch is not straight, but kinks slightly between T12 and Site C. However, there is little doubt that ditches KF17, F213 and CF03 are the same ditch because there was a row of pits or post-pits on the northern side of each of the excavated and evaluated ditches. Typically, these post-pits were 0.76m to 0.84m wide and 0.12m to 0.16m deep. These features and their finds dating were as follows: Site K, four pits: KF3 (1 Roman potsherd), KF6 (1 Roman potsherd), KF18 (no finds), KF20 (no finds); Trench 12 (F213, 1 Roman CBM fragment); and Site C, CF6, CF9, CF18, CF20, CF21, CF25, CF27-CF33. The only features with finds were CF9 (1 fragment of peg-tile), CF20 (a shattered flint, presumably prehistoric), and CF21 (1 sherd of Roman pottery).

Given the close spacing between the (various lengths of) ditch and the pits, they must be associated. The pits could be described as a 'pit alignment' followed by or following the ditch, or were potentially large post-pits. However, if the latter the absence of post-ghosts would mean the posts had been removed, rather than being left to rot *in situ*. Pit alignments are characteristic of the Bronze Age and the Iron Age but here the dating suggests a Roman date (there was only one possible Iron Age sherd from F150 and a flint flake from CF20). In many cases prehistoric pit-alignments were followed by later prehistoric and Romano-British ditches indicating that they formed long-lasting boundary demarcations (Masefield in Masefield *et al* 2015). However, unless the Roman sherds are intrusive, this alignment dates to the Roman period when pit-alignments with the symbolic associations considered appropriate for Iron Age occurrences (ibid) are no longer typical in the archaeological record.

Alternatively then these were actually Roman period post-pits. If so it would have been logistically difficult to put in the posts alongside an open ditch, so the row of posts was probably set up first, and then the ditch dug alongside it (the soil from the ditch was presumably packed around the upright posts). The combination of ditch and earth-packed post-pits must have formed a substantial barrier, but there would still have been a gap between posts of approximately 1.5m, easy enough for a person to pass through. It is possible that the gap between posts was closed in some way which has left no evidence

(smaller posts driven into the bank, but not penetrating the ground or via horizontal fence struts).

If they were post-pits there is some possible evidence of repair or renewal to the original row of posts, in that post-hole CF23 appears to have been inserted between adjacent post-pits CF9 and CF25. Also, F183 is close to and north of post-pit CF31 – it is possible that the former replaced the latter. In this scenario the ditch being on the southern side of the posts/bank shows that it was intended as a barrier to movement from the south to the north. For what reason is not clear.

The dating of the ditch is as problematic as the pit or post-hole alignment. Two views can be taken on the dating of this ditch. First, the peg-tile in CF9 is the relevant dating for the whole ditch and post-row arrangement (and that all the Roman pottery and tile is residual). Second, that the peg-tile in CF9 is intrusive, and that the Roman pottery and tile is the relevant dating material. This allows the ditch to be Roman, or post-medieval. The major context in which this ditch might be post-medieval is the Civil War siege of Colchester in 1648, in which the barrier could be seen as one of the siege lines. However, there is a major problem with this interpretation, in that the barrier is the wrong way round – to be effective, the ditch would need to be on the northern side of the fence, not the southern. Plus, the post-medieval explanation requires a lot of Roman material to be residual, which is perhaps unsatisfactory. However, the Roman date needs only the one piece of peg-tile to be intrusive – a more archaeologically satisfying idea. If the ditch is Roman-period, the association with the pits indicates it to have been unusual in a rural context as a field boundary but its precise function remains opaque. One possibility is that it demarked an administrative or ownership boundary between the Roman town and the rural hinterland.

Other Roman finds included a ditch CF22. If CF3 is Roman, then CF22 may be a contemporary ditch whose southern terminal may have defined the northern side of a field gate.

Anglo-Saxon and medieval

Apart from a single residual sherd of medieval sandy grey ware in post-medieval ditch F4, there were no finds or features of these periods.

Post-medieval/modern

Post-medieval features include a N/S aligned ditch, probably a field boundary (CF4) which cuts Roman ditch CF03, and a circular gully (CF10). The circular feature - a narrow regular channel with a highly compacted gravel base is of unknown use. The Chapman & André Map of Essex (1777) does show three windmills on the gravel plateau east of Mersea Road, but the scale makes it difficult to know for certain if this is one of them. However, the absence of a cross foundation for the trestle timbers (so typical of windmill foundations) and the small, c 6m diameter, of the ring-slot renders this explanation unlikely. An alternative explanation, and one entertained at evaluation stage, is that it represents a WWII anti-aircraft gun installation.

Modern activity consists of features associated with the now demolished signals stores, poured concrete foundations and service connections (drainage, communications and power supply), which are collectively CF01. These modern foundations overlay the an earlier foundation (CF2) which must belong to an earlier phase of barracks (late 19th century). CF26 was probably a modern burns pit.

Other

The following features were undated: CF07, CF08, CF12-16, CF34. Their profiles and leached-out fills probably indicate natural origin, and some with charcoal flecking in their fills may be evidence for tree felling and stump removal during land clearance for agriculture.

8.6 Site C finds reports

by Stephen Benfield

Circular foundation on Site C

A pen-annular, or possibly circular gully (CF10) on the northwest part of Site C, which has an internal diameter of approximately 5 m-6 m, produced a small quantity of finds of post-medieval date and might possibly be the site of a windmill. There is a post-mill depicted on the siege map of 1648 just to the east of Fort Needham and which broadly approximates to this location.

Finds CF10(4)

CBM post-Roman 2 pieces 18 g brick (post-medieval or modern). Clay pipe 2 pieces 4 g (stem pieces)

9 Site D (Figs 1, 2, 8, 88)

9.1 Site aims

Site D (size: 450m²) was placed to provide a wider area context to prehistoric pit AF301 found in 2002 evaluation T3, and for the projected line of the N/S-aligned Roman field ditch seen in T24 and T21 (both as F119), and 110m south of Site C as F20/21 in 2010 T37. Context numbers preceded by 'F' relate to evaluation stage (ie, 2010), whereas those excavated in 2011 are prefixed DF.

9.2 Site D summary

Site D contained the expected N-S aligned Roman ditch, two post-medieval pits, a modern concrete foundation, and three undated natural features.

9.3 Site concordance

Many of the 2011 excavation Areas overlapped the trenches of the two previous evaluation stages (2002, 2010). This overlap is explained below.

Concordance between excavated Site D, and 2002 evaluation trenches

2002 T3 coincided obliquely with the W side of Site D (and 2002 T4 was immediately W of the W side of Site D). Although ditch DF2 should have been intercepted in 2002 T3, the ditch was not seen because that part of T3 was left unexcavated due to the presence of live cables. Prehistoric pit AF301 had been completely excavated at 2002 evaluation stage, and so was not excavated further in 2011.

Concordance between excavated Site D, and 2010 evaluation trenches none

Context	Description	Finds	Notes	Date
AF301	pit	3 pot sherds	Prehistoric (Middle BA+)	?Iron Age
DL1	topsoil		frags of modern brick (not kept)	Modern
DL2	accumulation deposit		buried ploughsoil cut by modern foundations	post- Roman
DL3	natural		natural sand and gravel	-
DF1	foundations		concrete/brick foundations (circa 1997) of accommodation block	Modern
DF2	ditch	1: CBM Roman 4: CBM Rom prob E-M 2C+; greensand 6: CBM Rom	N-S aligned (field boundary?) ditch, continuation of EF8.	Roman
DF3	natural pit		Shallow irregular pit of likely natural origin	Undated
DF4	pit	2: pot p-Roman 17- ?18C	small pit	Post- medieval
DF5-7	natural pit		Shallow irregular pit of likely natural origin	undated
DF6	pit	3: CBM p-Rom		post- Roman
DF7	natural pit			

9.4 Site D Contexts and key finds dating

9.5 Site D discussion and phasing

Context numbers preceded by 'F' relate to evaluation stage (ie, 2010), whereas those excavated in 2011 are prefixed DF.

Prehistory

Pit AF301, fully excavated at 2002 evaluation stage (CAT Report 206, pages 6, 44) was the only prehistoric feature coinciding with what is now Site D. It was 1.75m by 0.60m in plan (though truncated on type small dimension) and 0.38m deep. It contained three undiagnostic sherds (10g) in a grog-tempered fabric which indicates a date in the Middle Bronze Age or later. There were no other prehistoric finds or features.

Roman period

Roman activity in Site D consisted of north/south-aligned ditch (DF2), **X**m wide and **X**m deep, which was probably a field boundary ditch. Judging by its alignment, DF2 was probably the same as ditch EF8, which was intercepted 38m to the south in Area E.

Anglo-Saxon period

There were no Anglo-Saxon features or finds.

Post-medieval/modern periods

The majority of features in Site D were of post-medieval or modern date. These were mostly modern building foundations and associated service-runs (drains, communications, and power supply) which were collectively labelled DF1. These are the foundations of buildings presumably demolished in the most recent reorganisation of MHB in the early 1960s. Other post-medieval or modern features were pits DF4 and DF6. DF1 truncated earlier features, including Roman ditch DF2 and pit DF6.

Other

The remaining features (DF3, DF5 and DF7) are undated. Their profiles and leached-out fills may indicate a natural origin, but charcoal flecking in their fills may be evidence of tree-felling and stump removal as part of land clearance for agriculture.

10 Site E (Figs 1, 2, 9, 88)

10.1 Site aims

Site E (size: 1,565m²) offered an opportunity to examine the context of 2010 T23 evaluation pit F31, which contained early Neolithic pottery and flints. A large excavation (Site E) would enable a better assessment of its symbolic/ritual or domestic context, and establish whether it was an isolated feature.

A second aim was to track and more fully investigate a N/S-aligned Roman field-ditch traced in T37 to the south and excavated in Site D to the north.

10.2 Site E summary

Context numbers preceded by 'F' relate to evaluation stage (ie, 2010), whereas those excavated in 2011 are prefixed EF. Site E is dominated by the foundations and services of now-demolished barrack buildings. One probable tree stump removal pit (F31/EF13) contained a large group of Neolithic finds - sixty one sherds and nine Neolithic flints - the earliest prehistoric finds assemblage yet found in Colchester. The most significant landscape feature was a large Roman ditch, whose N/S alignment makes it certain to be the continuation of a ditch excavated in Site D to the north, and in T37, to the south. There was residual prehistoric and Roman material in later features.

10.3 Site E concordance

Concordance between excavated Site E, and 2002 evaluation trenches None

Concordance between excavated Site E, and 2010 evaluation trenches

Trenches 21, 23, 24 and 37 coincided with Site E.

Trench no	area of trench within Site E	features within Site E	area of trench outside Site E	features outside Site E
T21	17m x 1.8m	F119 (same ditch as EF8), F120, F122	11m x 1.8m	F121
T23	29 x 1.8m	F29, F31 (same as EF13), F39	9.6m x 1.8m	F28
T24	20m x 1.8m	F1, F7	26.2m x 1.8m	F2-6, F8-19
T37	2m	None	42m	F20-23, F25-27

10.4 Site E Contexts and key finds dating

(including features in 2010 evaluation T21, 23, 24, 38, where they are within Site E)

Context	Description	Finds	Notes	Date
EL1	hardcore/gravel		base of parade square	modern
EL2	topsoil		topsoil remnant	modern
EL3	accumulation horizon		buried plough soil	post-Roman
EL4	natural		sand and gravel	-
EF1-6	natural features		shallow irregular features	-
EF7	drain	1: CBM Roman; p- Roman	(residual Roman finds)	modern
EF8	ditch	4: CBM Roman; p- Rom 11: med pot: CBM Roman	N/S ditch. P-med finds intrusive? Continues as DF2 (N) and in T37 (S)	Roman
EF9-12	natural features		shallow irregular features	-
EF13	pit	61: pot preh, w flint 4; burnt flint	Irregular pit, F31 in evaluation. 61 Early Nec	
EF14-15	natural features		shallow irregular features	-
EF16	military foundations	5: pot Roman p-Roman; CBM p-Rom		
EF17	post-hole		part of post group EF17-19, 25-7. Undated, but slag in EF18 means probably modern	undated (modern?)
EF18	post-hole	7: slag	part of post group EF17-19, 25-7.	undated (modern?)
EF19	post-hole		part of post group EF17-19, 25-7. undated Undated, but slag in EF18 means (modern?) probably modern	
EF20	natural feature		shallow irregular feature	-
EF21	undated ditch		undated, prob modern military undated (modern?)	
EF22	service run		concrete service run modern	
EF23	foundation	10: pot preh; Roman; p- Roman	Row of square straight sided features – foundation of barrack structure (EF16 is same row)? Residual prehistoric and	modern

Context	Description	Finds	Notes	Date
		CBM Roman;	Roman finds	
		p-Roman;		
		clay pipe		
EF24	natural features		shallow irregular features	-
EF25-7	post-holes		part of post group EF17-19, 25-7.	undated
			Undated, but slag in EF18 means	(modern?)
	in a trivial factoria		probably modern	
EF28-9	natural features		shallow irregular features	-
EF30	military ditch		military practice trench, early 20th century	modern
EF31	natural feature		shallow irregular features	-
EF32	post-hole		Isolated post-hole	undated
5500.4			ala alla su incarda a fa atoma a	(modern?)
EF33-4	natural features		shallow irregular features -	
EF35	post-hole		undated	
u/s		8: w flint		
E 440	T21 features with			
F119	ditch	CBM Rom	Rom	Rom
F120	pit	mod pot	mod, pottery . 19-20C	mod
F122	pit	CBM Rom	Rom	Rom
	T23 features with			
F029	pit	SF5: military badge	mod	mod
F030	pit	pot 1@3g	Rom	Rom
F031	ditch	024: preh pot	flint is Neolithic	prehistoric -
		flint blade,		?Neolithic
		bladelet,		
		burnt flint		
	T24 features with	nin Site E		
F001	natural pit	-	-	-
F007	ditch	CBM Rom, coal	p-med/mod?	p-med/mod? (coal), Roman tile. L1C+

Evaluation trenching close to but not coinciding with Site E

Parts of 2010 evaluation trenches T21, T23, T24 and T37 coincide with the area later excavated as Site E. However, there were parts of those trenches which were outside the limits of Site E. The tables below give details.

T21 features outside Site E

	T21 feature outside Site E			
F121	natural gully no finds			
Comment				

A natural gully. There were 19 natural features within Site E.

T23 features outside Site E

	T23 feature	outside Site E		
F28	natural pit	no finds	-	-
Commont				

Comment

A natural pit. There were 19 natural features within Site E.

T24 features outside Site E

	T24 features outside Site E			
Context	Description	Finds	Notes	Date
F2	natural pit	-	-	-
F3	ditch	w flint 1 @ 2g	prehistoric?	prehistoric
F4	ditch	undated	-	-

F5	pit	undated	-	-
F6	natural pit	-	-	-
F8	natural pit	-	-	-
F9	post-hole	-	no finds but mortar / charcoal flecks	post-medieval
F10	p-hole	pot 1@2g CBM 1@118g Fe obj. SF 7, mod	mod	mod pottery, 19- 20C
F11/12	p-hole	CBM 1@16g	med/p-med/mod	med/p-med/mod (p- tile)
F15	post-hole	undated		

Comment

Apart from possible prehistoric ditch, a group of natural features and small insignificant post-medieval post-holes (probably garrison-related).

	T37 features outside Site E			
Context	Description	Finds	Notes	Date
F20	ditch	pot Rom/p-Rom	Rom/p-	Rom/p-Rom? one sherd poss early
		CBM Rom	Rom?	Saxon . 5-6/7C?
F21	ditch	no finds	Roman?	this may be an earlier cut of F20
F22	ditch	pot Rom 1-2/3C	Rom	Roman
F23	ditch	no finds	Roman?	recut of ditch F22?
F25	ditch	CBM Rom inc poss early flue tile. M-L1C	Rom	Roman
F26	ditch	stone, shale/?coal	Rom	Roman
F27	ditch	CBM Rom	Rom	Roman

T37 features outside Site E

Comment

T37 contained at least two periods of Roman field ditches F20-F23, and F25-27.The N-S aligned F20-F23 is evidently the same ditch as EF8 (in Site E), and as DF2 (in Site D). Also, it seems that there are several periods of ditch cuts here because F20 is a plausible recut of F21, and F23 of F22.

F25-F27 cut obliquely across F20-23, and may represent a different period of Roman field boundary. However, the apparent terminal ends where F22/23 butts up to F20/21 may show that they were part of an evolving field system with a blocked-up field gate. A possible sequence is as follows:

(1) there was an 8m-wide field gate between the terminal ends of NW-SE ditch F27, and N-S ditch F22.

(2) both ditches were recut (F26, F23).

(3) the field gate was blocked off by the digging of ditch F21.

(4) ditch F21 was recut (F20).

10.5 Site E discussion and phasing

Context numbers preceded by 'F' relate to evaluation stage (ie, 2010), whereas those excavated in 2011 are prefixed EF.

Prehistoric period

Of particular interest is pit EF13 (F31 in the evaluation) in the SE corner of the site. It contained a large group of prehistoric pottery (61 sherds, 378g) and worked flints (5 flakes,

16g: 2 burnt flint, 20g) the largest prehistoric group from the GAL project). The pottery (from five or six pots) has stylistic associations with Mildenhall Ware, and this pit is one of only a very few Neolithic features in Colchester town centre and the GAL project

area. For more detail see Site E finds report in section 10.6 below, and also the flints by Adam Wightman (Section 18.5 below).

The steep-sided feature was slightly arced in plan (3.5m by 1.0m in plan and 0.38m deep), with an irregular base and shallower eastern and western ends. This makes it very likely to have been a tree-removal pit (ie, a pit created by the digging out of tree roots, perhaps during clearance for agriculture). There was sufficient pottery and flint (plain ware bowl sherds and flint blades) to indicate both deliberate deposition of domestic waste/selected items, and probably the existence of nearby occupation. As flint blades remained useful tools their deposition in particular requires explanation beyond identification as mere 'refuse'. It is of interest that several other tree throws on A1 have produced single flint blades. Early Neolithic placed deposits in tree-removal pits or tree-throw pits are documented elsewhere and include a complete upturned plain-ware bowl within a tree-hole at Great Western Park Didcot, Oxfordshire in 2010 (Hayden, Lawrence et al 2015) and a Neolithic axe-rough-out in a tree hole at Aylesbury in Buckinghamshire (Parkhouse and Bonner 1997). Given the upturned nature of the Didcot bowl, effectively inverted to face into the earth, it seems possible that deliberate deposition of such selected cultural items was considered an act of appeasement to chthonic deities responsible for crop fertility.

There were no other datable Neolithic features in Site E, although several undated treethrows were recorded nearby. These may indicate a single episode of woodland clearance in the early Neolithic, potentially along with the tree throws with blades elsewhere in A1

There was residual prehistoric pottery (1 sherd, 3g) in modern pit EF23, and a residual prehistoric flake (8g) in modern pit EF16.

Roman period

Roman activity is limited in one major landscape feature – ditch EF8. This ditch (2.48m wide and 0.76m deep), whose N-S alignment makes it certain to be the continuation of a ditch excavated as DF2 in Site D to the north, and as F20-F23 (in T37). It is sensible here to also discuss T37, to the south, because EF8 was visible along most of the N-S T37 (only a part of T37 appears on Fig 9, please see the full trench plan on Figure 102).

T37 contained at least two periods of Roman field ditches F20-F23, and F25-27. The N-S aligned F20/F23 (1.3m wide amd 0.56m deep) is evidently the same ditch as EF8 (in Site E to the north), and as DF2 in Site D (1.64m wide and 0.38m deep). Thus the total length of this Roman field boundary is approximately 115m north to south. Also, it is clear that there are several periods of ditch cuts here because F20 is a plausible recut of F21, and F23 of F22.

F25-F27 cut obliquely across F20-23, and may represent a different period of Roman field boundary. However, the apparent terminal ends where F22/23 butts up to F20/21 may show that they were part of an evolving field system with a blocked-up field gate. A possible sequence is as follows:

(1) there was an 8m-wide field gate between the terminal ends of the NW-SE ditch F27, and the N-S ditch F22.

- (2) both ditches were recut (F26, F23).
- (3) the field gate was blocked off by the digging of ditch F21.
- (4) ditch F21 was recut (F20).

Immediately to the north of the northern end of T37, where it was also seen in T24, ditch EF8 was, curiously, wider and deeper, although this may simply suggest it was dug by a different work gang. Examination of a wider area in the Site E excavation affords the best explanation - that the wide and deep part of EF8 was caused by stock erosion.

Anglo-Saxon period (AS)

There were no AS finds or features.

Medieval period

The minute amount of medieval material here (one sherd of Fabric 20 intrusive in ditch EF8), implies very little or no activity here. Use of this land for pasture or woodland would not contradict the limited archaeological evidence.

Post-medieval/modern activity

Features associated with MHB dominate this site (EF7, 16, 22, 23, 30, others unnumbered). As Site E coincided with the parade square, the foundations and associated services mostly belong to earlier structures demolished in the 1960s, when MHB was rearranged. A cluster of pits in the NE corner of the site was not excavated due to the possible EOD risk. However, surface finds included a NAAFI mug, cans of shaving soap, and glass bottle (all dating to the mid-20th century).

The modern features included an E-W line of square pits (EF16 and EF23) and a linear feature (EF30). Although the pits contained residual Roman material, they are undoubtedly a feature of the parade square, such as lighting stanchions, as they continued into excavation Site F on the western side of the square. F30 was deep, straight-sided, and flat bottomed, and contained modern glass and re-deposited natural sand and gravel. In its right-angled plan, it matches the profile and dimensions of WWI military training features observed elsewhere in the garrison (CAT Report 246, fig 4).

The row of post-holes F17-19, F25-7 is dated only by the inclusion of slag in EF18. They may be a recent fence. Undated EF21 may also be modern.

Other

The nineteen natural features (EF1-6, 9-12, 14-15, 20, 24, 28-9, 31, 33-34) had irregular profiles and leached-out fills indicative of a natural origin, but the presence of charcoal in some fills may be evidence of tree stump removal as part of agricultural land clearance.

10.6 Site E finds report

Summary of the Prehistoric pottery (also see Section 18.1 for more detail of finds) by Stephen Benfield

Finds from one pit (EF13/31) can be dated to the early Neolithic period. Previously, very few Neolithic features have been identified within the Garrison Alienated Land (GAL) and the Colchester town area in general. The pottery recovered from the pit has stylistic associations with Mildenhall Ware assemblages indicating it is one of the earliest closely dated archaeological features recorded at Colchester. Residual finds which can be dated to the Neolithic include a sherd of late Neolithic Grooved ware and a small quantity of flints.

In a wider context, Mildenhall Ware and Peterborough Ware pottery sherds have previously been recovered within the GAL area from a cluster of six pits on Area C1 (Sealey 2011). However, most of the small quantity of Neolithic material (pottery & flints) from GAL sites is residual or unstratified. This includes a rim of Early Neolithic Grimston/Lyles Hill type pottery. Area J1 North (Sealey 2011) and small numbers of Neolithic flints from Area C1 and Areas 2, 6 & 10 (Martingell 2011; Martingell 2005) and Area L/N (Wightman 2012).

A small quantity of Early Neolithic pottery attributed to the Grimston style has been recovered from the town centre but was not stratified in contemporary features, much being recovered from a deposit of cover loam (Brown 1992). A pit containing parts of Late Neolithic Grooved Ware vessels was located on a town centre site (Brown 1992). Small numbers of flints broadly dated as Neolithic have also been recovered from excavations in the town centre (Wymer 1992).

Overall, these finds show activity throughout the Neolithic period apparently focussed on the area of the ridge beneath the town centre and the area of the ridge and plateau of the GAL to the south of it, these areas being separated from each other by a small valley.

Small quantities of flints of probable Bronze Age date and sherds of undiagnostic flinttempered pottery, broadly dated to the Neolithic-Early Iron Age, were also recovered as residual finds. It can be noted that there is little evidence of any significant activity in the Middle Iron Age period (c 350-100/50 BC).

Early Neolithic (pit 13/31)

Finds EF13(9) EF31(24) Pottery Prehistoric (Neolithic - Mildenhall style) 61 sherds 378 g. Flint 9 pieces. Burnt flint 2 pieces 20 g

11 Site F (Figs 1, 2, 10-14, 89-94)

11.1 Site F aims

Site F (2,040m²) was one of the larger sites in Area A1 (MHB). It was designed to explore and better define the enclosure ditch F45 found in T34 (was it an enclosure, or a ring-ditch?), and to examine any internal features, and the Roman and post-medieval ditches running broadly east-west to the north of the enclosure.

It was also hoped that either Site F or Site D might also throw light on the provenance of the Iron Age mirror that was said to have been found within the northern area of the parade ground (CAT Report 97). A mortuary site would be a likely context for its deposition, and the investigation was intended to confirm whether the enclosure or other burial-related features could have been associated with it.

11.2 Site F summary

The principal discovery was three stock control related enclosures. No convincing buildings, so presumed all stock enclosures.

11.3 Concordance between excavated Site F, and 2002 evaluation trenches None

Trench no	area of trench within excavation site F	T 65 archaeological features within Site F	area of trench outside Site F	features outside Site F
T24	32m	F13-14, F16-19	49m (then T24 is within Site E).	F2-5, F8, F10-12.
T34	21m	F14, F42-3, F45-57, F61,	30m	F38-40
T65	all 17m	F115-117	none	none

Concordance between excavated Site F. and 2010 evaluation trenches

Comment on T34

Principal interest of T34 is its northern end, which coincided with Enclosure 1 (discussed in the main text below). At the southern end of T34 were undated pit F38 and undated post-hole F39. There was also a short length of curved ditch F40 which contained a piece of Roman CBM.

Comment on T65

T24 and 34 features are discussed in the text below. In T65 were a natural pit F116, a Roman pit F115 (1 sherd Roman pottery 88g, dated 1-2/3), and an undated gully. FF71 the zig-zag practice trench was recognised but not numbered or excavated at evaluation stage.

11.4 Site F features and discussion

In previous sections of this report, it has been common to discuss site features period by period. For Site F, the discussion below takes into account the uncertain date of the three enclosures.

Context numbers preceded by 'F' relate to evaluation stage (ie, 2010), whereas those excavated in 2011 are prefixed FF.

11.4.1 Early prehistoric activity (pre-LIA)

There are no features predating the late Iron Age, but prehistoric activity prior to that date is indicated by the presence of hand-made prehistoric pottery and prehistoric flints in various contexts shown in the table 11.1 below.

Context	Enclosure	Description	Finds	date
FF009	1	Pit	8: pot preh 1@ 7g HMF	preh neo-IA?
FF012	1	post-hole: fence 1	9: pot LIA 1@1	LIA
FF017	1	post-hole: structure 5	10: flint, 1@ 3g small broken	
FF056	1	ditch	25: pot LIA 1@ 3g Fabric GT	LIA
FF062		ditch (contins as F65?)	27: pot preh? 1@ 3g grog-temp (residual?)	stratigraphically Roman
FF080	1	gully around round- house	41: pot preh 2@4g HMF (flint- temp); w flint 1@2g flake 47: pot preh 1@2g HMF	Rom, residual preh Neo-EIA
FF150	3	post-hole near S2	44: pot preh 1@3g HMF	preh Neo-EIA
FF307		post-hole outside E2 ditch F295	26: flint, 1@ 5g small broken piece	
	T24 features	s within Site F	•••	·
F003		Ditch	w flint 1 @ 2g	preh
	T34 features	s within Site F		
F038		Pit	w flint 1@12g burnt flint 1@16g	p-med?/mod

Table 11.1: pre-LIA finds in Site F

11.4.2 Late Iron Age – early Roman period

Three enclosures were laid out in the late Iron Age or early Roman period: Enclosures 1-3 (E1-E3). Generally speaking, there are very few finds associated with any of the enclosures. Whereas this may mean that the occupants were relatively poor, and consequently had few ceramics or other household items normally encountered on Iron Age domestic sites (such as loom-weights), a more compelling explanation is that they are not domestic structures at all, but animal enclosures (perhaps occupied by shepherds on a seasonal basis).

11.4.2.1 Enclosure 1

E1 was a roughly oval enclosure defined by ditches FF3, FF11 and FF56 (FF11 may have been a recut). The whole of E1 was within Site F. There were a number of features which did not form any clear structural patterns with the exception of two possible fences:

Structure 7 (internal): FF12, FF14, FF16-18, FF57 Structure 8 (external and in the entrance to E1): FF36, FF57, FF76, (possibly extended by FF40, FF41)

An entrance on the SE side of E3 was apparently bisected by short ditch FF10 which may have been part of an stock control system (in combination with the fences labelled S7 and S8). Dated finds are sparse: one LIA sherd from the enclosing ditch FF56, a prehistoric flint from S7 post-hole FF17, a prehistoric sherd (Neolithic to Iron Age) and (undated) daub from internal pit FF9, and a Roman sherd from internal structural post-hole FF4. This material indicates a LIA and Roman date for the creation and use of this enclosure.

context no.	context type	finds	comments and dating
FF003	ditch		E1 enclosure, with FF11, FF56. This was 2010 evaluation T34 F45
FF004	post hole	4: pot Roman	Rom
FF005	post-hole		Undated
FF009	pit	8: pot preh, fired clay	prehistoric (Neo-IA?)
FF010	ditch		in entrance to ENC 1 (with FF13)
FF011	ditch		E1 enclosure, with FF03, FF56. With F003, this was also 2010 evaluation T34 F45
FF012	post-hole: Structure 7	9: pot LIA GTW	LIA
FF013	ditch		in entrance to ENC 1 (with FF10)
FF014	post-hole: S7		
FF015	post-hole: structure 5?		
FF016	post-hole: S7		p-med c 1700-1740
FF017	post-hole: S7	10: flint, 1	
FF018	post-hole: S7		
FF020	post-hole		Undated
FF024- 35	'stake-hole'		Evaluation T34 F46-56 was a group of undated 'stakeholes'. these are unconvincing, and are ignored here (product of machining?)
FF036	post-hole: S8		
FF037	pit	15 : pot Roman; p- Roman; CBM p-Rom peg-tile	p-med/mod
FF038	post-hole		undated but
			cut by modern F37
FF039	natural pit - tree-throw?		
FF040	post-hole: extension to S8?		between E1, E2
FF041	post-hole: extension to S8?		between E1, E2
FF046	evaluation pit		Undated
FF056	ditch	25: pot LIA 1	E1 enclosure, with FF03, FF11
FF057	post-hole: S8		
FF067	stake-hole		inside W side of F56
FF076	post-hole: S8		

context no.	context type	finds	comments and dating
FF080	gully around S1	41: pot preh 2 (flint- temp); w flint 1 flake 46: pot Roman 47: pot preh 1; Rom 1 SF 22: (finds no 53) fe nail, Manning type 1b	Roman, with residual prehistoric pottery (Neo-EIA)
FF081	post-hole		S edge E1 (with FF82)
FF082	post-hole		S edge E1 (with FF81)
FF310	pit	T34 finds pot, CBM, clay pipe	This was evaluation T34 F46. Pottery 19-20C
FF311	pit	-	This was evaluation T34 F61

Table 11.2: Site F Enclosure 1 contexts and key finds dating

11.4.2.2 Enclosure 2

The northern half of E2 coincided with Site F. It was defined by undated ditches FF262 and FF295, and had an entranceway on its NE side. Within the enclosure were three undated pits (FF298-300), and post-holes FF265-6, FF302 and FF305. A large number of stakeholes along the inner edge of the enclosure ditch probably defined fences, thus:

fence 8: FF267-286 fence 9: FF287-90, FF303-4 fence 10: FF257-61, FF262, FF308-9

Two post-holes FF263-4 between (and slightly rear of) the terminal ends of ditches FF262 and FF295 may have been posts for a gate to close off the entrance, and may have been used in combination with fences 8 and 10.

The lack of any recognisable post-built structure and the presence of fence lines means this was probably an animal enclosure. The only dating evidence for E2 was a fragment of Roman tile in pit FF298, but it seems likely that it shares the dating of the two adjacent enclosure E1 and E3 in being LIA and Roman in date.

There were two natural features FF77 and FF296, the former cut by ditch FF295. E3 was also cut by an infilled cellar FF2, and by unnumbered modern concrete footings and service runs.

Context	Context type	finds	comments and dating
no			
FF154	one of cluster of post / stakes	-	in SW quad E2
FF263	gate post paired with F264	-	
FF264	gate post paired with F263	-	
FF265	inner gate post paired with F266	-	
FF266	inner gate post paired with F265	-	
FF267- 86	stake-hole: fence 8	-	
FF287- 90	stake-hole: fence 9	-	
FF291- 4	stake-hole cluster		immediately outside and N of E2, so probably associated
FF295	ditch of ENC 2 (along with F262)	-	
FF296	natural pit - tree-throw?	-	
FF297	post-hole		immediately outside and W of E2, so probably associated

FF298	pit inside E2	54: CBM Rom	
FF299- 300	pit inside E2	-	undated
FF301	stake-hole		immediately outside gate to E2.
FF302	stake-hole: inside E2	-	
FF303- 4	stake-hole: fence 9	-	
FF305	post-hole inside E2	-	

Table 11.3: Site F Enclosure 2 contexts and key dating

Features outside E2

There were some features which, although outside E2, were so close to it that they were probably associated. Clockwise from west: post-hole FF297 (just outside ditch FF295): stake hole F301 and post-hole FF78 (the latter possibly connected with the gate structure to E2); stake-hole cluster FF291-4.

11.4.2.3 Enclosure 3

The enclosure ditch

E3 consisted of a shallow gully FF80, which defined an oval-shaped enclosure describing an area 9m by 11.5m in extent.

The circular structure

Within the enclosing ditch were a number of arcs and circles of post-holes and stake-holes. These formed three circles of posts: inner, centre, and outer.

Inner circuit (2.75- 3m diameter): FF96, FF98/108, FF102, FF101, FF93-4, FF130, FF92, FF131-2, FF91, FF90, FF89, FF88, FF85, FF144, FF146-7 (with possible repair phase indicated by post which are slightly offset – FF95, FF86-7, FF83, FF84, FF142-3, FF97, FF218).

<u>Centre circuit</u> (3.9m diameter): FF178, FF133, FF220, FF219, FF145, FF127, FF126, FF125, FF99 FF100.

<u>Outer circuit</u> (5.25-6m diameter): FF180, FF169, FF179, FF134, FF 226, 238, 227, 247, 229, FF72, FF73, FF217, FF120-23.

The initial impression is that the concentric rings of post-holes and stake-holes defined a timber structure typical of a prehistoric roundhouse (Structure 1, or **S1**) set within an oval enclosure. But there is a problem with this interpretation. The gully FF80 was not an eaves drip gully, as while of a suitable width (generally 0.4m) was too variable in its distance from **S1** to be an eaves-drip. For instance, if FF138 is taken as the notional centre of S1, then the eaves-drip is 3.4m from this point at its nearest, and 6.25m at its farthest. Clearly, FF80 cannot work as an eaves-drip, and must be an enclosing ditch.

S1 is nevertheless a convincing circular structure. There are a few obvious points of interest, however. First, the inner circuit has the largest posts and therefore is the load-bearing part of the structure, yet is only 2.75m in diameter, and the posts are set so close together that a person could not walk through it. Second, even if the outer circuit (5.25m – 6m diameter) were the outer wall of the structure, it would still be relatively small for a habitation (a comparison with other IA structures in Essex is given in Fig 14). Nevertheless, the scale is within the range for Iron Age roundhouses and outbuildings within Wessex hill forts such as Danebury (Cunliffe and Poole 1991) and Iron Age villages such as at Crick & Kilsby Northamptonshire (Masefield (ed) 2015). Given its scale this building may have been used periodically for

livestock confinement, perhaps as a lambing hut used by shepherds or as a byre. The lines of stakeholes around the inner edge of the ditch FF80 are so far from the circular structure and so widely at variance with its centre point that they cannot be part of the circular structure, and must therefore be a fence associated with ditch FF80. Perhaps the simplest explanation is that they represent a series of linking hurdle-style fences around the inner edge of the enclosure ditch, in order to keep animals in. For the sake of clarity, the different stretches of post- or stake-holes have been split up into Fence sections 1-7, as follows:

Fence section 1: FF172, FF171, FF163 Fence section 2: FF170, FF161-2 Fence section 3: FF160, FF159, FF157, FF155, F109?, FF110/111?, FF151-3 Fence section 4: FF183, FF182, FF115-9, FF69, FF114, FF233-6 FF239, FF112-3 Fence section 5: FF232, FF237, FF240-1, FF225 FF242, FF244-6 Fence section 6: FF228, FF221-3 FF195 Fence section 7: FF203-9

Other structures within the enclosure

There were other groups of post-holes within the enclosure. These are:

Structure 2: a row of three posts (FF173-5). A short fence or screen? Structure 3: a row of five posts (FF158, FF156, FF149, FF154, FF165-6) Structure 4: a two-poster (FF200, FF211) Structure 5): a group of posts centrally placed within the circular structure, which may or may not be connected with it (FF103-7, FF136-7, FF139, FF140-1, FF146, FF148).

Structure outside the enclosure

There was a group of post-holes forming a rectangular arrangement (outside the enclosure and partially overlapping its ditch (**S6**). If the idea of the circular structure being a standard domestic round-house has been discounted, this structural element may not be seen as representing a porch (it is, in any case, at an oblique angle to **S1**). However, linking up with Fence section 6, it may mark the position of a gate to control movement of animals.

S6 components: FF192-4, 196-8, FF185-9 Finds from S6: 1 sherd Roman pottery, dating mid-1st to early 2nd?

Dating of Enclosure 3 and its structural features

There is very little ceramic dating evidence from E3 which also suggests a non-domestic use. Although the enclosing ditch FF80 contained two small sherds of prehistoric pottery (4g in total weight) and a prehistoric flint, it also produced two Roman sherds and an iron nail. The only find from any of the post-holes or stake-holes forming the circular structure is a fragment of fired clay from FF72 in the outer circle. The only other finds are from the fences around the inner edge of the enclosure, and from a nearby structure, were a Roman tile fragment from FF109 (Fence 3) and a Roman sherd from post-hole FF149 (Structure 2). Two stake-holes within the enclosure contain a prehistoric sherd (FF150) and a Roman sherd (FF167).

Context	Description	Finds	finds date
FF072	post-hole: spec outer wall	36: fired clay 1@13g orange-brown	
		cream surface frag abr	
FF073	post-hole: spec outer wall		
FF080	gully around round-house	 41: pot preh 2@4g HMF (flint-temp); w flint 1@2g flake 46: pot Roman 1@2g Fabric GX abr 47: pot preh 1@2g HMF; Roman 1@1g, Fabric GX abr SF 22: (finds no 53) fe nail, Manning type 1b 	Rom, residual preh Neo-EIA
FF109	post-hole: fence 3 (bigger	42: CBM Roman 1@5g RBT frag?	Rom

Context	Description	Finds	finds date
	than stakes)		
FF149	post-hole: structure 2	43: pot Roman 1@3g, Fabric GX (poss Fabric 20?)	prob Rom, poss med?
FF150	post-hole near S2	44: pot preh 1@3g HMF	preh Neo-EIA
FF167	post-hole near S2, probably replaces F168	45: pot Roman 1@4g Fabric GX	Rom
FF185	post-hole S of F79	48 : pot Roman 1@2g, Fabric RCW/GX abr, crazed, laminating	Roman M1- E2C?

Table 11.4: dated contexts in E3 (table 11.5 below gives all contexts in E3)

Given the range of finds dates, there can be little doubt that E3 was in use in either in the LIA and early Roman period, or, despite its typically prehistoric form, was entirely a Roman period creation. However, the fact that it was truncated by Roman ditches suggests the possibility the probable agricultural structure was decommissioned at the beginning of the Roman period and that the finds recovered from the features represent items incorporated in open features in disuse.

Context No	Context type	finds	dating
FF072	post-hole, S1 (outer circuit)	36: fired clay	
FF073	post-hole, S1 (outer circuit)		
FF083-4	post-hole, S1 inner circuit (repair?)		
FF085	post-hole, S1 (inner circuit)		
FF086-7	post-hole, S1 inner circuit (repair?)		
FF098	post-hole, S1 (inner circuit)		
FF099-100	post-hole, S1 (centre circuit)		
FF101-2	post-hole, S1 (inner circuit)		
FF103-7	post-hole: structure 5		
FF108	post-hole: inner circle of house		
FF109	post-hole: fence 3 (bigger than stakes)	42: CBM Roman	Rom
FF110	post-pit for post-hole F111: fence 3		
FF111	post-hole: fence 3 (bigger than stakes)		
FF112-9	stake-hole: fence 4		
FF120-3	post-hole, S1 (outer circuit)		
FF124	stake-hole: between outer 2 circles		
FF125-7	post-hole, S1 (centre circuit)		
FF128-9	post-hole in base of F184		
FF130-2	post-hole, S1 (inner circuit)		
FF133	post-hole, S1 (centre circuit)		
FF134	post-hole, S1 (outer circuit)		
FF135-8	post-hole: structure 5		
FF139	post-hole <i>within</i> inner circle		
FF140	post-hole: structure 5		
FF141	post-hole: structure 5		
FF142-3	post-hole, S1 inner circuit (repair?)		
FF144	post-hole, S1 (inner circuit)		
FF145	post-hole, S1 (centre circuit)		
FF146-7	post-hole, S1 (inner circuit)		
FF148	post-hole within inner circle		
FF149	post-hole: structure 3	43: pot Roman or med?	prob Rom, poss med?
FF150	post-hole near S2	44: pot preh 1	preh Neo-EIA
FF151-3	stake-hole: fence 3		
FF155	stake-hole: fence 3		
FF156	post-hole near S2		
FF157	stake-hole: fence 3		
FF158	post-hole near S2		
FF159-60	stake-hole: fence 3		
FF161-2	stake-hole: fence 2		
FF163-4	stake-hole: fence 1		

FF165-6	post-hole: structure 3	1	
FF167	post-hole near S2, probably replaces F168	45: pot Roman 1	Rom
FF168	post-hole near S2		TIOITI
FF169	post-hole, S1 (outer circuit)		
FF170	stake-hole: fence 2		
FF171-2	stake-hole: fence 1		
FF171-2 FF173-5	post-hole: structure 2		
FF173-5 FF176-7			
	post-hole between F1 and S1		
FF178	post-hole, S1 (centre circuit)		
FF179-80	post-hole, S1 (outer circuit)		
FF181	square pit		presumably modern
FF182-3	stake-hole: fence 4		
FF185	post-hole: structure 6	48: pot Roman 1	Roman M1- E2C?
FF186-194	post- or stake-holes: structure 6		
FF195	post-hole: fence 6		
FF196-8	post-hole: structure 6		Undated
FF199	post-hole in side of F1		
FF200	post-hole: structure 4		
FF201	post-hole near F184, or part of fence 7?		
FF202	post-hole F184, or part of fence 7?		
FF203-9	post-hole: fence 7		
FF210	post-hole in side of F7		
FF211	post-hole: structure 4		
FF212	post-hole in base of F79		
FF213-16	post-hole in side of F7		
FF217	post-hole, S1 (outer circuit)		
FF218	post-hole: S1 inner circuit repair phase?		
FF219-220	post-hole, S1 (centre circuit)		
FF221-3	post-hole: fence 6		
FF224	post-hole in side of F1		
FF225	stake-hole: fence 5		
FF226-7	post-hole, S1 (outer circuit)		
FF228	stake-hole: fence 6		
FF229	post-hole, S1 (outer circuit)		
FF229 FF230	post-hole close to spec outer wall		
FF230	stake-hole N of fence 4		
FF231			
	stake-hole: fence 5		
FF233-6	stake-hole: fence 4		
FF237	stake-hole: fence 5		
FF238	post-hole, S1 (outer circuit)		
FF239	stake-hole: fence 4		
FF240-2	stake-hole: fence 5		
FF243	stake-hole N of fence 5	l	
FF244-6	stake-hole: fence 5		l
FF247	post-hole, S1 (outer circuit)		l
FF248	stake-hole near spec outer wall		
FF249	stake-hole on edge of F7		
FF250	stake-hole: near missing section of E1 ditch F80		
FF251	stake-hole on edge of F7		
FF252-6	stake-hole		
FF257-61	stake-hole: fence 10		
FF263	stake-hole: fence 10		

Table 11.5: all contexts in Enclosure 3

Contexts not within E1-E3.

There were a number of Site F contexts which were not associated with or actually within E1-E3. They are listed below.

FF001	ditch (eval F44)	1: pot p-Roman 2 Fab40; CBM Rom: 2 RB, IM; p-Roman 2 B, PT 14: CBM Roman 2@349g RBT 16: pot Roman 2; p-Roman 2 Fab 40; CBM Roman 11 ; p-Roman 7, B, PT 16: clay pipe 6@33g bowl crummy - Type 9 1700-40 37: pot p-Roman 1 Fab 21; CBM Roman 2 RBT RI; p-Roman 2 10g PT SF116 (finds no 37): ae ring	p-med/mod 17- 18/19C
FF002	infilled cellar		modern
FF006	ditch NW-SE , cuts ditch F7	5: pot Roman 1; CBM Rom: 27 RBT, IM, RB 6: pot Roman 1; CBM Rom: 1 RBT	
FF007	ditch major E-W, cuts N edge Enc 3	11: Rom: 11 RBT, TE(F), RB, IM SF 117: large stone block SF 118: (finds no 52): 1 @458g limestone similar to Purbeck	Rom
FF008	ditch on W edge Site F, cuts ditch F7	 6: pot Roman 1; CBM Roman 2 RBT 7: fe nail 12: pot Roman 10; CBM p-Rom: 1 B 13: 16 RBT, B, TE(F), FT (combed) 32: Pot p-Roman 1 Fab 40A; CBM p-Roman 5 MB, PT SF112: (finds 7) fe corroded lumps 	p-med with residual Roman M1-2/3C
FF019	natural pit - tree-throw? (S of E3)	, , p*•	
FF021	pit/post-hole S edge site	19: CBM p-Roman 4@76-g B PT	p-med/mod
FF022	Ditch	17: glass 1@5g blue-green 18: CBM Rom: 1@17g RBT; p- Roman 2@28g PT	p-med/mod
FF023	Pit	20: Pot p-Roman 1 48D; CBM p- Roman 7 MB	Mod
FF036	post-hole outside E1 entry		
FF040- 1	post-hole between E1, E2		
FF042	natural pit - tree-throw?		
FF043	ditch E-W and \\ to FF1	33: pot p-Roman 3 21?, 40B; CBM 6 RBT; p-Rom: 12 B (unfrogged), PT, PT(?) 1@8g	med-mod?
FF044	natural pit - tree-throw?		
FF045	modern post-hole	 34: pot Roman 5; p-Roman 1 Fab 40; CBM p-Roman 6 PT; clay pipe 2; fe nail SF 16: (finds number 21) ae needle Crummy type 3, Roman SF 15: (finds number 22) small dressmaker's pin - late med - modern 	p-med/mod; 17-18C
FF047- 9	pit/post-hole		Undated
FF050	modern post-hole	23: pot Rom/p-Roman 1 red sandy DJ or poss Fabric 40?	mod with residual Rom/p- med; 17-18C
FF051	modern post-hole		Modern
FF052	modern post-hole	24: pot Roman 1; CBM Roman 1	modern with residual Roman 1-2/E3C

FF053- 4	modern post-hole		Modern
FF055	pit/post-hole		Undated
FF058	pit cut by E2 enclosure ditch FF11		undated – prehist?
FF059	natural pit - tree-throw?		
-60			
FF061	pit/post-hole		Undated
FF062	ditch (contins as F65? which cuts F80 If so, this must be Roman, and the pre pot residual.	27: pot preh? 1@ 3g grog-temp (residual?)	Roman
FF063	natural pit - tree-throw?		
FF064	pit/post-hole	29: pot Roman 1; fired clay	Rom
FF065	ditch (contins as F62?)		Roman
FF066	pit/post-hole	30: CBM p-Rom? 1@4	p-med/mod?
FF068	stake-hole cut by ENC 1 ditch FF56)		
FF069	post-hole: fence 4 (larger than other stakes)		
FF070	natural pit - tree-throw?		
FF071	zig-zag training ditch	35: pot p-Roman 5 Fab 40 48D date 1873; CBM Roman 7; p-Roman 39 B, PT; glass 1 base mod	modern 19C+ with residual Roman
FF074	large ditch = F79, cuts F80		post-Enc 3 (later Roman)
FF075	ditch, E/W, cut by Pmed ditches F1 and F43		Roman?
FF077	natural pit - tree-throw?		
FF078	post-hole outside E2 ditch F295		
FF079	large ditch = F74, cuts F80		post-Enc 3 (later Roman)
FF088-	post-hole, S1 (inner circuit)		
97	including poss repairs		
FF184	'Sausage-shaped' feature parallel with post-medieval ditch F1		post-medieval, presumably
FL003		51: pot Roman 1@8g Fabric GX	Rom

Table 11.6: Site F contexts not in any enclosure

The Roman period and the end of Enclosure 3

Enclosure E3 was put out of use when ditches FF74/FF79 and FF65 cut enclosure ditch FF80. Although neither ditch contained any finds, at least FF74/FF79 must be of the Romanperiod because it was cut by a large Roman E-W field ditch FF7. The following sequence may be suggested:

early-mid Roman E3 put out of use by FF74/FF79 and FF65. mid Roman: use of ditches FF74/FF79 and FF65. mid-late Roman: field ditch FF7 cut across FF74/FF79

It is suggested above that E3 was an animal enclosure with an internal hut (perhaps used as a byre or lambing hut by sherpherds), in which case the changing sequence of ditches indicates a developing agricultural landscape in the Roman period. FF7 was intercepted in Site G below (as GF1), can be traced in GAL Site G to the west and continues to the east where it is approximately at right-angles to a NS ditch intercepted in Site D and E (as DF2 and EF8). This shows that elements of the Roman-period landscape were aligned approximately NS-EW.

Anglo-Saxon (AS) and medieval

There were no AS features or finds.

Post-medieval/modern activity

Shallow ditches in the southern half of Site F (FF1 and FF43) were probably agricultural.

As Site F coincided with the old parade ground, the post-medieval remains were not principally building foundations, but service runs (drains, communications, etc). These were not numbered, and are shown as grey tone on Fig 10. The exception to this was a backfilled cellar (FF2), the remains of a building demolished during the remodelling of MHB in the mid-1960s.

There was also a continuing E/W line of square-cut pits which are probably lighting stanchion foundations. Only one was excavated (FF45) but they are the same as excavated examples on Site E (EF16 and EF23). Though these pits were clearly modern, curiously they contained substantial amounts of residual Roman material.

The most interesting post-medieval feature was the zig-zag trench FF71. It was deep, straight-sided and flat-bottomed, and contained modern glass and re-deposited natural sand and gravel. This was undoubtedly a WWI training trench, of the type excavated previously at GAL Area F in 2002 (CAT Report 246). A fragment of a zig-zag trench on the same alignment in Site E may suggest a discontinuous line across the northern part of the MHB parade ground. On Site E it was 33m of trench (but in zig-zag, only 15m W - E), 1.2m wide and 0.75m deep.

In the northern half of the western side of Site F was a row of features - FF47-FF55. These appear to mark divisions within MHB, and were very probably fence posts.

Evaluation F62, a post-hole containing a peg-tile fragment partly cut into LIA ditch FF10.

Other

The following are undated features whose profiles and leached-out fills indicate a natural origin, possibly as tree throws?. However, the charcoal flecking in some of their fills may be evidence of tree felling and stump removal as part of land clearance for agriculture: FF19, FF39, FF42, FF44, FF59, FF60, FF63, FF70, FF77, FF296.

Significant features in 2010 evaluation trenches close to Site F.

There were some features in evaluation trenches which either partly coincided with Site F, or were close to it. These are tabulated and discussed here.

T24 featu	T24 features outside Site F			
Context	Description	Finds	notes and dating	
F013	p-hole	CBM 1@15g	med/p-med/mod (p-tile)	
F014	Ditch	pot 1@6g	mod, pottery dated 19-20C	
F016	p-hole	metal Ae button SF 1; fe nail	p-med?/mod	
F018	pit/p-hole	CBM 3@23g	Rom	
F019	Pit	pot 3@26g: CBM 9@152g	p-med/mod, pottery dated 17-18C	

Comment

T24 was a long trench overlapping with Sites E and F. Features between Sites E and F have already been discussed above in the Site E discussion. The only significant find was a ditch T24 F3 which contained a prehistoric flint and may therefore be prehistoric in date. The other features were not thought to be significant.

T34 featu	res outside Si	te F	
Context	Description	Finds	notes and dating

	F038	Pit	p-med?/mod pot, CBM ; clay pipe; slate ; w flint; bt flint; SF 14 fe obj	17-18C
ĺ	F039	post-hole		
	F040	ditch?	CBM 1@4g	Rom
	F043	Linear	CBM Rom; lava guern (SF12)	Rom

Comment

There were four features in T34 which were not also in Site F. At the south end of T34 was a pst-medieval pit F38, an undated post-hole F39 and a Roman curved ditch or gully F40.

11.7 Site F finds reports

by Stephen Benfield

11.7.1 Enclosure 1

From the fill of the enclosure ditch (FF56(25)) there is just a single, small sherd of grogtempered Late Iron Age pottery (3g). A few finds might be associated with the enclosure as they come from pits located within it. Excluding finds of post-medieval CBM (FF37(15)), there is a small sherd of Late Iron Age grog-tempered ware (Fabric GTW) (1g) from FF12(9) and single sherds of Roman pottery (Fabric GX) (7g) from FF4(4).

11.7.2 Enclosure 2

There are no finds from the ditches of this probable enclosure. The only find which might be associated it is a small piece of abraded CBM (12 g), which is probably Roman and comes from a pit situated within the enclosure area (F298(54)).

11.7.3 Enclosure 3

There are very few finds associated with the enclosure. The latest dated of these suggest a possible Roman date for the ditch and for one or two pits located inside. The finds are very few in relation to what might be expected for a Roman period site and might be either intrusive or residual (one of the Roman sherds is abraded). This, combined with an absence of later dated (post-Roman) finds could suggest a prehistoric date. However, there is little in the way of earlier dated finds which might help to confirm this other than a few sherds of prehistoric pottery and a worked flint from the enclosure ditch which might themselves be residual.

The few finds that can be directly associated with the enclosure come from the ditch (FF80 (41, 46, 47 & 49)). There are three sherds of prehistoric flint-tempered pottery (6g) and a worked flint; also two small sherds of Roman greyware (Fabric GX) (3g), dated *c* mid 1st-4th century AD, which are the latest closely dated finds. A single iron nail (SF22), which is likely to date to the Roman period or later, was also recovered from the ditch fill.

A few pits located within the area of the enclosure and which therefore might be associated with it, also produced a small number of finds. The finds can either be dated as Roman or are most probably Roman. There are two sherds of greyware pottery (Fabric GX) (7g) dated *c* mid 1st-4th century AD (FF149(43) & FF167(45)), although one of these sherds might possibly be medieval (FF149), and a small piece of Roman tile/brick (FF109(42)) (5 g). The only other find from these features is a small piece of undated fired clay from FF72(36).

12 Site G (Figs 1, 2, 15, 95)

12.1 Site aims

Site G (size: 400m²) was originally designed as a single 50m x 12m area, but was split into two parts following agreement with CBCAO in order to retain vehicle access for demolition plant. Site G was positioned to follow the line of E/W-aligned ditch F136/F143 found in 2010 evaluation T32 and T26 respectively, and also investigated in Area F to the east (where it was numbered FF7). The discovery of a Roman inhumation in 2002 T10, 60m to the west, also opened up the possibility that Roman burials would be found here.

Context numbers preceded by 'F' relate to evaluation stage (ie, 2010), whereas those excavated in 2011 are prefixed GF.

12.2 Site G summary

The main significant features in Site G were two intercutting possible graves (undated, but presumed to be Roman: GF4/6), and the expected E/W-aligned ditch GF1 which is the same ditch as FF7 in Site F (above). There was also a Roman gully (GF03). Despite the presence of the Roman features, Site G was dominated by the foundations of now-demolished barracks buildings. There were no prehistoric, Anglo-Saxon, or medieval features or finds. There were a few residual Roman finds.

12.3 Concordance between excavated Site G, and 2002/2010 evaluation trenches

2002: None (T8 was between the two parts of Site G). **2010**: Trench 32 coincided with Site G.

Trench no	area of trench within excavation site G	T32 archaeological features within Site G	area of trench outside Site G	T4 features outside Site G
T26	approx 15.8m	F134, F136, F138	approx 9m2	F137
T32	approx 33.25m2	F143, F147	approx 92m2	F140-142, F149

12.4 Site G contexts and key finds dates

Context	type	dated finds	Period
GF01	ditch (eval F136)	1: pot Roman 1; p-Roman 1 Fabric 21; CBM Rom: 2 RBT; PT? 2: CBM undated	med (or later?) 13-14C? later PT?
GF02	post-hole in ditch GF1		
GF03	gully	3: pot Roman 1@4g Fabric GX	Roman
GF04	grave	4: stone 1 tufa	Roman
GF05	pit cut into GF6		Undated
GF06	grave cut into GF4		Roman
GF07	pit		Undated
GF08	modern foundations	6: CBM Roman 3@256 p-Rom: 2@126g B, PT; ?coal 2@19g slate 1@2g	p-med/mod
GF09	pit		Undated
GF10	pit	5: CBM p-Rom: 1 B; (also mod fe wire & nails -discarded)	p-med/mod
GF11	natural pit		-
GF12- 14	stake-hole		Undated
GF15	natural pit		

Context	type	dated finds	Period
GF16	trench into F8		
	T26 features whi	ch coincided with Site G	
F134	natural feature	-	-
F136	ditch	-	undated, but possibly overcut part of Roman ditch GF1
F138	ditch or pit	mod quarry tile; clay pipe bowls, fe nails	post-med ditch or pit (part of)
	T32 features whi	ch coincided with Site G	
F143	linear	pot 2@23g stone 1@44g	Roman (note: 1 sherd poss med L12-13C)
F147	ditch	pot 1@7g stone 2@445g greensand, burnt? Fe obj SF 6 ?post-med; nail 1@3g	?post-med (pottery Roman, 1- 2/3C)
	T26 finds which	did not coincide with Site G	
F137	pit	med pot , 12th-13 th	medieval
	T32 finds which	did not coincide with Site G	
F140	linear	pot 11@395g	mod, one pot 1939
F142	p-hole	CBM 3@833g	Rom
F149	trench	pot 2@4g glass, mod green 1 @ 25g	mod (mod glass)

Table 11.1: Site G contexts and dated finds

12.5 Site G interpretation

Context numbers preceded by 'F' relate to evaluation stage (ie, 2010), whereas those excavated in 2011 are prefixed GF.

Prehistory

There were no prehistoric features or finds.

Roman

There are two or perhaps three phases of Roman activity. The first is represented by a curved gully GF3, dated by a single sherd of Roman greyware. The gully was slightly curved, but not enough to indicate that it may have been a circular structure like a ring-ditch.

The second Roman phase is marked by the digging of an E/W-aligned ditch GF1, which crossed both parts of Site G (a distance of 51m). It was 1.9m wide and 0.3m deep. Given the common alignment, it can be supposed that this was a continuation of Roman ditch FF1 in Site F, to the east, and also of ditch F31 in T35 (to the east of Site F), giving a total length of ditch of approximately 160m. This ditch would appear to be an axial agricultural land division. However, there are intrusive medieval sherds and medieval or later peg-tile fragments in its fills (perhaps suggesting the boundary remained in use as a hedged boundary in later periods).

On the basis that graves aligned with a ditch probably post-date it, a third Roman phase may be indicated by the digging of two intercutting graves, GF4 cut by GF6. There were no human remains, coffin nails, or grave goods in these graves, a piece of tufa being the only find from either. One nearby pit GF5 is close enough to have been a grave marker to GF4. A similarly-sized but isolated pit 5m to the north is of unknown function (GF7)

Other Roman features consist of a cluster of post-holes on the northern side of ditch GF1 (GF9, GF12-14) and one cutting ditch GF1 (GF2). These may form a short fence of unknown purpose, possibly for stock management.

Anglo-Saxon

There were no AS features or finds.

Medieval

There were no medieval features. Two sherds of ?medieval pottery in ditch GF1 and the same feature (F143 in evaluation T32) are regarded as intrusive here.

Post-medieval/modern activity

The post-medieval and modern features are military, and of no particular significance (such as the modern rubbish pit GF10). The only interesting military feature was GF8. Excavation of this feature at evaluation stage (as F147 in T32) revealed wood staining, indicating that there may have been wooden shuttering of some type, indicating a potential use as WWI training trenches, or slit trenches associated with anti-aircraft precautions. F140 in evaluation T32 produced a transfer-printed NAAFI mug (the NAAFI not being founded until 1921) showing that this feature (and indeed much of the post-medieval/modern material here) is associated more with WWI than with WWI.

Other

GF11 was either a natural tree-throw pit or the result of deliberate stump removal as part of land clearance for agriculture.

13 Site H (Figs 1, 2, 16, 64-75, 95)

13.1 Site H aims

Site H (size: 165m²) was positioned to intercept the western continuation of the line of Roman field boundary ditch found in 2002 evaluation T10 (ie, AF1004), and in 2012 evaluation T26 and T32 (F143), and explored in the current excavation in Site G (GF1).

Site H was also located as close as possible to the position of the Roman inhumation burial found in 2002 at the western end of 2002 evaluation T10 (which was approximately 10m east of the eastern edge of Site H), and to investigate the junction between the Roman Mersea Road and the above field boundary ditch.

Context numbers preceded by 'F' relate to evaluation stage (ie, 2010), whereas those excavated in 2011 are prefixed HF.

13.2 Site H summary

Site H contained thirty-one grave cuts, seventeen with potential human remains and only one with grave goods. The graves are not closely dated. The absence of coffin nails, hobnails and wood-stains so indicative of Roman burials in Colchester may indicate that an early Anglo-Saxon date is as valid as a later Roman date. However, the graves are regularly aligned E-W, which perhaps indicates a Christian ritual.

Three large N-S ditches, two of which may define a field corner, cut through nine of the graves. It is possible that some of the N-S aligned graves post-date these ditches, and were aligned upon them.

13.3 Concordance between Site H, and 2002 / 2010 evaluation trenches None.

13.4 Site H contexts and dating

nodataHF001E-W grave3: pot Roman 3@6 Fabric DJ, GX, abr: 1 fe small nail or tackwhole skeleton (poor preservation)Roman 3@6 (poor preservation)HF002E-W gravecuts HF3lower limbs partial upper limbsHF003E-W gravecut by HF2noneHF004E-W graveprobably cut by ditch HF13. Cuts HF68: pot Roman 1@28g Fabric HZ LIA/E Romupper, lower limbs, skull (poor preservation)HF005post-hole10: pot Roman 1@63 Fabric DJlower limb fragments (poor preservation)HF007post-hole11: CBM p-Roman 6@242g MMod	A/Rom
HF002E-W gravecuts HF3Fabric DJ, GX, abr: 1 fe small nail or tack(poor preservation)HF003E-W gravecuts HF3Iower limbs partial upper limbsIower limbs partial upper limbsHF003E-W gravecut by HF2noneHF004E-W graveprobably cut by ditch HF13. Cuts HF68: pot Roman 1@28g Fabric HZ LIA/E Romupper, lower limbs, skull (poor preservation)LI/ Import and the second	A/Rom
HF003E-W gravecut by HF2noneHF004E-W graveprobably cut by ditch HF13. Cuts HF68: pot Roman 1@28g Fabric HZ LIA/E Romupper, lower limbs, skull (poor preservation)LI/ LIA/E RomHF005post-hole	oman 1-
HF004E-W graveprobably cut by ditch HF13. Cuts HF68: pot Roman 1@28g Fabric HZ LIA/E Romupper, lower limbs, skull (poor preservation)LiHF005post-hole	oman 1-
ditch HF13. Cuts HF6 1@28g Fabric HZ LIA/E Rom limbs, skull (poor preservation) HF005 post-hole Imbs, skull (poor preservation) HF006 E-W grave cut by HF4 10: pot Roman 1@63 Fabric DJ lower limb fragments (poor preservation) Ro 2/3 HF007 post-hole Imbs, skull (poor preservation) Ro 2/3 HF008 mod peg-tile Imbs, skull (poor preservation) Ro	oman 1-
HF006 E-W grave cut by HF4 10: pot Roman 1@63 Fabric DJ lower limb fragments (poor preservation) Ro 2/3 HF007 post-hole 11: CBM p-Roman 6@242g M Mode	
HF007 post-hole 1@63 Fabric DJ fragments (poor preservation) 2/3 HF008 mod peg-tile 11: CBM p-Roman 6@242g M Model	
HF008 mod peg-tile 11: CBM p-Roman Mo 6@242g M	
6@242g M	
	bc
HF009 E-W grave skull fragments	
HF13 CBM Rom: 1@296g fragments, skull Ro RBT (poor preservation)	oman ?E om
HF011 E-W grave cut by ditch lower limbs HF13 Iower limbs Interview Interview	
1@31 Fabric DJ; Ro CBM Rom: 1 RBT 2/3 22: CBM Roman (m 2@113g FT 20 (combed) RBT int 51: pot preh 1 HMF; LIA/Roman 4: p- Roman 3 Fab 20, 40, 48D; CBM Rom: 13 RBT, FT; p- Roman 1 PT	oman L1c+ oman ?1- 3C nod 19- 0C – trusive)
	oman 1- E3C
HF014 grave cut by ditch skull fragments HF12	
HF015 E-W grave none	
HF016 E-W grave cuts HF31 and lower limbs HF35	
HF017 E-W grave upper limbs	
(poor preservation)	
HF018 E-W grave lower limbs	
HF018 E-W grave O25: pot Roman HF019 ditch 025: pot Roman 1@5g; ?p-Roman 1@5g; ?p-Roman 1@8g Fabric 20 Ro 026: CBM 3@82g pro Rom; unident 1@25 int	obably oman (p- om obably trusive)
HF018 E-W grave Information HF019 ditch 025: pot Roman 1@5g; ?p-Roman 1@8g Fabric 20 026: CBM 3@82g product 026: CBM 3@82g Rom; unident 1@25 int	oman (p- om obably

Context no	description	relationships	finds and dates	human bone	Context date
			1@27g		
HF022	E-W grave	cut by ditch HF12		lower limbs	
HF023	grave	cut by ditch HF13	028: pot p-Roman 1@13g Fabric 13 rim	none	med? 11/12- 13C (probably intrusive)
HF024	pit or grave marker		037: CBM Roman 1@420g RT(F) abr		Rom
HF025	E-W grave			upper limbs, pelvis, skull fragments (poor preservation)	
HF026	E-W grave		SF 26: ae ring; SF 27: ae armlet; SF 28/SF29: fe knife: SF30-33: fe obj frags	upper limbs? (poor preservation)	
HF027	E-W grave		040: pot Roman 2; w flint 1 flake	upper, lower limbs (poor preservation)	Roman 1C
HF028	E-W grave			pelvis fragments	
HF029	E-W grave		043: pot preh 2@13g HMF	none	preh
HF030	pit		048: pot Roman 1@3g RCW/GX		Roman prob E Rom
HF031	E-W grave	cut by HF16		lower, upper limb fragments (poor preservation)	
HF032	E-W grave	cut by ditch HF12		none	
HF033	N-S grave		049: pot preh 1 HMF; Roman 1; w flint 1; CBM Roman 1	none	Rom
HF034	E-W grave		046: nat flint discarded	whole skeleton (poor preservation)	
HF035	E-W grave			none	
HF036	post-hole or grave marker				
HF037	N-S grave			none	
HF038	E-W grave	cut by ditch HF13	050: pot Roman 1@3 Fabric GX; CBM p-Rom: 1@65g PT (intrusive?)	fragmented bone (poor preservation)	Roman
HF039	N-S grave		· · · · · · · · · · · · · · · · · · ·	none	
HF040	grave	cut by ditch HF13		none	
HF041	pit				
HL1	road surface and base				modern
HL2	buried plough soil				post-Roman
HL3	natural sand and gravel				-

Table 12.1: Site H features and dating

13.5 Site H discussion

Context numbers preceded by 'F' relate to evaluation stage (ie, 2010), whereas those excavated in 2011 are prefixed HF.

13.5.1 Prehistory

There were no prehistoric features, but two prehistoric flints and three prehistoric sherds were residual in Roman grave cuts HF27, HF29, and HF33, and one prehistoric sherd in ditch HF12.

13.5.2 Late Roman cemetery

Site H contained thirty-one grave cuts, aligned principally E-W. Only seventeen contained human remains, some in a very poor state of preservation. To summarise Julie Curl's report (below section 16.9), the burials were of:

1 mature maleHF11 adult maleHF221 sub-adult/adult ?maleHF41 young adult ?femaleHF141 mature (unsexed)HF345 adults (unsexed)HF2, HF10, HF11, HF16, HF241 Juvenile/sub-adult (unsexed)HF25

The graves are not closely dated, the only finds being residual flints and pottery (prehistoric, LIA). Only one grave (HF26) contained grave goods (a bronze ring, bronze armlet, and iron knife). None contained wood stains or coffin nails, or hobnails. The E-W alignment of the graves and the general absence of grave goods is indicative of a later Roman, Christian period burial group, 4th century or later (similar to the Butt Road Roman cemetery Period 2 - 320/340- 400 and later: *CAR* **9**). However, the general lyout of the cemeterry and particularly the absence of coffin nails and wood-stains so indicative of Roman burials in Colchester may alternatively indicate that an early Anglo-Saxon date is as valid as a later Roman date. Whether the burials are late Roman or early Anglo-Saxon, the Roman pottery in the fills of HF6 (dated 1st-3rd century Roman) and in HF1, HF27, HF10, HF33 (dated Roman) is all residual.

Apart from the graves, there were a number of pits and post-holes. HF36, on the southern edge of grave HF35 and pit HF24, central over grave HF25, may have been grave markers. Post-holes HF5 and HF7 were not well placed to have been grave markers, but serve no obvious function. None of these were dated, except HF24 which contained Roman pottery and CBM (probably all residual). Pits HF10 and HF41 were not of an obviously grave shape, and would be (superficially) of unknown function (in the context of a cemetery). However, given that the Roman pottery and CBM in the grave fills is probably all residual, it may be that pits HF30 and HF41, and post-holes HF5 and HF7 are part of a pre-cemetery phase.

An E-W Roman burial (AF1002) located by 2002 evaluation trench T10 (CAT Report 206, 8), only 12m to the east of Site H is very probably part of the same cemetery. There were two more Roman graves in Site G, which is 110m to the east. They were part of the same cemetery, and are typical of the occasional burals recorded within the agricultural landscape at Colchester Garrison (eg, Site 6 of the New Garrison project – CAT/RPS Report 292, and Area Q of the GAL project – CAT Report **412**).

Although this cemetery is only 100m NE of the small enclosed Roman farmstead excavated at GAL Site E (the old football pitch west of the Roman (Mersea) road), that enclosed farmstead had its own cemetery (excavated in 2013). Therefore the Site H cemetery must belong to another local community whose location is not known.

Roman ditches

The Roman ditch excavated in Site G to the east is aligned with the northern end of ditch HF13 (and with the presumed line of ditch HF9 which, running parallel with HF13, may also have an western return immediately inside ditch HF13. The point of interest here is that the ditches running E-W across what is now MHB turn sharply to align themselves along the Roman (Mersea) road. The fact that some of the Roman field ditches on Site A1 do not share the alignment with Mersea Road (for instance, 160m-long ditch running throufg Site K (KF17), T12 (F213), and Site C (CF151, CF182) may show that there are several phases of Roman field boundaries here. However, it is equally possible that curving ditch HF12 (which terminates within Site H close to the presumed edge of the Roman road) was the same ditch as found in Site G and Site F (ie, GF1 and FF7).

13.5.3 Medieval ditches

The Roman cemetery was cut by two ditches which appear to define a double-ditched field corner – HF13 as the outer circuit and HF19 as the inner circuit. From north to south, HF13 cut graves HF11, HF4, HF10, HF38, HF40, and HF23. If the argument above (that the cemetery is late Roman) be accepted, then the ditch must be latest Roman or post-Roman. Whereas an Anglo-Saxon date would be attractive, the presence of medieval pottery and pegtile fragments in ditch HF19 must be a strong indication that the ditches are medieval or later.

However, if the later finds in HF19 are intrusive, then it may be the case that an early phase of these ditches is Roman - perhaps HF12 (connecting with GF1 and FF7 to the east), and HF13/HF19 give an entry to the Roman fields to the east prior to the establishmet of the cemetery. It may then be later recuts of these ditches which cut the Roman graves.

13.5.4 Post-medieval ditch

At the north end of Site H, a large ditch HF12 cut Roman graves HF14, HF22, HF16, HF35, and HF32. HF12 contained residual prehistoric and Roman finds, as well as post-medieval red earthenware (Fabric 40) and modern ironstone fabric 48d (19th-20th century). A post-medieval date for this ditch seems certain.

13.5.5 Modern activity

There appears to have been extensive truncation on Site H, probably connected with reduction of levels for Mersea Road, and with battering back for the barracks wall.

A number of relatively unimportant modern features cut the Roman and later features. These were infrastructure associated with the retained officers mess buildings (such as drainage, and communications trenches).

13.6 Site H finds reports: inhumation burials

Very few finds were recovered from the graves, and almost all were residual in the grave fills.

The only finds which were placed with a burial and are contemporary with it is a group of poorly-preserved copper-alloy and iron objects found at the head end of this uncoffined female inhumation located in the north-west corner of Grave HF26 (SF26-33). These included an iron knife with a wooden(?) handle, a copper-alloy finger-ring and two iron rings, at least one of which was threaded over a probable iron armlet fragment, while some copper-alloy wire fragments may be from a distorted penannular brooch or a wire armlet. Traces of textile on some of the iron fragments are all that survive of a cloth bag or a piece of fabric use to wrap the objects. More detail in Nina Crummy's report (Section 18.7 below).

Armlets and jewellery such as rings are more common among late Roman inhumations but while knives are known from some inhumations dated to the late Roman period they are more

commonly associated with Anglo-Saxon burials (although they are also found in similarly ordered late Roman graves at Lankhills, Winchester (Booth, Simmonds, *et al*, 2010).

The finds from grave fills consist of flints and pottery sherds of prehistoric and Roman date. A few of the Roman sherds can probably be more closely dated to the 1st century (Fabric RCW) and 1st-3rd century (Fabric DJ). Although all of the Roman pottery is residual, the absence of later dated finds does indicate that these burials are either Roman or slightly later in date. An iron nail was recovered from grave HF1, but none of the burials contain coffin nails. So if any coffins were originally present they must have been entirely of wood.

Residual finds from fill of graves:

HF1(3) Pottery *Roman* 3 sherds 6 g Fabric DJ Fabric GX. Complete iron nail with round convex head, length 37 mm
HF6(10) Pottery *Roman* 1 sherd 63 g Fabric DJ.
HF10(12) Pottery *Roman* 1 sherd 3 g Fabric RCW/GX. CBM *Roman* 1 piece 296 g.
HF21(26) Fired clay 1 piece 27 g.
HF23(28) Pottery *post-Roman* 1 sherd 13 g Fabric 13.
HF27(40) flint single flake (prehistoric).
HF29(43) Pottery *Prehistoric* 2 sherds 13 g Fabric HMF.
HF33(49) flint single flake (prehistoric)

14 Site I (Figs 1, 2, 17, 95)

14.1 Site I aims

Site I (size 75m²), was positioned on the western edge of Area A1 to investigate the E/Waligned Roman ditch found in 2010 T47, and to explore its connection with the Roman (Mersea) Road and with the N/S-aligned ditches on Site H to the north.

14.2 Site I summary

Site I contained the expected Roman ditch and two undated natural features (which were probably tree-throw pits).

14.3 Site I Concordance

Concordance between excavated Site I, and 2002 evaluation trenches: None

Concordance between excavated Site I, and 2010 evaluation trenches

Trench no	area of trench within excavation site I	T47 archaeological features within Site I		T4 features outside Site I
T47	9.5 x 2m	F113, F114	48 x 2m	F118

14.4 Site I contexts and dating

Context no	description	finds	context date	
IF001	shallow E/W ditch(eval F113)	tile (imbrex) (not kept)	Roman	
IF002	shallow irregular pit – tree throw?	-		
IF003	shallow irregular pit – tree throw?	-		
IFL01	tarmac surface and sub-base		modern	
IFL02	buried plough soil		post-Roman	
IFL03	natural		-	
	T47 features which coincided with Site I			
F113	ditch	Rom pot 3@7g, 2-3C: CBM 1@4g	Roman	
F114	natural pit	-		
	T47 features which did not coincide with Site I			
F118	pit	Rom CBM 1@54	Roman	

14.5 Site I discussion

Context numbers preceded by 'F' relate to evaluation stage (ie, 2010), whereas those excavated in 2011 are prefixed IF.

14.5.1 Prehistory

There were no prehistoric features or finds.

14.5.2 Roman

A field ditch IF1 ran E-W across Site I. It was intercepted in the 2010 evaluation as F113 in T47. It appears broadly to follow the E/W grid of Roman fields at the Garrison, although some (earlier?) ditches seem to differ from that alignment. There was a Roman pit (IF118) 36m north of ditch IF1, at the northern end of T47

14.5.3 Anglo-Saxon, medieval, post-medieval

There were no features or finds of these periods.

14.5.4 Post-medieval/modern

There was one modern drainage or communication feature on the eastern site edge.

14.5.5 Other

IF1 and IF2 were undated. Their profiles and leached-out fills indicate that they are probably of natural origin (tree-throw pits?).

15 Site J (Figs 1, 2, 18, 18a, 20, 77-81, 96-7)

15.1 Site J aims

Site J (size:1465m2, plus three extra trenches 130m = 1595m2), was positioned to provide further context to what, due to its scale, was initially thought to be a quarry, when encountered beneath the foundations of a 19th century garrison prison block in evaluation trench T62. However, the feature turned out to be a late Iron Age to early Roman dyke. The aim was to examine its extent, date, form, function and landscape context.

Context numbers preceded by 'F' relate to evaluation stage (ie, 2010), whereas those excavated in 2011 are prefixed JF.

15.2 Site J summary

Site J was dominated by the highly significant discovery of a new part of the late Iron Age Berechurch Dyke (now referred to as the 'Hyderabad Sector' of the Berechurch Dyke) that appears to have defined the north-east side of the Camulodunum territorial oppidum (Fig 18a). The section of dyke extends the Berechurch Dyke by *c* 1.0km north of its previously known extent at Colchester Cemetery. Two sections hand excavated through the dyke revealed finds supportive of the conclusion that the ditch was probably a late Iron Age, rather than an early Roman, creation. The ditch then gradually silted up from the early Roman period up to and including the medieval period. An interesting finding is that some of the fill seems to have been dumped from an adjacent occupation site on the southern side of the dyke. This material may imply the abandonment, or deliberate removal, of this settlement, with clearance debris tipped into the adjacent ditch, Nevertheless, the dyke was clearly contemporary with the settlement to begin with. Remarkably, inserted into the Roman period central fills was a hoard of 1244 *antoniniani*, the latest being an *antoninianus* of Tetricus I, AD 271-4. This represents one of a very few such hoards recoverd from a secure context during an archaeological excavation, rather than via metaldetecting.

There were also large foundations of the barracks prison on the site along with service runs, and a number of modern and earlier pits (Plate 15.1, below).



Plate 15.1 Brick foundations of the miltary prison foundations over the Iron Age dyke (R Masefield).

15.3 Site J concordance

Concordance between excavated Site J, and 2002 evaluation trenches None

Trench no	area of trench within excavation site J	T61/62 archaeological features within Site J	area of trench outside Site J	T61/2 features outside Site J
T61	32.5m	F84 (modern foundations), F91 (post-medieval post-pit), (F97 (Roman 'quarry pit' = the dyke)	15m	F81 (medieval pit or tree- throw pit)
T62	20m (all of it)	F92 (edge of dyke ditch), F96 (post-medieval ditch)	none	none

Table 15.1Concordance between excavated Site J, and 2010 evaluationtrenches

15.4 Site J contexts and key dating

Context no	Description	Dated finds	Context date
JF01	Brick foundation of provost prison	•	1860 - Modern
JF02	dyke	 006: bt stone 4 @62 flint 010 (surface clearing equivalent JL04): 115 Roman Purbeck marble? veneer 010: pot p-Rom 17 20 21, 40 40A 45D; CBM 30RBT RI RB RT(F) mammata tile; p-Rom 4 PT; clay pipe 1 glass p-med 2@16; slag 1 smithing hearth base?; fe nail shaft 013: pot Rom 15 sherds from coin hoard pot 1 & pot 2 025: pot LIA-Rom 6; stone 2@198g sep 030: slag 1 faintly magnetic, smithing hearth base? 039: clay pipe 1@1g stem; CBM Rom 4 RBT; stone 7 sep; fe nail 040: pot Rom 4; P-Rom 16 20, 40 45 48D; c pipe 5; CBM Rom 1@26g Tess; p-Rom: 7@215g PT; glass 4 p-med-mod 040:CBM Rom 9 RBT TE; p-Rom 5, PT : 3 fe nails 	p-med/mod 17-18C Rom see JL5 145 & 15) Rom with residual LIA p-med/mod mod med-p-med/mod
JF03	small cut into dyke fills sealed by upper fills	011: pot preh? 1 prob LIA/Roman; pot LIA 2; briq 1@6g	LIA?
JF03 or JL05		012: pot LIA-Rom 4; fired clay 1; briq 9 014: 021 ag Coin hoard. M-L3c (1244 coins)	LIA?/Rom
JF04	Brick foundation (1860 OS as workshop / stores)		
JF05	modern pit	037: pot preh 1 HMF; Rom 4; CBM p-Rom: 3 B, PT; prob mod paving	mod with residual Roman
JF06	modern post-hole	-	modern
JF07	modern post-hole	wood frags and brick (not retained)	modern
JF08	post-hole	038:CBM p-Rom: 1@9g PT	p-med/mod
JF09	post-hole/ pit	036: pot preh 1@6 HMF	finds are prehistoric Neo-EIA sherd, Modern material is intrusive
JF10	undated pit		Potntially prehistoric
JF11	natural pit		
JF12	natural pit		
JL01	compacted base for REME depot		

Context	Description	Dated finds	Context date
no	· · · · · · · · · · · · · · · ·		
JL02	vehicle laager Agricultural accumulation		
JL03	natural		
JL04	layer representing long period of ?natural infilling of ditch, equivalent to JL14	 001: 019 ae ring, 'diamond' section, 002: 018 thin ae decorative binding strip, from furniture? or box/chest? LIA/Rom 007: 109 fe strip/obj 007: pot Rom 16@262 Fabric BACG (frag), AA D 2-4 handle, Gallo-Belgic TR4 (local) TN, GTW/RCW, GX; CBM Rom: 1@126g FT (combed); briq 1@11g; w flint 1@4g; fired clay 1; fe nail 008: pot preh 1 Neo grooved ware (?); Rom 18; CBM Rom: 8 FT? Fired clay 3@30; w flint 1; bt flint 2; briquetage 2; shell 1 009:pot LIA/Rom 25@260g Fabrics Gallo-Belgic TR Cam 5A, GTW/RCW Cam 266, GX; p-Rom Fabric 45; CBM Rom: 46@4100g RBT; stone 2 flint; briq 1@5g 019:pot Rom 30@229g NGW AA GTW RCW DZ; CBM Rom 14@1826g RB RBT; Fe nail; bt flint 2; briq 10@164g; 3 sep 022: pot Rom 30@303g Fabric TN Cam 2, Cam 56, AJ, AA, GTW Cam 266? RCW GX, DZ DJ; 	samian 2C, tile L1C+ (residual LIA-E Rom) M2C-M3C p-med/mod (intrusive(?)) with LIA/Rom E/M-L1C E/M-L1C
JL05	dump of charcoal-rich domestic debris, equivalent to JL16	 003: 020a ae Rom tweezers; 003: 020b ae Rom toilet spoon; 003: 020c ae Rom suspension loop-poss for toilet spoon?; 005: 023 pb? ball shaped piece 017: fired clay 1@72g perforation at one end 006: pot preh 1 HMF; LIA/Rom 80 ?2C; briq 28@672g; fired clay 9 brick edge; charcoal frags 014: pot Rom Fabric GX, pot with coins (pot 1) Cam 281(<i>capacity approx 1.05 litres</i>) & sherds from pot 2 (see JL5(15), JF2(13)) considered by excavators to be associated with pot 1 015:pot Rom Fabric GX, pot 2 Cam 281 (see JL5(14), JF2(13)) 016: pot LIA/Rom 63@879g Fabrics GalloBelgic, GTW/RCW, GX lid seated form (note 1 piece of waster of kiln furniture); CBM Rom: 16@2328g RBT, FT (combed) (no mortar); stone 16 greensand, sep; burnt flint 2; fired clay 2; briq 15@382g 021: pot LIA/Rom 90@1174g Fabrics AJ, Gallo-Belgic Cam 56 Cam 113, GTW/RCW, HZ; fired clay 2; 4 bt flint; briq 13; 4 fe nails 023: 024 puddingstone rotary quern frag. LIA?-E Rom 027: pot LIA/Rom 120 rim 1C BC (or poss ?ML1C AD); fired clay 4; bt stone 5 flint; briq 24 029: 025 two-pronged fe obj. 032: 114 charcoal 032: pot LIA/Rom 106; fired clay 5; brig 	E-M1C AD ?1 sherd poss Flav-2C M/L2-3/4C coins M-L3C M/L2-3/4c Rom with LIA M-L1C ?pre-Flav pot – E-M1C AD; CBM – combed flue tile late1C+; greensand e-M2C+ LIA/Rom c E- M1CAD/pre-Flav LIA/Rom(?sheepen) LIA (imp MQ/ DJ?) no G-B
JL06	material from bank collapse, or dump?, equivalent to JL06,	11@481g 031: pot LIA 8; stone 1 greensand; bt stone 3 flint quartzite/sandstone cobble; fired clay 5@43 brown/cream	Rom – greensand prob E-M 2C+ with /residual LIA pot
11.07	JL11, JL15		
JL07	layer representing LIA		

Context no	Description	Dated finds	Context date
	vegetation layer (and stabilisation of earthwork), equivalent to JL12, JL17		
JL08	material collapsing from bank? equivalent to JL09, JL13, JL18	035:pot LIA 50; bt stone 4 flint; briq 1@45g	LIA/?E Rom
JL09	material collapsing from bank? equivalent to JL08, JL13, JL18	034: pot LIA/Rom 3; w flint 1@4g flake; briq 7@42g	LIA/?E Rom
JL10	rapid silting of ditch, seals natural JL03, equivalent to JL19		
JL11	material from bank collapse, or dump?, equivalent to JL06, JL15		
JL12	layer representing LIA vegetation layer (and stabilisation of earthwork), equivalent to JL07, JL17		
JL13	material collapsing from bank? equivalent to JL08, JL09, JL18		
JL14	layer representing long period of ?natural infilling of ditch, equivalent to JL04	049: pot LIA/Rom 2 045: pot preh 1 HMF; Rom 7:CBM Rom 44 RB, RBT RI TE RT?; 2 fe ?nail frags 046: pot LIA 1; CBM Rom 6 FT?, RT(F), RB, RBT; bt stone 1 flint: fe nail 048: pot LIA/Rom 8, 87g GTW/RCW Cam 218	Rom E Rom? Rom Rom E Rom/?L1C+ Rom E-M1C
JL15	material from bank collapse, or dump?, equivalent to JL06, JL11	050: pot preh 1; LIA/Rom 2 047: pot preh 1, 8g; LIA/Rom 1, 6g GTW 054:pot LIA/(?)E Rom 11, 208g GTW/RCW 055:CBM Rom: 1, 448g RBT	Rom E Rom? LIA LIA/E Rom(?) Rom
JL16	dump of charcoal-rich domestic debris, probably equivalent to JL05	051: pot LIA/Rom 38, 3 greensand 4200g; pot LIA/Rom 11, 220g; 37, 705g Cam 12, GTW/RC 052: 111 small fe nails/tacks/hobnails 052: pot preh 2 HMF; LIA/Rom 12; w flint 1 blade (Meso/E neo)	LIA?/Rom sheepen ?Rom pre-Flav Rom E2C+ LIA/?E Rom E/M1C LIA/?E Rom E/M1C
JL17	layer representing LIA vegetation layer (and stabilisation of earthwork), equivalent to JL07, JL12	052: 104 fe nail/staple? (presume 52) 053: pot preh 1@7g HMF; LIA 38@724g Fabric GTW; briq 1@73g 056: 105 corroded fe lump	LIA ?Sheepen (stone prob date??)
JL18	material collapsing from bank? equivalent to JL08, JL09, JL13	•	
JL19	rapid silting of ditch, seals natural JL03, equivalent to JL10	055: pot LIA 1@18g Fabrics GTW, (sparse grog); pot prob (dirty) LIA 3@160g Fabrics GTW?	LIA LIA ?Sheepen
US		001: pot Rom 7@82g GX EA; coal 1@12g	p-med/mod residual Roman M/L3-4C
US		(dyke) 043:CBM Rom 3 RBT RT(F); p-Rom 1	mod
US		(dyke) 044: CBM Rom 7@1156g RBT RI; p-Rom 1@73g B	p-med/mod with Rom

Context	Description	Dated finds	Context date		
no					
	T61 features which co	T61 features which coincided with Site J			
F084	group number for modern foundations	CBM 1@13g	med/p-med/mod (p-tile)		
F091	p-hole	CBM 1@92g: stone 1@65g glass , post-med bottle impressed with lettered seal 1 @ 17g,	p-med/mod (brick, glass)		
F097	Pit	pot 11@61g: stone 18@1368g: CBM 27@3166g: bone 7@23g: mortar 1 @ 8g lava quern 1@352g (SF11	p-med/mod		
	T62 features which coincide with Site J				
F092	ditch?	pot 8@125g	Rom, pottery dated M1-E2C		
F096	Linear	CBM 1@13g	med/p-med/mod (p-tile)		
	T62 features which do not coincide with Site J				
F081	pit or tree-throw pit	pot med 2@10g, L12-13th cent w flint blade 1 @ 10g	med, L12-13C		

Table 15.2Site J contexts and dating

15.5 Site J discussion and phasing

Context numbers preceded by 'F' relate to evaluation stage (ie, 2010), whereas those excavated in 2011 are prefixed JF.

15.5.1 Prehistoric period (pre-Iron Age)

There was a sherd of prehistoric pottery in post-hole JF9. However, given the location of this feature close to similar-looking but modern features JF8 and JF5, it is quite likely that this is a modern post-hole with a residual prehistoric sherd. Evaluation T62 F81 (just north of Site J) contained a residual flint blade.

There were ten pre- late Iron Age prehistoric sherds in the fill of the LIA dyke ditch JF2, a flint flake and a burnt flint. The only sherd which could be more closely-dated was a possible Neolithic Grooved ware sherd from JL04, which is the top fill of ditch JF02. These sherds, while not numerous, demonstrate activity here before the construction of the dyke.

15.5.2 Late Iron Age and Roman dyke

The main feature of this period, and indeed of all of Site J, was the large ditch JF02, which ran the length of the Site J, before turning to the SW at its western end. Its location and the southward extension return at its western extent indicate the probability that this is an extension of the Berechurch Dyke (ie, the 'Hyderabad Sector'). The southern return was defined by three additional trenches designed to establish the alignment of the dyke to the west of the main excavation (see Fig. 2). The importance of this new dyke and inferences which can be drawn from it are discussed further below.

Introduction

Following the evaluation what had initially been thought to be a Roman quarry in the east area of sub-site J and a Late Iron Age to early Roman ditch in the west area, turned out to be the same very large ditch (JF2). The impressive dyke-sized ditch was some 2.7m deep and 7-9m wide, aligned north-east-east/ south-south-west for over 60m from the direction of the River Colne to the east, before turning a c.125 degree corner at its western extent, and continuing south-south-west for over 25m towards the southern boundary of the former Hyderabad Barracks. Two hand-dug and machine-widened slots were cut through the dyke at excavation stage. This followed a slot through the upper fills (between the foundations of the 19th century garrison prison) and partial investigation of the southern edge of the dyke, at evaluation stage. The eastern slot was cut mid way along the straight ENE/WSW aligned segment whilst the western slot was cut (NW/SE) across the curving corner of the dyke. There appear to be no related features within the excavation or trenches to the north of the dyke (although the stock corrals and hut in sub-Site F probably dates to the latest Iron Age). However, some or all of a small scatter of 7 pits on the immediate south side may have been

contemporary with the dyke at some point during its use (NB some of these included probably intrusive recent material).



Dyke JF02 Section 1 (eastern excavated segment)

Plate 15.2 Excavation of Section 1 across the LIA dyke, view NE (R Masefield)



Plate 15.3: Section 1 - lower dyke ditch section, view east

Dyke JF02 - Section 1 - upper Fill

The upper fill, JL4, was c.1.2m in depth, comprising homogenous brown silty sand. The deposit was split into 4 spits for finds separation purposes. It produced a large medieval rim sherd from surface collection and another from machining (to widen for deeper excavation). The slow silting fill also contained abraded Roman tile, Roman pottery, including greywares and probably residual amphora, plus a larger number of residual Sheepen grog tempered sherds of Late Iron Age or pre-Flavian Roman date (c.25 BC to c.AD60), mainly from the lower spits. The lower levels of JL4 also contained a toiletry set and a bronze finger ring. One of the amphora rims is of 1st century BC Dressel 1b form, whilst a handle may also be Dressel 1, perhaps confirming that a (presumably) nearby settlement was active in the early oppidum period (c.50/25-10BC).

Late Roman Coin Hoard

The depth of the feature necessitated creation of a machine step with 2m either side of the 2m wide hand dug slot. During the machining of the steps to facilitate the deeper central 2m slot, remarkably the top of a pot containing 1247 silver dipped or washed Roman coins was clipped, spilling some of the coins. The earliest denarii are of Severus Alexander, AD 222-35. The majority are antoniniani dating from AD 251/3 (Trebonianus Gallus) to AD 271-4 (Tetricus I), although the bulk of the coins (c.80%) were of the first Gallic Emperor, Postumus (AD 260-269). The coins of the Roman Emperor Tetricus I suggest the possible deposition date of AD 270 or 271 (N. Crummy below). The base of another pot stood upright, but with its upper portion broken in antiquity (with dislodged sherds found close by) next to the hoard. Given its adjacent position and its identical narrow necked vessel form, this pot may originally have held a second hoard that had been recovered. This suspicion appears to be confirmed by the remarkable finding that the rim portion of the narrow necked vessel containing the hoard, was of a different grey-ware fabric to the rest of the pot. Instead the rim matched the second vessel that had not been clipped by the machine, but had been broken in antiquity. It has been noted by Emma Spurgeon of CAT that the coins had been stacked in the pot and that this could not have been achieved via insertion through the narrow neck of the vessel. Therefore the top of the pot must have been removed, much like a boiled egg, before the coins were stacked inside. It is therefore apparent that the two vessels had been placed at the same time and originally had both held hoards, but that the owner had switched over the 'lids' (rim portions) when replaced over the coins. It follows that one hoard was recovered but the other, for whatever reason, was not.

The discrepancy between the late 3rd century hoard date and the (mainly) pre-Flavian date of the fill it was placed upon (JL5) suggests a long hiatus in the infilling of the dyke. It is possible that the fills were turf covered during this period and that the hoard (which had no discernable cut) was placed within a shallow (perhaps hand scooped) hole the same size as the vessel from no more than arms length above. This conclusion seems appropriate as a hole any deeper would have required a wider cut, which would have been visible. The hoard gives a fixed point in the sequence, meaning most of the fill above was 4th century or later in date. In fact the medieval pottery in the upper spit of layer JL4 indicates that the homogenous silting occurred throughout the late Roman and Saxon periods and into the medieval period (c.12-13th century?).

Pits cut into the lower fills

Below the hoard (from c.1.2m depth in the centre of the dyke) was a dark blackish brown charcoal rich silty sand deposit JL5. This appeared to have filled a cut within the central wide 2m hand excavated section. The feature had been cut down into the lower levels of the dyke at the west facing excavation section, but sloped up to c.1m from the base of the dyke within the east facing section. Terra nigra and terra rubra Gallo-Belgic finewares (which can generally be dated between the late 1st century BC and c.AD 60) were found from the contact between JL4 (b) and JL5, but apparently not deeper within the fill of JL5, which also produced large quantities of unabraded Sheepen type grog tempered pottery (termed 'Sheepen type' after the Camulodunum trading/mint and

get empered to allow of mile comodition.

Roman military depot site dated c.AD 5-AD60 – but otherwise known as 'Belgic' or grog-tempered to avoid ethnic connotations).

Plate 15.4 Dyke Section 1, view SE, with cavity left by removal of coin hoard

The fill included a significant number of large unabraded rims as well as a quantity of briquetage (from salt production / transport). This material is again broadly dated to the Late Iron Age/ pre-Flavian period (at latest) with grog-tempered pottery tending to persist into the early Roman period in rural areas such as at the farmstead at the former Goojerat Barracks (CAT Report 588). The absence of Roman tile and pottery fabrics here (unlike at Goojerat Barracks) may, nevertheless, suggest that much of this particular assemblage is of pre-conquest date. The rubbish deposit JL5 filled the associated cut to its full depth of c.0.8m and it was not possible to distinguish any banding within the homogenous dark fill. The cut for JL5 filled the feature but had spilled out over its southern shoulder, clearly demonstrating that the fill had been dumped into it from the southern side of the dyke. The tip sloped up to almost the shoulder of the dyke, perhaps to within 0.5m of the original ground level on the south side of the dyke (allowing for the land-surface originally being c.0.4m above the natural gravel level of the excavation). An adjacent pit or slot (JF3) was cut into the slope of the dyke's southern edge immediately to the south, and may have been filled at the same time as the cut for JL5, as its dark charcoal rich fill was indistinguishable from JL5 which sealed it. Slight traces of burnt or possibly cremated bone were noted within these fills.

The lower fills

The cut for JL5 truncated a sandy (erosion) deposit JL6 which contained occasional charcoal and finds, including a possible crucible base and several sherds of Late Iron Age type (Sheepen style) pottery. It in turn sealed dark charcoal rich tipped deposits JL7 and JL8 containing similar finds, but including larger quantities of animal bone (including sheep mandibles). This was clearly a domestic rubbish tip, also deposited from the south side of the dyke. Layer JL8 produced another relatively large assemblage of pottery of Sheepen/Belgic type (LIA to earliest Roman) - thirty-five sherds, including a probable Dressel 1 amphora spike. This is turn sealed two further deposits of brown sand with charcoal containing three sherds of Sheepen pottery (JL09). The primary silting (JL10) contained a few scraps of bone. Stephen Benfield (below) concludes that the lower fills almost certainly predate the Boudican Revolt and are most likely to belong to the period from the late 1st century BC to mid 1st century AD.

Section 2 - western excavated segment through Dyke JF02

The corner of the dyke was poorly defined due to modern disturbances and spreads of disturbed subsoil and initially appeared to by over 15m wide. The corner appeared, following stripping and surface cleaning, to be square sided, although clearly at an angle greater than a right angle. However, the excavated slot across the here NE/SW aligned dyke demonstrated that it was still approximately 7m wide but its northern edge was further south than it first appeared following stripping, thus the corner was actually a gentle curve, rather than sharply angled.

Upper Fills

The top half of the silting (layer JL14) was once again homogenous mid brown sandy silt, with spits 1-4 (to a depth of c.1.2m) producing abraded Roman tile, along with a few Roman and Late Iron Age sherds from the top 0.9m.

Pit Truncating Lower Fills

Below spit 4 layer JL15 comprised a paler silty sand deposit with a higher density of pottery, comprising Sheepen type. JL15 was, however, truncated by a pit-like feature equivalent to those in the eastern segment. The pit JF16 truncated about half of the JL15 and was approximately 0.6m deep. The semi-circular eastern side was located within the confines of the trench whist the rest of the feature was not traced beyond the western baulk. The upper levels of the intrusion contained occasional Roman tile and pottery in low density as well as several fragments of Kentish ragstone (Greensand). This material was imported from Kent from the 2nd century AD and was the principal building material for the Roman circus to the north-east. The upper levels and middle fills of this feature may have silted slowly, however, they comprised brownish silty sands with lower densities of finds and charcoal in comparison to the lower fill, which produced sizeable assemblage of earlier pottery (of probable pre-Flavian or Late Iron Age date) and was charcoal rich. This material represents the probable function of the feature as a rubbish pit.

Lower Fills

These are broady similar to those seen in Sx1 (see Tables 15.3-4 for concordance).

The lower ditch fills consisted of (from bottom up):

JL19 - sandy deposit representing rapid silting of ditch (= JL10 in Sx1). No finds.

JL18 - material collapsing from sides (= JL9 in Sx1). No finds

JL17 - Domestic material/stability and vegetation cover (= JL7 and JL12 in Sx1). Finds: Prehistoric hand-made pottery. LIA

JL15 - Roman recut ? (In position of but not same as JL6 and JL11 in Sx1). Finds 1st century LIA or Roman.

JL16 - dumping of charcoal rich domestic debris into ditch (equivalent to JL5 in Sx1). Finds 1st century LIA or Roman.

Position of bank

There was no physical evidence for the dyke bank. It is assumed that it must have been on the northern side of the ditch, to match both the expectation that, from a defensive point of view, it should be there, and also the fact that the Berechurch Dyke (of which JF02 is assumed to be a continuation) has a ditch on its equivalent (eastern) side (*CAR* **11**, 159).

This might at first glance appear counter-intuitive based on section 1 of the two sections cut through the ditch. A basic assumption is usually that the soil which finds its way into an open ditch consists of two elements: first, soil weathering off the ditch sides into the ditch bottom; second, soil slipping from the bank into the ditch. The two opposite faces of Section 1 (Fig 96) appear to show the ditch fills sloping in such a way as to indicate that soil was slipping into the ditch from the south (ie, from a bank on the *south side* of the ditch). Of the two sides of Section 2 (Fig 97), one is slighty more in favour of slippage from the north side, and the other from the south side. However, although on

balance, the evidence of the ditch fills might suggest a bank was present on the southern side of the ditch this does not account for the fact that much of the fill was in fact derived from occupation deposits deliberately dumped into the dyke from the south side. In this scenario the cleaner deposits above may represent the capping of odorous refuse (suggested by the black and organic fills). The direction of tipping from the south side emphasises the proximity of the adjacent occupation. In addition if the dyke bank had been reveted with a wooden palisade, to provide a more formidable obstacle, such containment of the bank would prevent its collapse into the dyke in its use period.

On balance, since the alignment of JF02 closely matches Berechurch Dyke to the south it is reasonable to conclude that JF02 is its continuation.

Size, depth and profile of dyke ditch.

The dyke ditch was between 9.0m - 9.1m wide and 2.55m deep in section 1, and 9.1 and 9.4m wide, and 2.45m - 2.60m deep in section 2. The ditch had a wide, steep-sided, U-shaped profile. The base was slightly deeper in the southern side of section 2, and was notably uneven in the northern side of section 2. Such an uneven profile would, perhaps, be unexpected in a Roman military feature (such as the V-shaped profile of the Triple Dyke). The U-shaped profile is perhaps more typical of an Iron Age dyke (such as the Sheepen Dyke: CAR 11, fig. 3.4).

Summary of finds dating of the dyke ditch JF02

The dating of the dyke is discussed in more detail by Stephen Benfield (below p88). The following paragraphs are a summary.

Close dating of the pottery from the lower ditch fill within the Late Iron Age period is difficult. The grog-tempered wares and the Italian amphora spike suggest a possible date of late 1st century BC-early 1st century AD. The absence from the lower fill of any Gaulish imports, which appear in Britain from the late 1st century BC, or local Gallo-Belgic copies, may also support an early date. It can be noted that a rim sherd from a Dressel 1B amphora, from the mid fill JL5(27) (pot 61) and a second probable Dressel 1 sherd JL4(19), if not from later secondary use of these amphorae, could also indicate activity here in the late 1st century BC. However, the quantity of pottery from the lower fill is much less than from the mid & upper fills, where small numbers of Gaulish imports are present, with small quantities of Roman pottery. This suggests that Gaulish imports may not have been particularly common on this site in the Late Iron Age (in comparison with Sheepen which has large numbers of them). As such, their absence, along with that of local Gallo-Belgic copies, may not be particularly significant in terms of dating these layers. Overall, a broad dating of late 1st century BC to early-mid 1st century AD may be appropriate.

The pottery from the **mid-fill** of the ditch is mostly of Late Iron Age type, with only a very small quantity of definite post-conquest (Roman) pottery, although Roman pottery is present in the lowest part of this deposit. Overall, Grog-tempered wares account for 78% by count and 63% by weight of the total Late Iron Age and Roman pottery assemblage from the ditch. Combined with grog-tempered storage jars this rises to 82% by both count and weight. The presence of Gaulish imports makes the overall composition of the assemblage more similar to that from Sheepen than that from the lower fill and the Late Iron Age coarse wares and Gaulish imports can be broadly date to the period of the late 1st century BC-mid/late 1st century AD. The Roman sherds can be dated to the period of the mid-late 1st/early 2nd century. The very small quantity of definite Roman (post-conquest) pottery suggests that this might represent an intrusive element, especially in the lower fill. In this respect the recovery of two whole pots associated with a mid-late 3rd century coin hoard may be significant. These were recovered from Sx1 (JL5) but had been cut into this fill from an unknown level higher in the ditch.

Overall the pottery assemblage from the **upper ditch fill** is similar to that from the mid fill, ie of Late Iron Age and Early Roman date; although the latest closely-dated

pottery from the upper fill is 2nd century, consisting of two sherds of Central Gaulish samian. The topmost (surface) fill of the ditch in both sections includes a small quantity of medieval and post-medieval pottery indicating that the ditch probably remained an open earthwork, feature into the medieval and post-medieval periods.

Overall, apart from a small quantity of medieval and later dated sherds from the topmost (surface) fill, the absence of Late Roman (3rd-4th century) pottery suggests that most of the ditch fill dates to the mid 1st-2nd century. Given the significant quantity of late Iron Age pottery from the mid-upper fill it appears possible this dates to after the abandonment of the Late Iron Age settlement here as there is little indication from the pottery that [the settlement] continued in any significant form into the Roman period (certainly not beyond the mid 1st century AD).

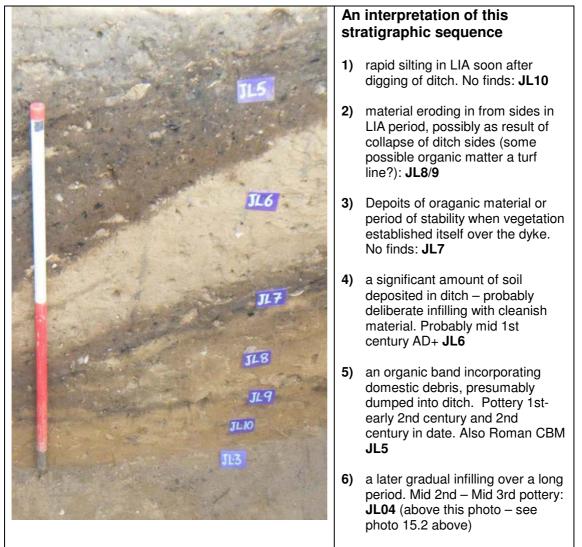


Plate 15.5: detail of lower dyke ditch (JF02) fills

Event	Section 1 contexts with finds dating	concordance date	Section 2 contexts with finds dating
Rapid silting after ditch digging	JL10 no finds	LIA	JL19 LIA ?Sheepen
material collapsing from sides and turf line	JL9 LIA/Rom ?E Rom, JL8 LIA/Rom ?E Rom, JL13 no finds	LIA or early Roman	JL18 no finds
Domestic material/ stability and vegetation cover LIA	JL7 no finds, JL12 no finds	Probably 1st century AD	JL17 LIA ?Sheepen
bank collapse or dumping of material in ditch	JL6 greensand prob E-M 2C (therefore intrusive) JL11 no finds	Mid-Late 1 st century (pot is mainly LIA)	JL15 in this position, but it is disturbed by Roman recut here
dumping of charcoal rich domestic debris into ditch (NB later pit cut into lower level) =JL16)	JL5 Mid to late 1 st century AD Intrusive coins M- L3C greensand e-M2C+	Mid to late 1 st century AD lower level of JL5 but presumbed upper levels of JL5 are later.	JL16 Mid to late 1 st century AD
deposit of coin hoard		AD 270/271	
long period of ?natural infilling	JL4 samian 2C, M2C-M3C p-med/mod (intrusive(?))	late Roman to medieval	JL14 Rom/?L1C+ medieval

Table 15.4: concordance of dyke ditch fills between JF02 sections 1 and 2

The adjacent Iron Age settlement

The quantity of Late Iron Age pottery recovered from the ditch suggests it is associated with a settlement of that period, and the presence of a spindle-whorl (SF243) from JL5 suggests a domestic context.

The settlement appears to have been contemporary with the Late Iron Age phase at Sheepen, which is thought to begin *c*. AD 5 (Niblett 1985, 3). Based on the absence of Gallo Belgic imports from the lower ditch fill the settlement could speculatively start a little earlier, possibly in the late 1st century BC. The apparent absence of any significant remains of Late Iron Age date or of residual finds dated to that period from the excavated sites on this area to the north indicate the postulated settlement was probably located to the south of the ditch [and outside the defences]. Overall, in contrast to Sheepen, the relatively small quantity of Roman pottery recovered indicates that there was no Early Roman (*c*. AD 43-60) phase for this settlement, nor any significant occupation later in the Roman period.

The mid fill of the ditch (JL5) contained Roman finds as well as a significant proportion of Late Iron Age pottery suggesting that this might relate to the end of the Iron Age settlement here, with broken, abandoned pottery dumped or cleared into the ditch. As this is associated with the mid fill and not the lower ditch silts, it indicates the ditch was not dug following the abandonment of the settlement but probably preceded it. The pottery from JL5 does not contain any sherds dated later than the early 2nd century while the vessel types and fabrics recorded indicate a date range in the mid-late 1st century. In terms of the later ditch fill the latest closely-dated Roman pottery from the ditch is two sherds of Central Gaulish samian of 2nd century date from the upper fill (JL4). In the later Roman period a pot containing a coin hoard of late 3rd century date was placed into a pit cut into the mid fill (JL5, Sx1); although from what level the cut was made is not known. A accompanying (near identical) second pot,

which was apparently empty, was placed close to it. The ditch seems to have remained a partly open feature into the post-medieval period.

Discussion of the Hyderabad Sector Dyke and its potential significance (text derived from Phases 3-5 Interim Report; Masefield 2011).

Histories of Camulodunum

The two centuries before the Claudian conquest saw dramatic changes in south-eastern Britain with the comparatively rapid enhancement of strong trading links with the adjacent Continent associated with the Romanisation of Gaul and the Rhineland. The period saw the abandonment of many hillforts, the establishment of lowland oppida and the rise in so-called 'Belgic'-influenced activities including the use of cremation rites, coinage, the potter's wheel, and the acquisition of exotic goods derived from the Mediterranean. South-eastern Britain has been regarded as a 'core' zone of major transition in the period from c.150BC including the emergence of oppida in the 1st century BC, as at Colchester. Terratorial oppida are large sprawling riverine sites with extensive dyke defences over many hectares and are perceived to have been chieftains' strongholds, with diverse functions including the manufacturing and redistribution of goods (Cunliffe 1995). They frequently encompassed a number of substantial Late Iron Age settlement enclosures (Bryant and Niblett 1997). The scale of such defences implies centralisation or coercive leadership. It has been suggested (eg Cunliffe 1995) that oppida were developed in direct response to Caesar's incursions off 55-54BC as 'economic ports of trade'. It is of interest, with regard to the prominence of the oppida of Camulodunum, that Caesar had established alliances with the Trinovantes. Cunliffe (and others) have suggested that these links could explain the re-orientation of trade from southern to eastern Britain around this time, as the pro-Roman tribes of Britain were given a virtual monopoly of trade with Roman Gaul.

With regard to research agendas the nature of the transition from the Late Iron Age to the early Roman period has been allocated a high priority; indeed, 'Briton into Roman c.300BC-AD200' was a major theme of Exploring our past' (English Heritage 1991b, 36). A series of priorities were subsequently formulated for the period in *Understanding the British Iron Age* (Haselgrove *et al* 2001, 28-31). In particular Haselgrove *et al* (ibid, 30) noted that the roles of territorial oppida are still poorly understood. For example; how did they relate to the general trend of settlement expansion in the later Iron Age? What role did they play in changes in the distribution, imagery and form of coinage? and how did they relate to the development of Kingdoms in the South-East?

Such questions have been hampered by a general lack of archaeological investigation within oppida, although the Colchester oppidum offers some exceptions to this general rule, with important work at Sheepen and Gosbecks as well as the present New Garrison/Alienated Land Project. Excavations at Sheepen have demonstrated trade with the Continent and metal-working evidence, including the probable location of a royal mint of Cunobelin, whilst at Gosbecks a probable earlier focal centre and religious complex has been identified. Further sites at Lexden and Stanway have produced very wealthy burials, indicative of tribal aristocracy. The remains from the Garrison project to date have largely identified contemporary data from an area of the oppidum mainly utilised for agricultural production and perhaps also managed woodland.

The precise origin of Camulodunum, and is political history thereafter, is a matter for informed speculation. It is assisted by brief historical references associated with Roman political history and to a point by the archaeological findings of the 20th and 21st centuries. The 'oppidum' or 'proto town' (though there are more similarities to a royal estate) lay within the territory of the Essex Trinovantes in the Late Iron Age. 'Camulodunum' appears to be a reference to Camulos, the Celtic god of war, with the -dunun (or -dunon) suffix the Celtic term (used in Gaul and Britain) for a 'fortified place' (*CAR* **11**, 6). The implication drawn is that the name could only have applied after the site was fortified with dykes (ibid). The majority of historians have suggested that the area later known as Camulodunum was based on a Trinovantian high status tribal centre which later fell into the hands of the powerful Catuvellauni (centred in

Hertfordshire), and that the royal seat and estate subsequently changed hands on several occasions. An alternative proposition by Philip Crummy is that the Catuvellauni may have established the oppidum by force within the territory of the Trinovantes from inception, as a 'coastal' colony, specifically to exploit the new trade links with the Roman Empire across (ibid). This action would certainly fit well with the place-name Camulodunum.

The Historical Figures

The political history is largely inferred by the study of coins. The first known king to be associated with the area was Addedomaros, presumed of the Trinovantes (in the traditional interpretation) but who may have relocated from Braughing or the Sandy-Baldock area, possibly within Catuvellaunian territory, to the Colchester area in c.25BC (ibid). Addedomaros, whose tribal name is not provided on his coins (and who may alternatively have been Catuvellauni according to Philip Crummy) is thought to have been buried within the Lexdon Tumulus. The burial was associated with rich ritually destroyed grave goods, including a medallion of Augustus and a number of Dressel 1 wine amphorae (suggesting a date of c.10BC). Tasciovanus was certainly of the Catuvellauni and was contemporary with, but outlived, Addedomaros, his reign ending in c.10AD (ibid, 92). His coins more clearly demonstrate the march east of the Catuvelluani - apparently replacing the Addedomaros' coin distribution here from c.15-10BC. The Tasciovanus early coin issues of c.15-10BC (which may date up to a decade earlier) bear mint marks 'CAM' and 'CAMLV' which, as noted, show the place existed then and that it was defended (presumably by dykes). Although the lineage of Tasciovanus is uncertain it is plausible that he was a grandson of Cassivellaunus who had been famously defeated by Ceaser in 54BC and was named by the Romans as the king north of the Thames - an area perhaps equating with the powerful Catuvellauni (Frere 1987, 29). Tasciovanus was succeeded by Dubnovellaunus-in-Essex and in turn by 'the great king' Cunobelin (c.AD5/7-40/2).

Although it is uncertain whether Addedomaros and Dubnovellaunus-in-Essex were of the Catuvellauni or Trinovantes (or another tribe), from the reign Cunobelin things become clearer. Hawkes and Crummy (1995, 173) provide a translation by Ernest Black of Dio (1x, 20, 1) as follows, '*Plautius...first defeated Caratacus and then Togodumnus, the sons of Cunobelinus, since he himself was dead. When they had fled he* [Plautius] *won over by agreement a section of the Bodunni whom they had ruled although they* [Caratacus and Togodumnus] *were Catuvellauni.*' Given that Caratacus was active against the Atrebates of Sussex and Hampshire just prior to the Roman invasion, it seems likely that Togodumnus was in control from his fathers' seat, at Camulodunum, after his death. The death of Cunobelin and subsequent expansionist aggression of his sons towards the Atrebates and others is often cited as the catalyst or pretext for the invasion of Claudius (following the flight of Verica of the Atrebates to Claudius). Such a pretext had been used before by the Roman Emperors Augustus and Caligula, who had planned, and in the case of the latter, very almost implemented invasions, following similar pleas from dislodged British princes.

An established view of the history of Camulodunum between c.20BC and AD40-2, advocated by Frere (1987, 29-35), is therefore one of constant invasion and counter-invasion, with at least five rulers in the first 25 years, followed by stability under Cunobelin and the Catuvellauni for 35-37 years, before Togodumnus' presumed brief rule to AD43. Frere emphasises that Tasciovanus' reign, as shown by a concentration of coins bearing his mint mark, began at Verulamium, the capitol of the Catuvellauni in c.20BC. However, amongst the early issues are 'very scarce' examples with the Camulodunum mint-mark. Camulodunum is assumed to have been the Trinovantian capital at that time and the existence of these coins there is considered by Frere to represent only a brief eastward expansion of the Catuvellauni. It is emphasised that such an expansion was almost certainly at odds with the treaties established by Caesar, following the subjugation of Cassivellaunus (presumed of the powerful Catuvellauni) but that these treaties had not necessarily been renewed. Frere suggests Camulodunum probably briefly became a Catuvellaunian colony around 17BC when Rome suffered a great defeat in the Rhine 'but the presence of Augustus himself in Gaul in 16 almost certainly caused him to withdraw, for this must surely be the meaning of the scarcity of the issue' (ibid, 29).

In this version Tasciovanus continued to rule out of Verulamium until about AD5-10, and although the Catuvellauni continued to expand their empire in the south-east (ruling from the Thames to Northamptonshire and in Kent to the west of the Medway) they were prevented from conquering the Trinovantes and Camulodunum remained Trinovantian. Addedemaros' coins (the earliest named in Essex) are therefore considered by Frere and others to imply he had lost and then regained Camulodunum from the expansionist Catuvellauni. However, 'the distribution and character of his coins show that he maintained himself against his western enemies...'. In this reading Addedemaros was supplanted, rather than succeeded, by Dubnovellaunus. His rule at Camulodunum was brief. It is taken at face value by Frere that there was only one ruler of this name at this time, rather than a *Dubnovellaunus-in-Essex*' and a '*Dubnovellaunus-in-Kent*'. His coins show that he was previously ruler in part of Kent (and possibly an area north of the Thames in Essex) before being driven out by Eppillus around AD1. The coins, in combination with a reference in the *Res Gestae* document of Augustus, before AD7, tell of his displacement before seeking Roman intervention (along with Tincommius of the Atrebates).

Frere concludes: 'He [Dubnovellaunus] was supplanted at Camulodunum by Cunobelin son of Tasciovanus, and from this date onwards the Trinovantes were finally submerged in the new Catuvellaunian empire. Cunobelin was the greatest of the Belgic kings, and he had a long reign of almost 40 years, during which he gained control of most of south-east Britain. Suetonius could call him Britannorum rex. It is evident that his seizure of Camulodnunum and conquest of the Trinovantes was contrary to Roman policy as so far traced, but nevertheless was successfully accomplished. If the conquest of the Trinovantes occurred in AD9 or soon after, taking advantage of Roman weakness created by Varus' disastrous defeat and loss of all 3 legions in the German forests that year, it is possible that Cunobelin was acting in pure defiance of Augustus. On the other hand Augustus had been ruling for nearly 40 years and may have changed his views on Britain' (ibid, 31). Furthermore the expansion of Dubnovellanus' rule from Kent will further have confused the Roman position. Therefore by Cunobelin's reign the Catuvellauni had developed into a maritime power.

Tolerable relations with Cunobelin's Essex are also inferred by the safe return of ship loads of soldiers from Germanicus' army that had been wrecked on the Essex coast. Relations remained amicable in to the reign of Tiberius, even though Cunobelin continued to expand his empire, perhaps because of esteem held for him in Rome. However, after his death in AD40-2, and the ascent of Caratacus and Togodumnus, the aggression of the Catuvellauni was apparently now considered a suitable pretext for direct Roman intervention and invasion.

Whether Camulodunum was Catuvellaunian from the outset or was originally Trinovantian, before being reinvented by Cunobelin, it is fair to say that Essex based trade with the Roman empire flourished throughout the final decades BC until the Roman conquest; both at Camulodunum and at other Essex coastal sites, most notably Elms Farm, Heybridge near Maldon (Atkinson and Preston 2015). Indeed the extensive 1993-5 excavations at the small Blackwater estuary town have produced the largest number of Dressel 1 amphora (44) to be excavated in Britain since 1945, whilst at least 118 amphora pre-dating AD125 were recovered (Sealey 2009, 15). It is interesting to note that the possible Dressel 1 amphora sherds (including a rim and handle) from the eastern segment of the 'Hyderabad Sector', along with the 'Sheepen type' Belgic pottery and Gallo-Belgic imports, further testify to Roman links in the period prior to and during Cunobelin's reign. In Britain finds of the Italian Dressel 1 amphora peak at the very end of the forms circulation from c.10BC (ibid, 1) and therefore any 'site' with Dressel 1 is generally considered to date to before c.10BC (ibid, 5). For the Garrison sites a BC date is implied for the early use of Late Iron Age farmsteads at New Garrison Area 6 (east of the former Kirkee Mcmunn Barracks and now within Merville Barracks) and the former Goojerat Barracks (now housing at the west end of Circular Road South) by single examples of Dressel 1 sherds found residually in early Roman features. Given the isolated location of the sites these amphora sherds clearly infer that the isolated LIA farms within Camulodunum were also linked into the Roman trade network and to Romanised manners to some extent (Sealey in CAT Report 292, 2005; Benfield forthcoming 2011). At Sheepen 'trade is indicated by large quantities of imported amphorae, both containing wine and oil, and imported plates and drinking vessels whose presence in such large numbers points to a revolution in manors...some of these vessels - but only the

imported ones – are inscribed with owners marks suggesting literacy was beginning to spread amongst the wealthier classes who could afford the better ware' (Frere 1987, 35). Perhaps this statement gives a clue to the status of the presumed Late Iron Age settlement south of the Hyderabad Sector dyke. The paucity of imported wares suggests a modest status in comparison with both Sheepen and at the Goojerat site (Area L/N).

Landscape context

The identification of the new 'Hyderabad Sector' extension of the Berechurch Dyke at Area A1 is a major discovery. The New Garrison and GAL landscape investigations well to the south of Area A1, near and adjacent to the Berechurch Dyke, suggest that the dyke had sliced through the NW/SE and NE/SW grain of an earlier field-pattern. However, the earlier landscape aligment had nevertheless continued in use, with modifications, in the early Roman period (NB if the dyke had been earlier than the field pattern the latter is likely to have respected the major boundary). Roman pottery and tile from some of the field-system ditches is therefore considered to simply represent final use of these divisions, rather than their institution, whilst other ditches appear to be late prehistoric both in origin and final use (as suggested by New Garrison excavation Areas 2, 6 and 10; CAT Report 292).

Similarly at GAL Area L/N (former Goojerat Barracks) the Late Iron Age to Roman farmstead clearly demonstrates continuous occupation in the central eastern area of the oppidum period from the later 1st century BC and throughout the 1st century AD. The NW/SE and NE/SW alignment of the enclosures there is similar to the aforementioned field-systems and trackways associated with the New Garrison Project to the south-east.

The significance of the new dyke section to the study of Camulodunum is the evidence it provides for a previously unknown and unsuspected extension of the Berechurch Dyke and for a ENE offshoot ('Hyderabad Sector') towards the River Colne (Fig 18a). It also includes settlement related evidence in the form of significant concentrations of Late Iron Age pottery from the dyke– indicating (in combination with previous burial related finds to the south on the UAD) a probable further area of Late Iron Age settlement between the Berechurch/Hyderabad Dyke and the 'Barnhall Sector' Dyke to the south. There are indications that this settlement may have had fewer imported wares than the L/N farmstead site, which may allude to differences in date, status and/or access to the trade with the Roman world.

The Development of the Defensive Dykes

One question is whether the Berechurch Dyke and its Hyderabad Sector was created for defence, and/or conspicuous display of power, during the reign of one of the kings discussed above, or was in fact a Roman initiative. Camulodunum in its developed form, when both the eastern and western defences were contemporary, incorporates a c.12 square mile area. Sheepen, by Cunobelin's reign at the latest, formed an inner nucleus defended by Sheepen Dyke (Ditches 1a and 1b, Fig 18a) whilst Gosbecks Farm appears to have formed the earlier tribal centre. The location appears to have been chosen because of the natural defences offered at the convergence of the Colne and Roman River valley's, its well drained gravel subsoil for farming, and its proximity to the estuary and the coast opposite the Roman Rhineland. It also looked inland towards the chalklands to the west (Frere 1987, 34).

Understanding the sequence of the dykes is fundamental to understanding the origins and development of the oppidum, but is far from fixed given the limitations of the available dating evidence. Hawkes and Crummy (1995, 52-55 and 174-7; Figs 2.28 to 2.30 and 7.8 to 7.1) indicate that the earliest dyke is likely to be the Heath Farm Dyke, shielding the Gosbecks presumed royal farmstead (see Fig 18a). This was probably followed by Lexden Dyke (which truncates the northern extent of Heath Farm Dyke), Moat Farm Dyke (Lexden Dyke is northern projection, north of the River Colne), Shrub End Dyke (west of Lexden Dyke and possibly linking Heath Farm Dyke at its southern end), and possibly Sheepen Dyke (L-shaped dyke against the Colne comprising Ditch 1 and Ditch 1b). Presently the earliest dykes are considered likely to date to c.25BC/10BC, or slightly earlier (perhaps even as early as c.50BC). The substantial Lexden Dyke is confidently ascribed to c.25BC to 10BC by Crummy (ibid 174-175) although Hawkes (ibid 52-55) seemed to prefer a date of c.10AD for Shrub End Dyke, Lexden/Moat Farm Dyke and Sheepen Dyke, which together 'form a system with its

base along the Colne' (ibid, 53). Prettygate Dyke, Kidman's Dyke and Oliver's/Layer Dyke followed on to re-defend the Gosbecks area, linking southwards with the Roman River and beyond it.

Sheepen Dyke's presumed dating, apparently favoured by Hawkes, is of c.AD10 (ibid 52-55) but may be too conservative, and Crummy (ibid 174-5) seems to prefer a date of between 50-10BC and c.5BC-AD5AD in his tabulation of likely dyke dates (ibid, Fig. 7.7). A well with Dressel 1 amphora in its construction lining from the defended internal area at the recently excavated Institute site (Holloway pers comm.), along with a number of Dressel 1 sherds from the classic 1930's investigation, also strongly hint at occupation at Sheepen by or prior to c.10BC, by when Dressel 1 was becoming obsolete (Sealey 2009, 1, 5). The new evidence from Hyderabad Barracks may add the eastern defences of a Hyderabad Sector dyke, and by implication Berechurch Dyke and Barnhall Dyke, to the list of western Late Iron Age defences, and is summarised below. Previously the incomplete eastern defensive dykes were interpreted as follows by Hawkes and Crummy, based on the very limited dating information then available to them at the time:

'Berechurch Dyke, with Barnhall Dyke forming its north end, is even more problematic in terms of date than most of the other dykes. Its physical appearance, with the straight lines and sharp bends, suggests that it is Roman, or at any rate, very Late Iron Age, which is why the threat of invasion by Caligula is usually seen as the likely context for its construction (p 54)' (Hawkes and Crummy 1995, 175).

The Triple Dyke (s) V-shaped profiles are probably a Roman military form created in the conquest period date and Gryme's Dyke, also of the western defences, appears to be post-conquest based on the available evidence (ibid). Crummy states that 'the lineality of the various components making up the dyke give the earthwork a Romanised appearance and thus support a post-conquest date for all of it' (in Hawkes and Crummy 1995, 174).

Frere (1987, 34) simply states that the area between the River Roman and River Colne was demarked by '*powerful reclilinear dykes*' and within this area was an inner nucleus defended by the Sheepen dyke which '*proved to be the capital of Cunobelin*.' The earlier focus of Gosbecks was, however, defended by dykes of '*contour type*' that seem to pre-date the rectilinear ones and here '*lay the original Camulodunum, capital of Addedemaros and of the Tinovantes*.' He emphasises that the idea of defending a large landscape represented a change of approach from the earlier hillforts, from protecting a refuge population to protecting an entire agricultural estate from attack from chariot based warfare in the Belgic style. However, their hugely time-consuming construction must have been as much a statement of power as a means of defence.

Description of Berechurch and Barnhall Dykes

The southern section of Berechurch Dyke follows the north-south alignment of Abberton Dyke, to the south, which begins at Layer Brook, a tributary of the Roman River. The Abberton Dyke section continues north to the Roman River and begins again the other side where it has been named 'Berechurch Dyke'. The dyke kinks to the north-west and then north-north-east where its bank is partially preserved under the Friday Wood road (where it is a Scheduled Monument). The route crosses Berechurch Hall Road into the Garrison project area of Area S1. The upper levels of Berechurch Dyke were investigated as part of the Alienated Land Project. Its alignment, immediately east of Roman Barracks and Roman Camp that had previously been assumed, was firmly established by three trenches across it in 2006 (Pooley, Holloway, Crummy and Masefield 2006 - CAT Report 361). Unsurprisingly Roman tile was present within the upper levels. A further section of the upper levels was conducted in 2011 for the new road link between S2 North and S1 (CAT Report 672). The most significant finding here were a series of large post-holes along the west edge of the ditch which may have been associated with revetment of the bank.

The alignment of Berchurch Dyke further north had been found by A.F. Hall at Monkwick when he dug a section in 1944. Here he confirmed the presence of the lower rampart and (presumably) the upper level of the dyke. Subsequently in 1945-6 Hall was able to examine an occupation site of LIA date on the west side of the dyke, after its' eastwards kink, near

Park Farm, about a kilometre south of the former Roman Barracks. This settlement was therefore protected by the dyke, assuming the dyke was in place by then.

In fact Berechurch Dyke has (had) no complete excavated sections from which pottery from lower fills could be extracted, and its actual construction date has been assumed to be late in the sequence based on its straightness, rather than finds derived from its primary silting.

The Barnhall Dyke (or 'Barnhall Sector') was found in the 1940s but was not recorded to a high level. Its finds are not certainly dated but were thought to be Saxon at the time (although Paul Sealey has since suggested may be of c 25BC date as Little Waltham pottery (50-25BC) is very similar to early Saxon fabrics). 25BC is at the latest end of the range for the Little Waltham type, with 50-25BC the current approximate date for the instigation of the Camuldodunum dykes. The precise dating of the Barnhall Dyke is therefore unsecure at present.

The relationship of the Barnhall Sector with the Berechurch Dyke is an interesting one. The dvke here was found at the old Ordnance Depot during sewer laying in April 1945 (Hawkes and Crummy 1995, 24). It was supposed by A. F. Hall that the sector must have started at the Colne floodplain near New Quay. No pottery was found in the lower fills of the dyke sized ditch but the central fills produced the 'Anglo-Saxon' pottery mentioned above. Despite Sealy suggesting this might be misidentified Middle Iron Age pottery of c.50-25BC, the filling of the Hyderabad Dyke shows late Roman central fills and medieval upper fills, and therefore that the upper central fills of the Barnhall Dyke could well be of Saxon date. Fig. 6.1 of the 1995 report (ibid) shows the line of Barnhall Dyke confirmed in three places. In the years 1945 to 1947 Hall attempted to test whether Barnhall and Berechurch Dykes were related by gradual observation of grave digging and borehole testing at Colchester (Borough) Cemetery. He claimed to have found the course of both dykes and noted a presumed 'entrance' gap at the point of connection (where natural gravel was found at the normal depth). Furthermore the Barnhall Dyke did not continue SW beyond the connection, confirming they were contemporary. However, an absence of controlled excavation precludes firm confirmation (Philip Crummy pers comm.).

With respect to the role of the Barnhall Sector dyke Crummy and Hawkes (1995, 170) reported that: 'A group of vessels on the east side of Camulodunum indicates the presence of what is likely to have been a substantial burial area. The material needs to be brought together and studied as a group, particularly since it is likely to be associated with an important area of occupation in the vicinity. The provenances of the vessels suggests that if such an area of occupation existed, then it was next to the Colne (perhaps with a function like Sheepen) and north of the Barnhall Dyke. It could explain the presence of the Barnhall Dyke.' The implications of this prediction in the light of the similarly aligned 'Hyderabad Sector' are considered below.

Previous Interpretations of the Date of the Eastern Defences

Construction of the Berechurch Dyke (with its southern extension of Abberton Dyke) has been a matter of speculation, given the lack of any investigation of its lower silts. It has been noted that, because it faces east towards the sea, it might have been built as a response to a threat from the expanding Roman Empire. The possibility of a Roman invasion of the east coast of Essex would fit the bill and the planned invasion of Caligula (AD 37-41) is cited as a possible motivation for the construction (see Hawkes and Crummy 1995, 54). The threat of an invasion during the reign of Augustus cannot be discounted as a cause for the construction of the eastern defences.

Prior to the Hyderabad Dyke find Crummy has postulated a significantly later possible post Boudican Revolt (c.AD61-75) date for construction of Berechurch Dyke in the east, and Grymes Dyke in the west, although he had been clear that this had not been proven by excavation. The dating is based on the Roman looking straight lines of the dyke. '*The final phase of dyke building followed the defeat of Boudica and the traumatic destruction of the Roman Colony which, according to Tacitus (Annals xxx), was easy because its builders neglected to provide it with defences. The rebuilt colony was given a stone wall (CAR 6, 62-4) and the defences of the former Iron Age settlement were improved with the addition of* Gryme's dyke (in stages), Berechurch Dyke and Dugard dyke (if it had not already been built by the army in AD43' (Hawkes and Crummy 1995, 178).

Discussion of the new 'Hyderabad Dyke' Extension of Berechurch Dyke with regard to the Eastern Defences

The dyke was traced for a distance of 60m+ within sub-site J, with the westward extension of the area and an additional trench to the south-west, defining a c.135 degree angle corner and its return to the south-south-west, for at least another 25m. Remarkably the return of the dyke south-south-west corresponds perfectly with a now probable 1km continuation north-north-east aligned section of Berechurch Dyke, the eastern boundary dyke of Camulodunum (Fig. 18a). Therefore there is a very good case that the Berechurch Dyke and the new Hyderabad Sector at Garrison Area A1 Sub-Site J, constitute elements of the same system. The previously known northern extent of Berechurch Dyke is located at the Borough cemetery, a point at which it appears to have met the Barnhall Sector dyke offshoot running to the north-east-east, again towards the River Colne. Notably, the perceived connection angle between these two dykes was very similar at c.140 degrees.

If the Barnhall Sector dyke is also a legitimate element of the defences of Camulodunum then its similarity of alignment to the Hyderabad Dyke requires explanation. The most probable conclusion is that Hyderabad Sector and Barnhall Dykes formed analogous and contemporary arms of the Berechurch Dyke defensive system extending towards the river, thus completing and making sense of the eastern defences of Camulodunum as a unitary system. Put another way the common alignment of the Barnhall and Hyderabad Sector dykes appears to confirm that all three dykes were planned and implemented by a centralised and powerful authority at broadly the same time. If so the dating evidence from the Site J excavation provides crucial and unique evidence for their mutual origin. They can be seen as a double line of defence for the eastern approach to Camulodunum for those following the River Colne valley or following the boundary of Berechurch Dyke from the south.

Dating

As noted the 'Belgic' or 'Sheepen style' of the pottery assemblage, and the number of fills, including a recut and a pit within which the sherds are associated (particularly in the eastern segment) suggests the strong possibility of a pre-Roman conquest date. If the dyke was cut in the conquest period or pre-Flavian/Boudican Revolt period (AD43 to before or at c.AD61) it would be expected that at least a few pieces of Roman tile and Romanised sherds would have been found in the basal fills. In particular, although grog-tempered wares continued in use post-conquest and therefore a pre-Flavian date cannot be completely discounted, the lack of South and East Gaulish samian amongst the large 'Belgic' assemblage from the middle and lower fills of the two hand-excavated segments must surely strongly hint at a pre-Roman date, particularly given the proximity to the legionary fortress and then the colonia. From a form perspective although the Berechurch Dyke is rectilinear in plan, its U-shaped profile at the Hyderabad Sector, is also not suggestive of a Roman military origin, and does not compare with the V-shaped Roman Triple Dyke.

Terra nigra and terra rubra pottery from the JL4/JL5 interface in the eastern segment (i.e. at the top fill of the large recut feature filled by JL5) may indicate a date of anywhere from the late 1st century BC to c.AD60, but the fact that the 'recut' feature itself was cut from a level mid way up the ditch silting, strongly suggests that the fills below started silting considerably earlier. The same may be said of pit JF16 in the western section, although this pit may be later in date. Furthermore an absence of terra nigra, terra rubra, Arretine ware, south Gaulish and indeed of amphora, from the mid to lower fills of the dyke within the two segments could even hint at a late 1st century BC date for the cutting of this dyke. Given the large assemblage and the lack of correspondence with both Sheepen and the Area L/N Goojerat farmstead (c. late 1st century BC to principally pre-Flavian Roman) in terms of a lack of such finewares that were commonly imported to Camulodunum, then a later 1st century BC date may even be appropriate. As an aside the dating of Sheepen may itself require review following the recent discovery of a well lining packed with Dressel 1 amphora sherds (which should not date to after 10BC) from the Institute site (Holloway pers comm.).

Implied Areas of Quayside/Riverside Occupation?

The occupation deposits dumped into the ditch and the pits cut into its middle fill, indicate that there was probably an occupation on the south side of the dyke. As noted above it is assumed the rampart bank was on the north side of the dyke and as such the dyke was easily accessible for those dumping rubbish.

If the function of the ENE/WSW aligned Hyderabad Sector dyke, by kinking the line of Berechurch Dyke east (rather than continuing its course NNE) was to connect the Colne to the east, it may have been to protect a wider stretch of the Late Iron Age riverside. It might have been designed to include the more navigable wider area of river meander, to the south-east of the area occupied by the later town. There are, as yet, no known Late Iron Age sites within this dyke defended potential quayside area, but this is not to say that none existed, given that this area is occupied by 19th century housing. If continued on its line NEE trajectory the dyke would intercept the north-west corner of the Recreation Ground, south of Harsnett Road. Future investigations, should if possible confirm its presence there, and whether, unlike at Hyderabad Barracks, there is evidence of occupation on its north side. This noted an Iron Age mirror, found at the barracks in the 1974, is reportedly from the northern side of the central parade, based on the HER. The trenching in this area located stock control enclosures and a small hut, but the meagre finds present do not sit well with the high status mirror. The mirror may, therefore, have derived from the dyke itself, or alternatively (and more probably) from a burial disturbed by garrison construction.

As noted in the discussion of the Barnhall Sector dyke above, there are a number of cremations found north of the Barnhall Dyke that have been take to imply that the dyke defended an area of riverside occupation, potentially similar to that at Sheepen (ibid). That statement appears even more likely now there is tangible evidence of occupation material dumped into the Hyderabad Sector dyke from the south side, in addition to the pits at the extreme south side of Hyderabad that may constitute the northern (and perhaps northwestern) fringe of such a settlement area. The settlement appears to have been located between the dykes, with its epicentre most plausibly closer to the Colne. The evidence for metalworking, salt working and imports of wine amphora do indeed suggest that a Sheepenlike settlement nearby. The only oddity is that such a settlement appears to have been located between the two dykes, rather than to the north of the Hyderabad Sector. In essence the settlement was presumably defended by the Barnhall Dyke on its south side but was apparently outside, and therefore would have faced the rampart and ditch of the Hyderabad Dyke on its northern and western sides. This seems less peculiar when it is acknowledged that this was also the case in the western area of the oppidum where a similar double dyke arrangement is observed by the layers of defence represented by the Lexden Dyke and the Sheepen Dyke. In addition and as noted the Hyderabad Dyke, in facing south, confirms the conditions for another area of defended settlement/trade and industry close to the Colne within the tapering area between this rampart and the river.

The previously mentioned burial evidence included four possible burial groups found at the Borough Cemetery in Mersea Road, a pedestal urn from a sand pit at Bourne Road, two Sheepen 'Period 1' pots from Abbey Field and a lidded bowl with copper alloy and iron rings from Winsley's Almshouses (ibid). There is therefore also a chance some of the pottery found in the Hyderabad Sector Dyke was from disturbed cremations, given that the dark 'occupation deposits' of L5 and L7 contained some possible cremated bone.

One possibility is that this particular settlement was largely excluded from the lucrative trade, or purposefully avoided such Romanising influences, to maintain political autonomy from the importers (eg the Catuvellauni). Whether or not the assemblage is that early, it now seems more likely that the dyke (along with the Berechurch Dyke and possibly the Barnhall Sector dyke) forms the pre-Roman eastern defence for the Catuvellaunian stage oppidum in operation in the 1st century AD. It remains plausible that the straight and angular alignments may have been influenced by a Roman sense of order, perhaps implying a relatively late date in the Late Iron Age in contrast to the probably earlier contour dykes at Gosbecks. As such the eastern defence dykes may have been built within the reign of Cunobelin (AD5/7-40/2) and quite possibly primarily as a defence against Rome.

The pottery from the lower dyke fills at Site J (despite the presence of a probable Dressel 1 spike) could alternatively fall within latter end of its date range, perhaps, after all, dating the construction of these eastern dykes as a response to threat of Roman invasion during the reign of Caligula. However, the possibility of defence from an earlier invasion by Rome (in the reign of Augustus) or from British tribes following the line of the Colne may now also be postulated. The plan of Berechurch Dyke in Camulodunum 2 (Fig. 6.1; CAR 11) shows the dyke as a rigidly straight feature exhibiting two sharp changes of angle in the southern area south of section (south of Berechurch Hall Road) and a sharp 140 degree angle at the connection point with Barnhall Dyke at the Borough Cemetery. These angles have not been excavated, however, and it is unclear whether the dyke was actually of rigidly straight form for its length as no open plan areas had been observed. The Hyderabad connection with the extension north-north-east of the Berechurch Dyke alignment shows that these changes of angle were not necessarily sharp but could be rounded in a manner perhaps more familiar to Iron Age earthworks. Therefore, although the overall effect of connecting the known points gives a very straight appearance and essentially the dyke was clearly pretty straight, it may not have fully taken the appearance of an angular Roman earthwork.

Wider Implications of the New Dyke for the Development of Camulodunum

On plan (see approximate position of new dyke in red on Fig. 18a) the angle of corner of the Hyderabad Sector of Berechurch Dyke appears to mirror that of the Sheepen Ditch 1b with Ditch 1, which is also at an angle greater than 90 degrees. The profile of the Hyderabad Sector Dyke is also similar to the Sheepen Dyke (based on the sketch section). A glance at the wider layout of the Camulodunum Dykes in relation to topography and geography of the river suggests a potential common purpose of the Sheepen and Hyderabad Dykes to defend Colne-side quays in the western and eastern areas of the oppidum respectively.

If the Sheepen Dyke and Hyderabad Sector dykes were broadly contemporary, as seems likely, by between c.25/10BC and AD5-40 (i.e. by Cunobelin's reign) then they can perhaps best be read as two complementary sets of defences, designed to protect key industrial and commercial zones close to the river. Together they defended Camulodunum's stretch of the river. The importance of the quaysides may be further emphasised by each being shielded by an outer line of defence, the Lexden Dyke for Sheepen, and Barnhall Dyke for Hyderabad. In sum there is now a possibility that Sheepen Dyke and Hyderabad Dyke, and therefore by implication Berechurch/Abberton and Barnhall Dyke, are all from the same construction or connected phases of oppidum defence construction. This was also an extreme example of the power and prestige of the ruler's concerned and their ability to command the necessary labour. This process may have taken many years to complete. If the Hyderabad Dyke continues its present course as far as the River Colne as expected (and as predicted on Fig. 18a), and with its south-south-west line to connect Berechurch Dyke strongly implied, it is now more or less certain that the eastern defences were designed as complete system between and linking the two rivers. This would mirror the developed layout on the western side of Camulodunum, where Lexden/Moat Farm Dyke and Heath Farm Dyke may form an equivalent western defensive system that is already widely agreed to be of Late Iron Age date. Together these western and eastern alignments complete a defensive circuit for Camulodunum, complete by 5AD-AD40 and the reign of Cunobelin and possibly earlier.

The point that these dykes were an important symbol of power defining the Royal estate, as much as a serious defensive line, is significant, as it is difficult to conceive that the c.4 kilometre plus length of Berechurch Dyke would have been possible to defend from a serious multi-focal attack or an attack by stealth during darkness.

Roman Hoard

The Alamannic invasions of AD 233 and again in AD 258 were precursors to the collapse of the Rhine frontier in AD 260, whilst a third Alamannic offensive was finally checked by Postumus. The breakaway 'Gallic Empire' was established in AD 260 when Postumus, supported by the provinces and armies of Britain, Spain and Germany, declared himself emperor. This thirteen year independent Roman state caused particular problems as the large western armies now had to be paid soley by the north-west provinces. The Gallic Empire phase ended in the restoration of central authority in AD 274 (Salway 1993, 175, 190). How the disloyal soldiers of Britain were treated in the aftermath of their allegiance with the Gallic

Empire is unknown but it is not impossible that there followed a major reorganisation of the Roman forces stationed there. Postumus, who led the Roman army in Germany, revolted from the Empire in AD259/60 and was joined by the Roman army in Spain, Gaul and Britain to form a fully functioning and independent western empire which survived for 13 years (until the surrender of Tetricus 1 at the battle of Chalons in AD274). This occurred at a time of severe inflation and increasing raiding of the eastern coast areas of Britain by Saxons and Franks (from the Low Countries). At the same time the Saxon Shore forts of Orthona (Bradwell) and Walton, Near Felixtowe were constructed. Orthona protected the mouth of the River Colne, and therefore Colchester to some extent.

Notably since the coin dates of the 'Germanic' ring-ditches at Area C2 in particular cluster around c.AD 270, barbarian incursions and the Gallic Empire and its aftermath are one possible context for their appearance at Colchester. This military associations of these burials have been dicussed elsewhere.

The hoard of 1247 mainly antoniniani coins includes latest coins of the Roman Emperor Tetricus 1 suggesting the possible deposition date of 270 or 271AD. This date is remarkably similar to the date of coin deposition within the nearby barrows and their associated cremations. The coin hoard deposition thus also echoes the period of political upheaval and social dislocation associated with the rise the Gallic Empire. At around the same time (i.e. late 260's or early 270's) at laest four other 'savings hoards' were deposited in the Colchester area including the largest of the hoards, over 6,000 antoniniani coins, found in three pots at Gosbecks in 1983 (Hawkes and Crummy 1995, 124). The use of more than one pot for the deposition of hoards of this period at Colchester therefore has a precedent. Nina Crummy discusses these hoards below.

The historical interest of both the hoard deposition dates and the occurrence of the barrows lies in the apparent simimarity of date with the strengthening of the Balkerne Gate defences at around this time (Crummy 1997).

15.5.3 Anglo-Saxon

There were no AS features or finds.

15.5.4 Medieval

Small quantities of medieval pottery residual in JL2. Post-Roman pottery was also recovered from the surface and upper fill of linear feature (JF2).

15.5.5 Post-medieval/modern

Remains of substantial modern buildings, especially over the eastern part of Site J. According to cartographic sources (OS 1876 and 1921), the brick foundations (including a cellar at its northern end) are part of the Eastern District military detention barracks, demolished in the remodelling work of the early 1960s. Over the western side of Site J there was extensive modern disturbance due to drainage and communications infrastructure of the now-demolished REME stores and workshops.

15.5.6 Other

JF 11 and JF12 are undated. Their profiles and leached-out fills indicate natural origin, possibly as tree-throw pits.

15.6 Site J finds

by Stephen Benfield

15.6.1 Late Iron Age and Roman

15.6.1.1 Dyke ditch JF2

Introduction

The size and alignment of the ditch JF2 suggest it is a dyke, belonging to the extensive series earthwork features of this kind at Camulodunum (Colchester). These were constructed in the Late Iron Age and in the early post-conquest (Roman) period, although close dating and sequencing of the dykes remains problematic (CAR 11, 174-178). The finds from the lower fill of the dyke ditch (JF2) indicate it was constructed in the Late Iron Age, *c*. late 1st century BC-early 1st century AD, but it is difficult to conclusively narrow the dating within that period.

Two sections were hand excavated across the ditch JF2, section 1 (Sx1) and section 2 (Sx2). Finds were recovered from layers JL4, JL5, JL6, JL8 & JL9 in Sx1 and from layers JL14, JL16 & JL17 in Sx2. The finds from the surface of the upper fill of each of the ditch sections were recorded separately (JL4.S & JL14.S). Some sections of layers of the ditch fill (JL4, JL5 & Sx 2 JL14, JL15) were excavated in horizontal spits (sp) broadly corresponding the upper part (sp 1), mid part (sp 2) and lower part (sp 3) part of each of these layers. Where finds are from one of the excavated spits the spit number follows the layer number (ie. JL4.sp 1). It should be noted that JL14.sp 1 & L14.sp 2 are both from the upper part of JL14 fill. All the finds are listed by context for each of the two excavated sections (Sx1 & Sx2) below.

Finds and dating

The main dating evidence for the ditch consists of pottery recovered from the fill, supplemented by some small finds and CBM. While it is difficult to match the sequence of the early and middle (mid) layers of fill between the two sections excavated across the ditch (Sx1 & Sx2), in both the pottery reflects a broad division between layers in the lower ditch fill containing only Late Iron Age pottery (JL6, JL8 & JL9), those of the mid and upper part of the ditch (JL4, JL5 & JL14) which also contain Roman pottery. The lowest (basal) layers in the ditch did not produce any pottery. The lower fills of both sections produced only grog-tempered coarse wares with a single Italian amphora import (Sx1) while the pottery from the mid fill and upper fill includes Roman (post-conquest) fabric types and Gallo-Belgic imports (Tables 15.5, 15.6). The quantity of pottery is much greater from Sx1 than Sx2, Post-Roman (medieval, post-medieval & modern) pottery is present in the topmost (surface) fill from both sections.

Context	Grog- tempered fabrics	Amphorae	samian	Gallo- Belgic imports	LIA/E Roman coarse wares	Roman coarse wares	Post- Roman	Average sherd wt/g	Roman CBM
JL04	104:1076g	5:192g	2:6g	6:118g	15:73g	11:169g	18:354g	12.3	69:6189g
JL05	442:9867g	4:172g		9:36g	28:405g	12:437g		22.0	18:438g
JL06	10:265g							26.5	
JL08	35:939g	1:561g						41.6	
JL09	3:32g							10.6	

Table15.5 Pottery grouped fabrics and Roman CBM from layers in Section 1 (Sx1)

Context	Grog- tempered fabrics	Amphorae	samian	Gallo- Belgic imports	LIA/E Roman coarse wares	Roman coarse wares	Post- Roman	Average sherd wt/g	Roman CBM
JL14	1:22g	1:95g			2:3 g	9:110g	12:228g	19.5	50:4791g
JL15	9:83g				2:27g			10.0	1:448g
JL16	9:161g							17.8	

Table 15.6 Pottery grouped by fabrics and Roman CBM from layers in Section 2 (Sx2)

Apart from a single Italian amphora basal spike of probable pre-conquest date, all of the pottery from the lower fills (JL6, JL8 & JL9) is grog-tempered and of Late Iron Age type. Although not a large assemblage, the pottery indicates that the early ditch silts were accumulating in the Late Iron Age period. There is an iron nail or staple (SF104) from the lower fill (JL17) which is not closely-dated and might possibly be Roman rather than Late Iron Age. Also, a small piece of stone (150 g), probably limestone from JL6(31) appears possibly to be Kentish ragstone. This is a stone type which was probably not available in Colchester (certainly in any significant quantity) until the 2nd century when it was used in the construction of the circus. However, this stone may be mis-identified or is possibly intrusive in this layer. Overall, the absence of any Roman (Romano-British) pottery and absence any Roman ceramic building material (CBM) from the lower fill of the ditch suggests a Late Iron Age date for the construction and early ditch deposits. The pottery from the mid-upper fill is primarily of Late Iron Age type with a small quantity that is Early Roman (1st-early 2nd century) and Mid Roman (2nd century) in date. There are also very small quantities of Roman ceramic building material (CBM) associated with the mid fill (JL5 & JL15), although this increases considerably in quantity in the upper fill (JL4 & JL14).

The quantity of Late Iron Age pottery recovered from the ditch suggests it is associated with an adjacent settlement of that period. The presence of part of a spindlewhorl (SF243) from JL5(27) which has been made from a grog-tempered pot sherd also suggests a domestic context. However, a very small quantity of burnt bone fragments or flecks observed the mid fill (JL5) could be cremated human bone (Rob Masefield pers.com.) suggesting the pottery might possibly be associated with disturbed burials. A Late Iron Age cemetery area, the 'Barnhall cemetery' (*CAR* **7**, 170), is postulated from earlier finds located to the east of the Berechurch and Barnhall dykes. However, there is no significant quantity of burnt bone from the ditch and the pottery recovered does not include any recognised sherds from 'pear-shaped' pedestal urns (*CaR* **7**, 164-169). The quantity of pottery and number of different vessels represented also suggests it is more likely to come from a settlement.

The settlement appears to have been contemporary with the Late Iron Age phase at Sheepen, which is currently thought to begin around *c*. AD 5 (Niblett 1985, 3). Based on the absence of Gallo Belgic imports from the lower ditch fill the settlement could possibly start a little earlier, possibly in the late 1st century BC, but the quantity of pottery in the lower fill and the relatively modest quantity of Gallo Belgic imports recovered from the ditch as a whole makes this very speculative and it is possibly unlikely. The apparent absence of any significant remains of Late Iron Age date, or of residual finds of that date from the excavated Sites located immediately to the north of the ditch indicates the settlement was probably located to the south of it. In contrast to the Sheepen site the relatively small quantity of Roman pottery recovered does not suggest a significant Early Roman phase (*c*. AD 43-60) nor any significant occupation later in the Roman period. However, it should be noted that Sheepen was developed as an industrial site in the early in the Roman period and acquired a Roman aspect in terms of the pottery in use there in the immediate post-conquest phase. This may not necessarily have been acquired quite so rapidly at other existing settlements within the *oppidum*.

The mid fill of the ditch (JL5, JL15 & JL16) contained Roman finds as well as a significant proportion of Late Iron Age pottery. Most of this comes from JL5 (Sx1). The layers in the mid fill of the ditch in Sx2 produced few finds, while the stratigraphy in Sx2 could indicate a recut

(JL16). The large quantity of finds from JL5 suggests that this might relate to the end of the Iron Age settlement, with broken, abandoned pottery dumped or cleared onto the ditch. As this is associated with the mid fill and not the lower ditch silts it indicates the ditch predates the abandonment of the settlement and is of Late Iron Age date. The small quantity of Roman pottery from JL5 does not contain any closely datable sherds later than the early 2nd century while the vessel types and fabrics recorded indicate a date range of mid-late 1st century AD.

Among the finds from the possible recut JL16 (Sx2) are eight, small iron tacks (SF111) identified as hobnails, which are very likely to be of Roman (post-conquest) date; although this should itself not be taken for granted as the Roman military had been active in the south-east of Britain in the mid 1st century BC and strong diplomatic and trade contact was maintained with Rome from that time. It can be noted that a small quantity of hobnails was also recovered from well down in the fill of the central ditch of the Lexden Triple Dyke associated with Roman pottery (*CAR* **7**, 59).

In terms of the upper ditch fill the latest closely-dated Roman pottery is two sherds of 2nd century Central Gaulish samian from Sx1(JL4). In the late Roman period a whole pot (narrow-necked jar) containing a coin hoard of late 3rd century date was placed into a pit cut into the mid fill (JL5); although from what level the cut was made is not known. An second, near identical whole pot was located close to it and is clearly an associated vessel, but was empty of any contents. Pottery of medieval, post-medieval and modern date recovered from the excavation surface and top fill of the ditch would appear to indicate that it remained a partly open feature into the medieval or post-medieval period.

Finds from the ditch JF2 (note: layers ordered in stratigraphic sequence)

JF2 Section 1 (Sx1)

Layer 4

JL4.S JL4(10), JL4(25)

Pottery *LIA/Roman*: Fabric GAB TN 1@11 g, Cam 2, Fabric GTW 2@19 g, Fabric GX 2@110 g, Fabric RCW 1@11 g. *Post-Roman*: Fabric 13 1@128 g; Fabric 20 9@137 g; Fabric 40 4@55 g; Fabric 40A 1@10 g; Fabric 45D 1@6 g; Fabric 98 1@4 g.

JL4.sp 1 JL4(9)

Pottery *LIA/Roman*: Fabric GAB TR1 1@41 g, Cam 5A, Fabric GTW 13@130 g, Cam 266, Fabric GX 4@28 g, Fabric HD 1@7 g, Cam 254, Fabric RCW 6@22g.

Spit JL4.sp 2 JL4(8) JL4(22)

Pottery LIA/Roman: Fabric AA 2@67 g, D 2-4, Fabric AJ 1@8 g, BA(CG) 1@5 g, Fabric GAB TN 2@43 g, Cam 56, Fabric GTW 36@324 g, Fabric GX 1@5 g, Fabric HZ(GT) 2@27 g, Fabric RCW 2@7 g.

Spit JL4.sp 3 JL4(7)

Pottery *LIA/Roman*: Fabric AA 1@92 g, D 2-4, Fabric BA(CG) 1@1 g, Fabric GAB TN 1@10 g, Cam 2, Fabric GTW 12@71 g, Fabric GX 1@3 g, Fabric HZ(GT) 1@79 g,

Other pottery from JL4 (nos.)

• Pottery LIA/Roman: Fabric AA 1@25 g, 1 sherd (25g) Dressel 1?; Fabric DZ 1@2 g; Fabric DZ(TR4) 2@16 g; Fabric GTW 33@245 g Cam 218, Cam 266; Fabric HZ(GT) 3@165 g (LSJ);

Fabric NOG WH 2 1@13 g; Fabric RCW 5@25 g Cam 116; Fabric TZ 2@21 g.

Other finds from JL4 JL004(1, 2, 7, 8, 9, 14, 19 & 22) CBM Roman: 69@6189g Flue Tile(combed), (dated L1/E2c+), Rom. Brick, Rom. Brick/tile Fired clay 5@46 g Briquetage 14@219 g Worked flint 2@12 g Burnt stone 6@352 g (flint) Stone 39@2894 g sep, white limestone (possibly kentish ragstone), fossilferous limestone; 3@246 g septaria; 1@302 g sandstone/quartzite not modified (discarded) Coal 1@12 g Fe nail Shell 1@1 g (Oyster)

Animal bone 16@68 g

Small finds SF18(2) copper-alloy decorative binding strip; SF19(1) copper-alloy ring; SF21(14) coin hoard; SF109(7) iron strip

Layer 5

JL5.sp 2 JL5(6) JL5(16) JL5(18) JL5(21)

Pottery *LIA/Roman*: Fabric ÀJ 1@96 g, D 20, Fabric DZ 1@10 g, Cam 115-116, Fabric GTW 69@539 g, Cam 115, Cam 210, Cam 210/211 Cam 218?, Cam 249, Fabric GX 1@5 g, Fabric HZ(GT) 6@152 g, Fabric NOG WH 1@4 g, Cam 114, NOG WH3, 3@13 g

Spit JL5.sp 3 JL5(27)

Pottery *LIA/Roman*: Fabric AA 1@64 g, D 1, Fabric DZ 5@42 g, Fabric GTW 96@2394 g, Cam 210/211, Cam 218, Cam 220, Cam 249, Cam 253?, Cam 254, Cam 266, Cam 271, Cam 299; Fabric GX 3@243 g, Fabric HD 2@86 g, Cam 254, Fabric HZ(GT) 10@572 g, Fabric RCW 3@113 g.

Other pottery from JL5

Pottery *LIA*/*Roman*: Fabric AJ 2@ 12 Dressel 20 (Peacock, & Williams 1986, fig. 66 rim types 15-17); Fabric DJ 3@13 g; Fabric DZ 1@9 g; Fabric DZ (TR4) 12@112 g Cam 115, Cam 116; Fabric FJ 1@82 g; Fabric GAB TN1 1@4 g Cam 56; Fabric GAB TR3 1@2 g; Fabric GTW 233@4321 g Cam 117, Cam 211?, Cam 212-217, Cam 217/ 218, Cam 218, Cam 220, Cam 221, Cam 229, Cam 230, Cam 231-232, Cam 266, Cam 260A, Cam 270B, Cam 271; Fabric GX 4@60 g; Fabric HD 17@162 g Cam 254; Fabric HZ(GT) 9@1806 g Cam 270B, Cam 271; Fabric MQ (2@47 g); NOG WH (1@4) Cam 114; Fabric NOG WH3 3@13 g Cam 113; Fabric RCW 4@27 g Cam 266; Fabric UR 1@8 g Cam 56

Other finds from JL5 JL005(14, 15, 16, 18, 21, 27 & 32) CBM Roman: 18@438 g Flue Tile(combed) (dated L1/E2c+), Teg.(Flange), Rom. Brick/tile Fired clay 22@368 g Briquetage 91@2,568 g Burnt stone 11@251 g (flint) Stone 18@1,653 g limestone (Kentish ragstone), septaria Animal bone 93@1,011 g Carbonised material 8@26g (SF114) Charcoal fragments Small finds SF243(27) pottery spindle whorl (Fabric GTW); SF20a-c(3) toilet set (tweezers, spoon suspension ring); SF23(5) lead? ball; SF24(23) puddingstone quern fragment; SF25(29) iron object; SF113(27) fired clay lining or a vessel fragment; SF114(32) carbonised material

Layer 6

JL006(31) **Pottery** *LIA/Roman*: Fabric GTW (10@265 g) Cam 220/229, Cam 266 **Fired clay** 5@43 g **Stone** 1@150 g limestone (Kentish ragstone) **Burnt stone** 3@1380 g flint & large quartzite/sandstone cobble **Animal bone** 16@45g

Layer 8

JL008(35) **Pottery** *LIA/Roman*: Fabric AA (1@561 g) Dressel 1 or 2-4 (large spike in Italian fabric); Fabric GTW (38@1004 g) Cam 221? Cam 220?/229, Cam 229 Cam 229/ 218, Cam 259; Fabric HZ(GT) 91@52 g) Cam 271 **Fired clay** 2@6 g **Briquetage** 1@45 g **Stone** 1@288 g white sandy limestone, poss. an erratic cobble **Burnt stone** 4@201 g (flint) **Animal bone** 100@1911 g

Layer 9

JL009(34) Pottery *LIA/Roman*: Fabric GTW 3@32 g Briquetage 7@42 g Worked flint 1@4 g flake Animal bone 4@54 g

JF2 Section 2 (Sx2)

Layer 14

JL14.S JL14(40)

Pottery *LIA/Roman*: Fabric DZ 1@6 g, Fabric GX 4@51 g, Fabric RCW 1@22 g. *Post-Roman*: Fabric 13/20 3@66 g; Fabric 21A 1@11 g, Fabric 40 6@113 g, Fabric 48D 2@38 g.

JL14.sp 1 JL14(45) JL14(46) Pottery *LIA/Roman*: Fabric GX 4@53 g, Fabric GTW 1@22 g.

L14.sp 2-L14.sp 3 L14(49) Pottery *LIA/Roman*: Fabric AJ 1@95 g, D20, Fabric GTW 1@10 g (large storage jar).

Other finds from JL14 CBM Roman: 50@4791 g Flue Tile? Teg., Imb., Rom. Brick, Rom. Brick/tile stone 21@1163g septaria Burnt stone 1@25g (flint) Animal bone 14@184g

Layer 16

JL016(52) Pottery *LIA/Roman*: Fabric GTW 9@161 g Cam 255/256

Other finds from JL16 Fired clay 1@9g Worked flint 1@ 2g blade (prob Meso/E Neo) Stone 3@4200g limestone (Kentish ragstone), also small piece of natural weathered sandstone (discarded) Animal bone 10@115g Small finds SF111(52) eight iron hobnails

Layer 15

JL15.1 JL15(50) upper fill Pottery *LIA/Roman*: Fabric GTW 1@15 g, Cam 256, Fabric RCW 1@1 g.

JL15.2 JL15(47), L15(48) Middle fill Pottery *LIA/Roman*: Fabric GTW 8@68 g, Fabric RCW 1@26 g, Cam 218.

Other finds from JL15 CBM Rom: 1@448 g Rom. Brick/tile (abraded).

Layer 17

JL017(53) Pottery Prehistoric: 1@7 g HMF;

Other finds from JL17 Briquetage 1@73 g stone 1@254 g septaria Bone 1@21 g (tooth) Small finds SF104(52??) iron nail/staple(?); SF105(56) iron object

Pits located to the south of Dyke ditch JF2

Several small pits (JF5-9, JF11 & JF12) were located immediately to the south of the dyke ditch (JF2). The finds from these do not suggest any necessary close connection with the Dyke.

Only three of the pits (JF5 & JF8-9) produced finds. One (JF5) might be of Late Iron Age or Early Roman date. Pieces of ceramic building material (CBM) identified as post-medieval/modern brick, peg-tile and a piece of probable modern paving were associated with its fill, but these may well be contamination from the modern foundation JF4 which cut it. A small quantity of pottery of Late Iron Age and probable early Roman date was also recovered and this is considered likely to be contemporary with the pit. The finds from the other two pits (JF8 & JF9) are probably of medieval/post-medieval and modern date. There is one piece of CBM from JF8 which is identified as medieval-post-modern/modern peg-tile. The pit JF9 produced a single piece of flint-tempered prehistoric pottery.

15.6.1.2 Roman pottery associated with the coin hoard

Two near identical pottery vessels of form Cam 281 (dated M/L2-3/4C) were recovered with a coin hoard cut into JL5 in the ditch JF2 (Figs 18, 20, Photos 15.2, 15.4). The pot Fig 20 Pot 2.1 contained the coins. The other pot (Fig 20 Pot 2.2) was recovered close to the pot containing the coins but was empty. The recovery of some rim sherds from Pot 002 with sherds broken from Pot 001 clearly relates to disturbance at the time of discovery.

Fig 20 Pot 2.1 Cam 281 Fabric GX. Broken on discovery, most of rim and some body sherds missing but probably complete when placed in ground. Red-brown fabric with grey surfaces. Used as container for coin hoard dated to the late 3rd century. Measured capacity of pot approximately 1.05 litres. JL5(14)

Fig 20 Pot 2.2 Cam 281 Fabric GX. Broken on discovery, somebody sherds missing, but probably complete when placed in ground. Grey fabric and surfaces, burnished upper body and shoulder with some burnishing inside rim. Minimum dia. At neck 26-27 mm. JL5(13) (14) (15)

16 Site K (Figs 1, 2, 19, 98)

16.1 Site K aims

Site K (size: 240m²), positioned to the south of Site A in a former car park and north of a former military block, was designed to investigate the western continuation of the WSW/ENE-aligned Roman ditch CF03 and its associated pit alignment, which was also identified in 2010 trenches T5 and T12 to the east.

16.2 Site K summary

Site K contained three phases of Roman field ditch, two or more Roman pits, a pit or possible grave, and a semi-circular gully. There were also undated pits and post-holes, and natural features.

16.3 Concordance between Site K, and 2002/2010 evaluation trenches None

16.4 Site K contexts and key finds dating

Context	Context type	Dated finds	Context
no			date
KF01	natural pit	-	-
KF02	ditch	002: pot Rom: 1@1g GX 008: B stone 1@8g 017: CBM: Rom RBT 3@114g	Rom M1- 2C
KF03	pit	003: pot Rom: 1@19g TZ; flint 1@1g	Rom M1- 2C
KF04	pit	004: pot Rom: 4@63g GX HZ; RBT 2@30g 005: SF 129, cut lead strip/sheet, 1, 11	Rom
KF05	natural pit	-	-
KF06	pit	006: pot Rom: 1@8g GX rim, abraded;	Rom
KF07	gully (part of KF02?)	009: fe slag	Rom?
KF08	ditch, cut by ditch KF2	011: pot Preh: 1 HMF rim; Rom 1: 1 fe nail	Rom M1- 2C
KF09	gully (part of ring- ditch?)	014: SF 130, Roman tile counter 1, 248g 015: pot Rom: 4@83g; RBT 1@101g 020: pot Rom: 7@119g: RBT 1@53g cream	Rom M2- 4C
KF10	natural pit	-	-
KF11	ditch	-	undated
KF12	pit	brick and coal frags not kept	post- medieval
KF13	stake-hole	-	undated
KF14	natural pit	-	-

Context	Context type	Dated finds	Context
no			date
KF15	pit	012: stone: SE 1@19g	undated
KF16	part of KF9	016: pot Rom: 5@15g GX:CBM: Rom IM 1@460g;	Rom M1-
		greensand 1: SF 220, Purbeck marble veneer? 1, 510	2C
KF17	ditch	018: pot Rom: 2; CBM: RBT 1	Rom
		019: pot Preh, 1 HMF; Rom 4; flint 1; RBT 2	
KF18	pit	-	undated
KF19	natural pit	-	-
KF20	pit	-	undated
KF21-2	post-hole, cuts	-	undated
	KF9		
KF23	post-hole	-	undated
KF24	continuation of	021: CBM: Rom RBT(?) 2@18g	Rom
	ditch KF2		
KF25	natural pit		-
KL1	tarmac/crush		modern
	base		
KL2		007: CBM: RBT1@178g, RFT(C) 1@136g	Rom
KL3	natural		
US		001: SF 128, ae, ring, ring/small wire hoop, 1, 2.6	

16.5 Site K discussion and phasing

16.5.1 Prehistory

There were no dateable prehistoric features. There were residual prehistoric sherds (Neolithic-IA pottery) in Roman ditches KF8 and KF17, and a small flint flake, presumably prehistoric, in Roman pit KF03.

16.5.2 Roman

16.5.2.1 Roman ditches and pits

There were three Roman ditches on different alignments. Earliest was the ditch terminal KF08, dated by pottery to mid-1st to 2nd century. This was aligned NNW-SSE (there is no ditch on this alignment in Site A to the north and therefore the ditch would have been relatively short). The next phase is ditch KF3/KF24, which cut KF8 and was aligned E-W, also dated to the 1st-2nd century. Third was KF17, which probably cut KF02 (the exact point of contact being removed by a modern footing).

There were four pits on the western side of this ditch, and roughly aligned on it, KF3, KF6, KF18, and KF20 (though KF3 was a little off the alignment).

This arrangement of pits along a ditch is curious, in that its WSW-ENE alignment does not quite match that of the main Roman field ditches (E-W and N-S). The same arrangement of ditch and pits was also seen in Site C above, where between fourteen and seventeen pits were aligned along ditch CF3 (and within the intermediate trail trench, T12). Given the location of the Civil War defensive fortlet on Site A, it is tempting to ask whether this pit/ditch arrangement is actually a Civil War feature. There was Roman pottery and tile in the Site C ditch, and the two finds-dated Site C pits contained Roman pottery and a piece of post-medieval peg-tile. It was concluded above that, assuming that the single peg-tile fragment is intrusive, then a Roman date for the Site C ditch and pits is appropriate. The Site K ditch contained five pieces of Roman tile, and 1 Roman sherd, and of the three pits aligned on it, only one had finds (one Roman sherd). By contrast, the Civil War ditches on Site A (AF117, AF143, AF155) contained 193 sherds of post-medieval pottery. The balance of the evidence is therefore that this ditch and aligned pits is Roman. Further, as it probably cuts Roman ditch KF02, a later Roman date will be appropriate. This unusual association of a ditched boundary with a pit alignment ran for at least 160m (between sites C and K).

15.5.2.2 Possible Roman burials

There are no definite burials here. However, the plan of KF04 might suggest a possible grave, although there is no supporting evidence by way of human remains, coffin nails or wood stains. Its fill contained four Roman sherds, two pieces of Roman tile, and a cut lead strip. The other is the gully KF09/KF16, which resembles, in part, the ring-ditches around 'Anglo-Saxon' burials on Site A, 50m to the north (and in particular the penannular gully AF30). Against the interpretation of KF9/16 as burial-related is the lack of a burial associated with it, the only nearby feature being natural pit KF19. Oddly enough, there is a piece of marble veneer in the fill of KF16, which may be from a monument.

A late Roman date may be inferred for post-holes KF22-3, which cut gully KF09. It is not entirely clear whether these features are associated with KF9/16, or represent stock sorting ditches or pens. On balance the curving gully might represent a stock-related feature ion this instance.

16.5.3 Anglo-Saxon and medieval

There were no features or finds of these periods.

16.5.4 Post Medieval/modern activity

Poured concrete foundations were part of the REME depot, demolished 2010/11, which maps of MHB show as part of the quartermasters department, and housing offices. There were also associated drainage and communications trenches. Pit KF12 was post-medieval.

16.5.5 Other

The remaining features (KF1, KF5, KF10, KF14, KF19 and KF25) are undated. Their profiles and leached-out fills indicate a natural origin. However, the charcoal flecking in KF5, KF10, and KF19 may be evidence of stump removal as part of land clearance for agriculture.

Pit KF15, ditch KF1, and post-hole KF23 were undated.

17 2010 Evaluation features coinciding with Area A1

The 2002 and 2010 evaluation trenches have been discussed in relation to the Sites with which they coincided. For some trenches and features, there was no close connection to an excavated Site. These trenches are tabulated and discussed below.

Trench 6

Modern conctrete foundation. No finds.

Trench 7

Context	description	finds	notes and dating
F98	post- hole	-	undated
F99	small pit	-	undated

Trench 8

No features.

Trench 9

Context	description	finds	notes and dating
F102	linear	CBM 1@188g	Rom
At the extrem	he NE corner of Area A	1 T9 contained the te	rminal end of a ditch containing

Roman CBM. Orientation difficult to determine, but roughly N-S or NW-SE.

Trench 10

Context	description	finds	notes and dating
F100	concrete footings of ?circular structure	-	modern military

Trench 11

Context	description	finds	notes and dating		
F216	pit	CBM 1@13g	Rom		
Controlly on the r	Controlly on the netthern olds of Area All this pit contained Reman CRM				

Centrally on the northern side of Area A1, this pit contained Roman CBM.

Trench 12

Context	description	finds	notes and dating
F213	ditch	CBM 1@5g	Roman

This ditch is very close in alignment to ditch KF17 (Site K, 40m SW), and to a lesser extent with ditch F151 in Site C (90m NE). Ditch F151 is also dated by Roman CBM. All three may be part of the same Roman landscape feature.

Trench 14

Context	description	finds	notes and dating
F212	probable natural feature	-	-
F212 was cu	t by a modern service run		

F212 was cut by a modern service run.

Trench 15

Context	description	finds	notes and dating
F179	natural pit	-	-
			•

T15 also contained two modern service runs.

Trench 16

Context	description	finds	notes and dating	
F171	natural	-	-	
F174	natural			
F175	natural			
F176	gully	-	undated	
F177	rectangular pit	-	probably post-medieval	

Immediately east of excavated site K, T16 contained an undated gully and a post-medieval? pit.

Trench 17

Context	description	finds	notes and dating
F157	concrete foundation	-	modern
F158	concrete foundation	-	modern
F159	natural pit	-	cut by concrete F158

Trench 18

Context	description	finds	notes and dating
F148	natural pit	-	-
F160	concrete foundation	-	modern
F161	concrete foundation	-	modern

Trench 19

Context	description	finds	notes and dating
F186	natural linear	-	-

T19 was in two parts. The southern part was criss-crossed by modern services and footings. The northern part contained natural pit F186.

Trench 20

A modern service run.

Trench 22

Context	description	finds	notes and dating		
L003	layer	pot 1@49g CBM 1@91g	Roman finds in subsoil layer above natural		
T22 crossed	F22 crossed by many modern service runs				

T22 crossed by many modern service runs.

Trench 25

Context	description	finds	notes and dating
F107	ditch	CBM 3@421g	med/p-med/mod (p-tile)
F110	ditch	pot 2@17g; CBM 4@441g	med, pot L12-13C
F112	pit	pot 2@7g: clay pipe stem frag 1 @ 10g	post-med/mod (clay pipe)

West of Site F, T25 contained two E-W ditches both of which contained medieval or postmedieval brick and pottery, and a pit with post-medieval clay-pipe and pottery. The question then is - if these ditches are convincingly post-Roman, then are the Roman ditches to either side of T25 (ie, F37 in T32 and FF7 in Site F respectively) also post-Roman, with residual Roman finds? Or are the post-medieval finds intrusive into an otherwise OK Roman ditch?

Trench 27

Context	description	finds	notes and dating
F139	pit/nat	pot 1@2g; CBM 1@1g	Rom

On the western side of Area A1 and 40m SE of Site K, T27 contained a pit with a Roman sherd and CBM fragment.

Trench 28

Context	description	finds	notes and dating	
F144	natural pit	-	-	
F145	natural linear	-	-	
F146	natural pit	-	-	

T28 also crossed by many concrete footings and services.

Trench 29

Context	description	finds	notes and dating
F123	small ditch	-	undated. aligned NW-SE
F124	post hole	-	undated
F125	natural pit	-	-
F126	post hole	-	-
F127	gully? terminus	-	-
F129	stake hole	-	-
F130	gully	-	-
F131	natural pit	-	-

T29 was crossed by modern footings and services.

Trench 30

Context	description	finds	notes and dating
F128	ditch	pot 1@24g; CBM 21@622g	med, pot L12-13C
F132	pit	CBM 1@35g	Rom

On the SW edge of Area A1 and 30m E of Site H, T30 contained a stretch of medieval ditch F128. This was not visible in 2002 evaluation trench 10 immediately to its south, so the ditch cannot have been more then 12m long N-S. T30 also contained Roman pit F132.

Trench 31

Context	description	finds	notes and dating
F133	natural pit	-	-

Trench 33 No features.

Trench 35

Context	description	finds	notes and dating
F035	ditch	p-med/mod pot 1; CBM 6; glass, mod 1 @ 2g	mod (glass)
F037	ditch	CBM 9@1247g	Rom

T35 was 6m – 8m east of Site F. It contained modern ditch F35. aligned WNW-ESE. Parallel to it was Roman ditch F37, which appears to continue the line of Roman ditches to west and east – F43 in T34, and possibly F25/26/27 in T37 respectively. There may be some difficulty over these ditches, because the pairing of Roman and modern parallel ditches here mirrors the pair of post-medieval ditches in T25, west of Site F. Are these Roman ditches with intrusive later finds, or all they all post-medieval?

Trenches 36, T38

T36 and T38 were dominated by modern footings and services. No significant finds.

Trench 39

Context	description	finds	notes and dating
F101	modern service	CBM 11; clay pipe 3; p-med/mod pot 7	post-med (clay pipe)
F103	ditch	p-med pot 1; CBM 3@44g	p-med/mod, 17-18C
F104	ditch	pot 2@12g: stone 1@35g	med, pottery dated L12-13C
F105	pit	CBM 1@35a	med/p-med (p-tile)

T39 was on the extreme eastern side of Area A1. It contained a pair of ditches, F104 with medieval pottery, and F103 with post-medieval pottery. These may be roadside ditches west of Mersea Road.

Trench 40

Context	description	finds	notes and dating
F063	pit	p-med pot, CBM 2; glass, mod vehicle light?; clay pipes 5; slate pencil(s) 2	mod (mod glass)

South of T39 on the eastern edge of Area A1, T40 contained a modern pit.

Trench 41

Context	description	finds	notes and dating		
F033	ditch	pot 1@3g; CBM 1@126g; stone 1@26g	med, pot L12-13C		
T41 was could	T41 was south of Site E and SE of T27. It contained a mediaval ditch on a NW/ SE alignment				

T41 was south of Site E and SE of T37. It contained a medieval ditch on a NW-SE alignment which does not readily match other local ditches.

Trench 42

Modern footings and services only.

Trench 43

Context	description	finds	notes and dating
F58	ditch	-	-
F59	natural pit	-	-
F60	natural pit	-	-

Trench 44

Context	description	finds	notes and dating
F64	pit	-	undated, prob post-med
F65	gully	-	undated, prob post-med
F78	modern foundation	-	modern

Trench 45

Context	description	finds	notes and dating
F82	concrete foundation	-	modern
F83	concrete foundation	-	modern

Trench 46, 48

Modern footings only.

Trench 49

Context	description	finds	notes and dating
F71	concrete foundation	-	modern
F72	concrete foundation	-	modern

Trench 50, T52, T54

Context	description	finds	notes and dating
T50 F066	linear	late Saxon? and med pot 2; CBM 1; metal Ae pin(?Rom) SF 2	L12-13C, (+?9-12C)
T52 F067	foundation	CBM 1@1724g	mod (brick)
T54 F073	pit	mod pot 2@15g; CBM 1; clay pipe 2	19-20C

T50 contained an E-W medieval ditch with a residual AS sherd. The ditch did not appear in T52 to the west, but may have been removed by the many modern footings in that trench. T54 to the east had a modern ditch which, if it deviated slightly to the north, may have been the same ditch.

Trench 53

Context			notes and dating
F69	post hole	-	undated
F70	post hole	-	undated

Trench 55

Context	description	finds	notes and dating
F94	large pit	-	post-medieval
F95	concrete foundation	-	modern

F94 was a large pit also seen in adjacent T56 (where it is F93). Not excavated here, but where excavated in T56, it contained brick and peg-tile.

Trench 56

Context	description	finds	notes and dating
F093	ditch	mod pot 2@22g; CBM 3@420g	19-20C

T56 contained a large modern pit F93. This may have been the same feature as undated ditch F94, 10m to the west in T55.

Trenches 58-9

Modern concrete foundations only.

Trench 60

Context	description	finds	notes and dating
F087	linear	CBM 4@132g	med, 13th C+ (p-tile), pot dated L11-12C
f090	linear	-	

T60 was north of Site J. It contained a medieval ditch F87 on a N-S alignment, and undated ditch F90 which mirrored the alignment of the LIA dyke ditch in Site J 12m to the south, and two undated pits F88, F89.

Trench 63

Context	description	finds	notes and dating
F080	pit	p-med pot 1@18g; CBM 5; clay pipe 1	17-18C
 T 0 0 1 1			

T63, west of Site J, contained a large post-medieval pit F80.

Trench 64

No features.

Trench 67

Natural feature F196.

18 Specialist finds reports

by Stephen Benfield, with Joanna Bird, Nina Crummy with Stephanie Shrubshall, Julie Curl, and Val Fryer.

18.1 Prehistoric pottery (Fig 76)

by Stephen Benfield

Early Neolithic pottery from EF13/31

A total of sixty-one sherds of flint-tempered Early Neolithic pottery (378 g) were recovered from the fill of the pit. Twenty-eight sherds (191 g) were recovered during the evaluation (T23, F31(24)). The remainder, thirty-three sherds (187 g) were recovered during the excavation (EF13). Together, these represent a minimum of five or six pots. Four different fabrics are represented (Table 18.1). Flint is the main visible temper in the pottery; although one rim appears to be tempered with sand (quartz) (Fabric O) and grog is probably present in some of the coarse tempered sherds which have a slightly soapy feel (Fabric D). There are also a number of very small sherds, almost all in Fabric V. The condition of the pottery is generally fair to good, although some sherds have suffered surface abrasion and a couple may have been scorched. Overall the sherds have an average weight of approximately 6.2 g; although leaving aside the predominantly small sherds in Fabric V the average weight is approximately 7.8 g. None of the sherds could be joined together.

Fabric	description	no.	wt/g
В	flint S-M 2	22	100
С	flint S-M, occasional L 2	7	71
D	flint S-L 2, poorly sorted	10	141
L	Quartz, sometimes with some sand S-L2	1	8
V	flint S-M 1	20	58

Table 18.1EF13 pottery fabrics

Key: S=small <1mm M=medium 1-2mm L=large >2mm, 1=<6 per cm 2=6-10 per cm

There are seven rim sherds, five of which are certainly from different pots. The vessel forms represented are bowls, either open or necked, with simple everted or rolled over rims. One has is an externally thickened rim (N2 Fig 76). There are one, possibly two body sherds that are from shoulder carinations. A number of the body sherds are from one or more thick-walled pots with coarse flint-tempered (Fabric D), including the externally thickened rim. Some of sherds represent finer vessels with a thinner body and a fabric dominated by fine-medium or sparse fine flint-temper. Several of these have a smooth surface. One of the bowl rims may have been burnished (N1 Fig 76) and neck of one vessel has been smoothed or burnished above the carination (N4 Fig 76). The surfaces of the sherds are predominantly a dark grey colour. A few sherds are a dark reddish-brown, although some of this appears to be due to abrasion and one of two sherds, possibly from the same vessel, appear to have been scorched externally. By contrast the external surfaces of some of the sherds with coarse tempered are an oxidised orange-brown.

The bowls represented here can be compared with other assemblages from Essex attributed to the Early Neolithic Mildenhall style. Although there are no decorated sherds, a low incidence or absence of decoration is not uncommon among vessels of this type recovered from pits in Essex (Brown 2001, 57). Mildenhall pottery can be dated to the 4th millennium BC. It appears to emerge around 3600 BC and is its currency comes to an end following the introduction of Peterborough styles of pottery after *c*. 3300 BC (Gibson 2002, 76 & 78). Carbon dating associated with assemblages of Mildenhall pottery from St Osyth (Essex) and Kilverston (Norfolk) indicate date ranges of *c*. 3670-3530 BC (Germany 2007, 69) and 3650-3400 BC (Garrow *et al* 2006, 72) respectively.

The presence of single rim sherds from several individual pots, the slightly abraded condition of the much of the pottery and that a few sherds appear possibly to have been

scorched suggests a collection of material. As such the pottery in the pit might represent a collection from an occupation scatter or possibly from a midden.

Illustrated pottery (EF13/31):

Pot N1 Fig 76 EF13(9). Simple everted rim from a bowl, smoothed, possibly originally burnished surface. Grey-brown exterior surface, dark grey interior (Fabric C)

Pot N2 Fig 76 EF13(9). Externally thickened rim from a bowl. dark grey surfaces (Fabric D)

Pot N3 Fig 76 EF13(9). Simple rolled-over rim from a bowl, dark grey exterior, dark orange-brown interior (Fabric B)

Pot N4 Fig 76 EF31(24). Carinated shoulder sherd from a bowl. Smoothed or burnished above carination (Fabric B)

Pot N5 Fig 76 EF31(24). Simple rolled-over rim from a bowl, dark grey fabric, pale orange-brown surface, patchy on exterior and possibly due to staining (Fabric L)

Pot N6 Fig 76 EF31(24). Simple rolled-over rim from a bowl, brownish slightly soapy fabric with some grog-temper, dark grey surfaces with medium -large pieces of flint-temper (Fabric D)

Neolithic-Iron Age pottery

Other than pit EF13/31, a total of thirty-one sherds (176 g) of prehistoric pottery was recovered. None of the Sites produced more than ten sherds and none was recovered from Sites D & G. One sherd was recovered during the evaluation (Table 18.2). Overwhelmingly this pottery was recovered as single sherds and no context produced more than two. The pottery was divided between broad fabric categories (Table 18.3) and the number of sherds and weight was recorded for each finds number by context. Approximately 80% of the pottery by count and weight, is flint-tempered (Fabric HMF) and the average sherd weight is 5.7g.

Fabric	Description
HMF	hand made flint-tempered
HMF/S	hand made flint & sand-tempered
HMG	hand-made grog-tempered

Table 18.2Prehistoric pottery fabrics

Site A1:	Fabric HMF		Fabric H	Fabric HMF/S		Fabric HMG		orded
	no	wt/g	no	wt/g	no	wt/g	no	wt/g
Α	3	25	1	6				
В	1	12						
С	1	3						
E	1	3						
F	4	13			1	3		
Н	4	26						
J	7	38			1	5	4	37
K	2	7						
F152	1	8						
(T5)								
Total	24	135	1	6	2	8	4	37

Table 18.3Prehistoric pottery by Site and fabric type

Key: HMF=Hand made flint-tempered, HMF/S=Hand made flint & sand-tempered, HMG=Hand made grog-tempered

Only one sherd could be closely dated (JL4(8)). This is from the base of a late Neolithic Grooved ware bowl (Fig 76) which would have been current *c*. 2800-200 BC (Gibson 2002, 84). The remaining sherds recovered are not diagnostic, but almost all are flint-tempered and can be dated within a broad range of Neolithic-Early Iron Age. Most of this pottery is residual from later dated contexts. A small number of sherds come from contexts which

produced no later dated finds (CF150, FF9, FF62, HF29, JF9 & F152(T5)). However, with only one or two sherds from each of these contexts it suggests that most, if not all are also residual.

Illustrated Pottery:

Pot N7 Fig 76 JL4(8). Base edge sherd from a Grooved Ware pot decorated with horizontal grooves. Grog-tempered with some small voids from organic inclusions in surfaces, oxidised orange-brown surface colour with dark-grey fabric core. (weight 5g). dated late Neolithic.

18.2 Late Iron Age and Roman pottery

Although all of the pottery has been quantified and spot dated, only the assemblage from the Dyke ditch (F2) has been discussed in detail, together with a small quantity of Roman pottery of intrinsic interest.

Late Iron Age and Roman pottery from the Dyke ditch (JF2)

Incorporating comments by Paul Sealey on the form types of the imported amphora

Introduction

The Iron Age and Roman pottery recovered is one of the most significant assemblages in terms of size and the stratigraphic sequence to be recovered from one of the large linear ditch and bank features at Iron Age and Roman Camulodunum (Colchester) referred to as Dykes. The pottery is listed by context (above) and is listed by fabric in Table 18.4. In addition there are two associated pots which were buried in the ditch, one of which contained a 3rd century coin hoard (see pottery of intrinsic interest).

Fabric	count	% count	weight (g)	% weight	Eve.
AA	6	0.8	809	5.3	0.04
AJ	5	0.7	211	1.4	0.16
BACG	2	0.3	6	<0.1	
DJ	4	0.5	15	0.1	0.16
DZ	8	1.1	67	0.4	0.10
DZ(TR4)	15	2.1	133	0.8	0.26
FJ	1	0.1	82	0.5	
GAB TN 1	5	0.7	68	0.4	0.35
GAB TR 1	1	0.1	41	0.2	0.10
GAB TR 3	1	0.1	2	<0.1	
GTW	566	77.7	9542	63.5	7.67
GX	24	3.3	559	3.7	0.23
HD	19	2.6	217	1.4	0.68
HZ	1	0.1	38	0.2	
HZ(GT)	33	4.5	2863	19.0	0.55
MQ	2	0.3	47	0.3	
NOG WH	1	0.1	4	<0.1	0.06
NOG WH 2	1	0.1	13	0.1	
NOG WH 3	6	0.8	26	0.2	0.14
RCW	24	3.3	255	1.7	0.73
TZ	2	0.3	16	0.1	
UR	1	0.1	8	<0.1	0.07
Total	728	99.7	15022	99.3	11.30

Table 18.4 Dyke ditch JF2 Late Iron Age and Roman pottery by fabric

Lower ditch fill (Sx 1 JL6, JL8 & JL9, Sx 2 JL15 & JL16) and pit JF3

Apart from an imported Italian amphora basal spike, all of the pottery recovered from the lower ditch fill is grog-tempered ware of Late Iron Age type (Fabric GTW) and all of the vessel forms recorded appear among the earliest dated deposits at Sheepen (c. 5 AD). Pots present in this fabric are predominantly bowl or jar forms with cordoned shoulders (Cam 229D, Cam 229/Cam 218, Cam 220) with jars (Cam 266), cooking pots (Cam 259) and a storage jar (Cam 271). All of the forms are recorded from the earliest deposits at

Sheepen dated from *c*. 5 AD. Two grog-tempered sherds from JL15, are a thinner, Romanising coarse ware (Fabric RCW); one of which from a form Cam 218 bowl. The Italian amphora spike was recovered from JL8. This is either of form Dressel 1 or Dressel 2-4, but it is not possible to tell apart the basal spikes from these two forms. Dressel 1 is a pre-conquest form not current after the late 1st century BC and Italian Dressel 2-4 amphorae first appear in Britain from the late 1st century BC. Finds of amphorae from London show that Italian Dressel 2-4 in Campanian fabric continued to be imported in the post-conquest period although this probably did not continued beyond the late 1st century (Davies *et al* 1994, 21). Sherds of two amphora of this form in Campanian fabric (Fabric E) are also recorded from the area of the Roman town at Colchester (*CAR* **10**,138 Type 10 no. 49 & 51) and as such are almost certainly post-conquest imports. However, there is a noted decline in the quantities of Dressel 2-4 amphorae reaching Britain from the early 1st century AD (Sealey 2009, 22). This suggests that the amphora spike from the lower fill of the dyke ditch can be fairly confidently accepted as a Late Iron Age import and may be more likely to date to the period of the 1st century BC-early 1st century AD than later.

In addition to the pottery from the layers of ditch fill a few sherds were recovered from a small pit (JF3) on the south side of the ditch which had been cut into JL6. The upper fill of the pit appeared to be settling from JL5. The lower fill produced just three sherds which have little to contribute to the dating of the mid ditch fill (JL5) above. One is a degraded (burnt?) sherd, fissured with cracks, in a sandy fabric with a rilled surface, possibly of Late Iron Age or Early Roman date. The other two are grog-tempered sherds, one of which is from a beaker in Fabric TR4.

Mid ditch fill (Sx 1 JL5, SX2 JL15 & JL16)

The mid fill of the ditch in Sx1 is taken to be JL5A. Sx2 appears to have a distinct sequence of fills (JL15 & JL16) of which JL16 could be a recut. A significant assemblage of finds was recovered from the mid (sp.2) and lower part (sp.3) of layer JL5, while only small guantities of finds were recovered from JL15 & JL16.

The most significant pottery from JL5, in terms of dating, is the appearance of Gaulish imports and the presence of a small quantity of Roman (post-conquest) pottery sherds which begin to appear from the base of JL5. A very small quantity of greyware pottery (three sherds) associated with the lowest level of JL5 (sp.3) can be closely dated as Roman. However, most of the pottery recovered is of Late Iron Age type, although some shell-tempered sherds and sherds from large storage jars could also be post-conquest. There are also some Late Iron Age-Early Roman Gallo-Belgic imports of late 1st century BC-mid 1st century AD date. The imports also include a sherd from an Italian Dressel 1 amphora of 1st century BC date. The pottery from JL5(sp.2) is very similar with only a small proportion of closely date post-conquest greyware consisting of a single sherd. This includes a rim from a Dressel 20 amphora the shape of which suggests it dates to the period of the mid-late 1st/early 2nd century.

Other Roman pottery recovered from JL5 includes a sherd of Verulamium region oxidised ware (Fabric FJ) of mid 1st-early/mid 2nd century date; while a few sherds of oxidised ware (Fabric DJ) may be local and of Roman date, but might possibly also be early Gaulish imports. The Gaulish imports include Gallo-Belgic wares (Fabrics GAB TN1 (Cam 56), GAB TR3, NOG WH (Cam 114) & NOG WH 3 (Cam 113)). This layer also sees the appearance of imitations of Gallo-Belgic types in local grog-tempered wares, especially Butt Beaker forms (Fabric UR (Cam 56) & Fabric DZ (Cam 115-116) & Fabric DZ(TR4) Cam 115 & Cam 116). Early shell-tempered wares (Fabric HD), current from the Late Iron Age and into the early Roman period, also appear in this layer with the cooking pot Cam 254 identified. This form is common at Sheepen but appears to be very rare among assemblages from the Roman fortress and *Colonia* (*CAR* 10, 478) which suggests it barely survives into post-conquest period. The small quantity of pottery from both JL15 & JL16 consists of sherds of Late Iron Age or early Roman date.

Upper ditch fill Section 1 (Sx 1) JL4 Section 2 (Sx2) JL14)

Grog-tempered pottery of Iron Age date still dominates the assemblage in JL4 (Sx1) but within this layer all of the Iron Age pottery can be treated as residual as it is stratified above Roman pottery recovered from the middle ditch fills. In terms of the Roman pottery main difference between the upper fill (JL4) and the mid ditch fill (JL5) is the appearance of a few sherds of Central Gaulish samian (Fabric BACG) which can be closely dated to the 2nd century. It can be noted that a single, abraded sherd from the lower body of an amphora in an orange fabric is possibly from a Dressel 1 as the wall thickness is approximately 16 mm and the fabric is consistent with that of some Dressel 1 sherds from Sheepen (Colchester Institute site). However, as the sherd comes from the area of the lower wall above the spike it could also be from the lighter successor form Dressel 2-4 and on balance this may be more likely. Post-Roman pottery dating from the medieval-post-medieval period was recovered from the topmost (surface) fill of both sections.

Discussion

The absence of Roman (post-conquest) pottery among the pottery recovered from the lower fill in both of the ditch sections indicates these layers began to accumulate in the Late Iron Age and that the Dyke was constructed in the Late Iron age period. That this material appears to have accumulated in the lower part of the ditch (rather than representing a single dump of pottery) supports this and it appears unlikely that the dyke could have been constructed later ie in the early post conquest (Roman) period although grog-tempered wares would probably still have been current in the early post-conquest period.

Close dating of the pottery from the lower ditch fill within the Late Iron Age period is difficult. The grog-tempered wares and the Italian amphora spike suggest a possible date of late 1st century BC-early 1st century AD. The absence from the lower fill of any Gaulish imports, which appear in Britain from the late 1st century BC, or local Gallo-Belgic copies, may also support an early date. It can be noted that a rim sherd from a Dressel 1B amphora, recovered from the mid fill JL5(27) (pot 61) and a second probable Dressel 1 sherd JL4(19), if not from later secondary use of these amphorae, could also indicate activity here in the late 1st century BC. However, the quantity of pottery from the lower fill is much less than from the layers above (mid & upper fill) where only modest numbers of sherds of Gaulish imports are present, with small quantities of Roman pottery. This suggests that Gaulish imports may not have been particularly common on this site in the Late Iron Age., especially in comparison with Sheepen which has large numbers of them. As such, their absence, along with that of local Gallo-Belgic copies, may not be particularly significant in terms of dating these layers. Overall, a broad dating of late 1st century BC to early-mid 1st century AD may be appropriate.

The pottery from the mid-fill of the ditch is mostly of Late Iron Age type, with only a very small quantity of definite post-conquest (Roman) pottery, although Roman pottery is present in the lowest part of this deposit (JL5 sp.3). Overall, Grog-tempered wares (Fabric GTW) account for 78% by count and 63% by weight of the total Late Iron Age and Roman pottery assemblage from the ditch (Table 18.4). Combined with grog-tempered storage jars (Fabric HZ(GT)) this rises to 82% by both count and weight. The presence of Gaulish imports makes the overall composition of the assemblage more similar to that from Sheepen than that from the lower fill and the Late Iron Age coarse wares and Gaulish imports can be broadly date to the period of the late 1st century BC-mid/late 1st century AD. The Roman sherds can be dated to the period of the mid-late 1st/early 2nd century. The very small quantity of definite Roman (post-conquest) pottery suggests the possibility that this might, to some degree, represent an intrusive element, especially in the lower part of this fill. In this respect the recovery of two whole pots associated with a mid-late 3rd century coin hoard may be significant. These were recovered from Sx1 (JL5) but had been cut into this fill from an unknown level higher in the ditch.

Overall the pottery assemblage from the upper ditch fill is similar to that from the mid fill, ie of Late Iron Age and Early Roman date; although the latest closely dated pottery from the

upper fill is 2nd century, consisting of two sherds of Central Gaulish samian (Fabric BACG). The topmost (surface) fill of the ditch in both sections (JL4 sp 4.S & JL14 sp 14.S) includes a small quantity of medieval and post-medieval pottery indicating that the ditch probably remained an open, earthwork, feature into the medieval and post-medieval period.

Overall, apart from a small quantity of medieval and later dated sherds from the topmost (surface) fill, the absence of Late Roman (3rd-4th century) pottery suggests that most of the ditch fill dates to the Early-mid Roman (mid 1st-2nd century) period. Given the significant quantity of late iron Age pottery from the mid-upper fill it appears possible this dates to after the abandonment of the Late Iron Age settlement here as there is little indication from the pottery that it continued in any significant form into the Roman period; certainly not beyond the mid 1st century AD. To some extent this could be is supported by the average sherd weights. Although varying widely between different fills, among the larger quantity of pottery from Sx 1 the average sherd weight appears generally to be slightly higher for the lower ditch fill, at approximately 26 g, than that for the mid fill layer (approximately 22 g) and lower again in the upper fill (approximately 12 g) (Table 18.4).

The absence of 1st century samian among the Late Iron Age and Early Roman pottery is surprising as significant quantities of samian from Italian/early South Gaulish and South Gaulish centres have been recovered from deposits at the Sheepen site. Arretine, possibly Italian (Pisa) samian, together with decorated and plain 1st century South Gaulish samian, has been recovered from one garrison site (GAL Area L/N) within the *oppidum* (Benfield 2012). The occupation here appears to have had some access to Late Iron Age networks which provided more sophisticated and presumably socially restricted commodities, including imported pottery represented by the presence of Gaulish imports and sherds from one or more Italian amphorae (including Dressel 1B). While there is one sherd from a form Dr 29 bowl from Site A (AF74(103)), the style of decoration indicating a date of *c*. 50-70 AD, the absence of early samian from the ditch may reflect its relative rarity in the preconquest period and that the occupation here probably does not to continue in any significant way into the Early Roman period.

The presence of a rim sherd from a Dressel 1B amphora recovered from JF2 Sx 1 (JL5) (pot 61) is of some interest. A second, abraded, sherd from JL4(19) is also almost certainly Dressel 1. Camulodunum (Colchester) is one of just a few Late Iron Age sites to produce Dressel 1 amphora in any quantity. These amphorae at Camulodunum, where closely identifiable correspond to the late dated form variant Dressel 1B and Camulodunum has the largest quantity of this form of any site in Iron Age Britain. Most of these Dressel 1 amphorae have come from excavations at Sheepen, although there is also six of these amphora from the Lexden tumulus and one from St Mary's Rectory (Dunnett 1971, fig 26 No. 1). More recent excavations at Gosbecks Park (Benfield, forthcoming), Abbotstone (Fawcett, 2005) and on the Garrison Alienated Land (GAL) (Sealey 2005; Benfield 2012 & forthcoming) have together produced a small number of sherds from Dressel 1 amphorae from several settlements sites locates within and around the Camulodunum oppidum. This indicates the consumption of imported wines, presumably associated with feasting, at these various sites. To some extent this is also a reflection of the quantity of these amphorae at the oppidum in the Late Iron Age period. In addition there are also two possible Dressel 1 sherds from the dyke ditch JF2 but which cannot be positively identified between the forms Dressel 1 and Dressel 2-4. These are an undiagnostic basal spike in Italian fabric from JF2 Sx 1 (JL8) (P62) and sherd from lower body above the spike (abraded) from JF2 Sx 1 (JL4 (19)). The sherds of Dressel 1 amphorae (and possible Dressel 1 sherds) recorded from GAL excavations and other sites immediately to the south of Colchester are listed below.

Garrison Alienated Land (GAL)

Dressel 1 body sherd F61 Sx 8, field boundary, GAL Area 6 (Sealey 2005) Dressel 1 body sherd F161(167) ditch GAL Area L/N (Goojerat barracks) (Benfield 2012) Dressel 1 rim (Dressel 1B) JF2 (JL5), dyke ditch (Benfield this report)

Gosbecks Park

Dressel 1 rim (Dressel 1A) Temple ditch (Benfield forthcoming)

Abbotstone quarry (Bellhouse farm)

Dressel 1 rim (Dressel 1B) F2 (L16) (Fawcett 2005)

Illustrated Late Iron Age and Roman pottery from the ditch JF2 (Figs 77-81)

Pottery from ditch JF2 (Sx 1)

Pottery from JL8

Fig 77.1 P62 JL008 (33) Fabric AA Undisgnostic basal spike from an Italian amphora, sandy fabric including black sand, grey core with brownish-orange margins (561 g) dated L2/1C BC-1C AD

Fig 77.2 P04 JL008 (35) Fabric GTW Cam 220?/229 jar with beaded rim and shoulder cordons, (T D2-4) part of post firing hole made through neck, second rough post firing hole just below rim, 4 sherds from same vessel, 2 join (117 g, Eve 0.20) Dated L1C BC-M1C AD

Fig 77.3 P05 JL008 (35) Fabric GTW Cam 229/ 218 everted rim with shoulder cordons, one larger cordon poss. Cam 218 (43 g, Eve 0.17) Dated L1C BC-M1C AD

Fig 77.4 P06 JL008 (35) Fabric GTW Cam 259 rough surface (41 g, Eve 0.06) Dated L1C BC-M1C AD

Fig 77.5 P07 JL008 (35) Fabric GTW Cam 221? small jar with beaded, slightly undercut rim and single cordon, LIA GTW fabric (poss latest form from layer) (19 g, Eve 0.06) Dated L1C BC-M1C AD

Fig 77.6 P08 JL008 (35) Fabric GTW 2 joining sherds, large jar with tall, bead rim and ripple shoulder (Thompson B2-3?) (140 g, Eve 0.06) Dated L1C BC-M1C AD

Pottery from JL6

Fig 77.7 P01 JL006 (31) Fabric GTW Jar with simple rim small cordon and rough body surface, fabric sandy with grog (32 g, Eve 0.15) Dated L1C BC-M1C AD

Fig 77.8 P02 JL006 (31) Fabric GTW Cam 266 jar with beaded rim and rough (horizontal wiped) body surface (Native version as Hawkes & Hull 1947, 271) (82 g, Eve 0.17) Dated L1C BC-M1C AD

Fig 77.9 P03 JL006 (31) Fabric GTW Cam 220/229 jar with beaded rim and shoulder cordons, small cordon on neck (T D2-4) small post firing hole made through neck (77 g, Eve 0.20) Dated L1C BC-M1C AD

Pottery from JL5 sp3

Fig 77.10 P61 JL005.sp 3 L5(27) Fabric AA Dressel 1B rim, Italian fabric (dense pinkishbuff/brown with cream surfaces) (64 g, Eve 0.04) Dated M-L1C BC

Fig 77.11 P13 JL005.sp 3 JL5(27) Fabric HD (ESH) Cam 254 shell-tempered, 2 sherds - possibly 2 pots represented (86 g, Eve 0.30) Dated E-M1C AD

Fig 77.12 P14 JL005.sp 3 JL5(27) Fabric GTW Cam 254 (54 g, Eve 0.12) Dated E-M1C AD

Fig 77.13 P15 JL005.sp 3 JL5(27) Fabric GTW Cam 266, 4 sherds SV, sooted exterior (135 g, Eve 0.79) Dated E/M-L1C AD

Fig 78.14 P17 JL005.sp 3 JL5(27) Fabric GTW Cam 266, sooted rim (93 g, Eve 0.20) Dated E/M 1C AD

Fig 78.15 P18 JL005.sp 3 JL5(27) Fabric GTW Cam 271, 2 sherds SV, small version (see CAR 10, GX Type 161) (50 g, Eve 0.10) Dated E-M1C AD

Fig 78.16 P19 JL005.sp 3 JL5(27) Fabric GTW Cam 218, 2 sherds SV (127 g, Eve 0.11) Dated E-M 1C AD

Fig 78.17 P20 JL005.sp 3 JL5(27) & (32) Fabric GTW Cam 229 7 sherds SV, poss. LSJ, Cam 270A (?) but rippled shoulder and massive Cam 229 (800 g, Eve 0.65) Dated E-M1C AD

Fig 78.18 P21 JL005.sp 3 JL5(27) Fabric GTW Cam 249, (35 g, Eve 0.15) Dated E-M1C AD

Fig 78.19 P22 JL005.sp 3 JL5(27) Fabric GTW Cam 220 (44 g, Eve 0.15) Dated E-M1C AD

Fig 78.20 P23 JL005.sp 3 JL5(27) Fabric GTW Cam 218? (86 g, Eve 0.14) Dated E-M1C AD

Pottery from JL5 sp2

Fig 78.21 P09 JL005.sp 2 JL5(6) Fabric AJ Dressel 20 rim, see Martin-Kilcher types 15 & 17 (Peacock, & Williams, D., 1986, fig 66) (96 g, Eve 0.16) Dated M1-E2C

Fig 78.22 P34 JL005.sp 2 JL5(6) (21) Fabric NOG WH3 Cam 113, 2 sherds SV (13 g, Eve 0.14) Dated L1C BC-M1C AD

Fig 78.23 P10 JL005.sp 2 JL5(6) Fabric GTW Cam 249 oxidised polished red ware (DZ) (6 g, Eve 0.07) Dated Late Iron Age

Fig 78.24 P11 JL005.sp 2 JL5(6) Fabric GTW Cam 115 Butt Beaker rim, everted rim with small cordon below (closely similar to imported TR form Cam 116) (20 g, Eve 0.20) dated L1C BC-M1CAD

Fig 78.25 P12 JL005.sp 2 JL5(6) Fabric DZ Cam 115/116 red fabric white/cream slip, some sparse grog, slightly cupped rim (10 g, Eve 0.10) Dated E-M1C AD

Other pottery from JL5

Fig 78.26 P33 JL005 (21) Fabric GAB TN1 Cam 56 (abraded) (4 g, Eve 0.08) Dated L1C BC-M1C AD

Fig 78.27 P45 JL005 (16) Fabric UR Cam 56 local copy (8 g, Eve 0.07) Dated L1C BC-M1C AD

Fig 78.28 P24 JL005 (32) Fabric GTW Cam 218 5 sherds SV, very similar to pot 19 but not cordon at base of shoulder (138 g, Eve 0.04) Dated E-M1C AD

Fig 78.29 P25 JL005 (32) Fabric GTW Cam 230 fabric relatively romanising (120 g, Eve 0.46) Dated E/M1C AD

Fig 78.30 P26 JL005 (32) Fabric GTW Cam 211-217? (16 g, Eve 0.14) Dated E-M1C AD

Fig 78.31 P27 JL005 (32) Fabric GTW Cam 211-217 (63 g, Eve 0.08) Dated E-M1C AD

Fig 78.32 P28 JL005 (32) Fabric GTW Cam 229 (32 g, Eve 0.04) Dated E-M1C AD

Fig 79.33 P29 JL005 (32) Fabric GTW Cam 270B (939 g, Eve 0.20) Dated E-M1C AD

Fig 79.34 P30 JL005 (32) Fabric HD (ESH) Cam 254, 12 sherds SV, appears different pot to pot 13 (95 g, Eve 0.36) Dated E-M1C AD

Fig 79.35 P31 JL005 (32) Fabric GTW Cam 271 large jar poss. Cam 217 type (110 g, Eve 0.06) Dated E-M1C AD

Fig 79.36 P32 JL005 (32) Fabric GTW Cam 218 (48 g, Eve 0.20) Dated E-M1C AD

Fig 79.37 P35 JL005 (21) Fabric GTW 260A, oxidised, rilled body, 3 sherds SV, (37 g, Eve 0.20) Dated E/M1C AD

Fig 79.38 P36 JL005 (21) Fabric GTW Cam 218, am 218 variant (32 g, Eve 0.07) Dated E-M1C AD

Fig 79.39 P37 JL005 (21) Fabric GTW Cam 220 (abraded) (49 g, Eve 0.11) Dated E-M1C AD

Fig 79.40 P38 JL005 (21) Fabric GTW Cam 270B, poss Cam 271(128 g, Eve 0.16) Dated E-M1C AD

Fig 79.41 P39 JL005 (21) Fabric GTW (Cam 117? or Cam 92?) (11 g, Eve 0.07) Dated E-M1C AD

Fig 79.42 P40 JL005 (21) Fabric GTW Cam 217/218, small (18 g, Eve 0.07) Dated E-M1C AD

Fig 79.43 P41 JL005 (18) Fabric TR4 Cam 116 rim (21 g, Eve 0.20) Dated L1C BC-M1C AD

Fig 79.44 P42 JL005 (18) Fabric GX lid seated jar (35 g, Eve 0.14) Dated Roman

Fig 79.45 P44 JL005 (18) Fabric DZ base with protruding foot, oxidised, thin grog-tempered ware (9 g) Dated L1C BC-M1C AD

Fig 79.46 P46 JL005 (16) Fabric GTW Cam 221 small cordon on shoulder (45 g, Eve 0.22) Dated L1C BC-M1C AD

Fig 79.47 P47 JL005 (16) Fabric GTW Cam 231-232, 2 sherds SV (29 g, Eve 0.24) Dated L1C BC-M1C AD

Fig 80.48 P48 JL005 (16) Fabric GTW Cam 231-232 (26 g, Eve 0.13) Dated L1C BC-M1C AD

Fig 80.49 P59 JL005 (12) (sinkage into F003) Fabric GTW Cam 117 (29 g, Eve 0.08) Dated L1C BC- M1C AD

Fig 80.50 P60 JL005 (12) (sinkage into F003) Fabric GTW Cam 266 (7 g, Eve 0.04) Dated L1C BC- M1C AD

Pottery from JL4 sp2

Fig 80.52 P53 JL004.sp 2 JL4(22) Fabric GAB TN Cam 2, underside heated/burnt, different platter to L4(25) (38 g, Eve 0.10) Dated L1C BC-M1C AD

Fig 80.53 P54 JL004.sp 2 JL4(22) Fabric GTW Cam 266 slight groove for lid seating inside rim, pitted surface from burnt-out temper (30 g, Eve 0.08) Dated E-M1C AD

Fig 80.54 P57 JL004.sp 2 JL4(8) Fabric GTW Cam 229 (abraded) rim (14 g, Eve 0.07) Dated L1C BC- M1C AD

Fig 80.55 P58 JL004.sp 2 JL4(8) Fabric GTW Cam 256 (11 g, Eve 0.05) Dated L1C BC- M1C AD

Pottery from JL4 sp1 Fig 80.56 P55 JL004.sp 1 JL4(9) Fabric GAB TR1 Cam 5A (abraded) rim (41 g, Eve 0.10) Dated L1C BC-E/M1C AD

Fig 80.57 P56 JL004.sp 1 JL4(9) Fabric GTW Cam 266 (31 g, Eve 0.10) Dated L1C BC- M1C AD

Pottery from JL4 surface Fig 80.58 P52 JL004.S JL4(25) Fabric GAB TN Cam 2, different platter to L4(22) (11 g, Eve 0.07) Dated L1CBC-M1CAD

Pottery from ditch JF2 (Sx 2)

Pottery from JL15 & JL16

Fig 80.59 P50 JL015.sp2 JL15(48) Fabric RCW Cam 218 (abraded) shoulder (26 g) Dated E/M1C

Fig 80.60 P49 L015.sp 1 JL15(50) Fabric GTW Cam 256 pitted surfaces similar to dissolved shell-temper (15 g, Eve 0.08) Dated E-M1C

Fig 80.61 P51 JL016 (52) Fabric GTW Cam 255/ 256, fabric as for Cam 256 (64 g, Eve 0.11) Dated L1C BC-E/M1C AD

18.3 Roman pottery of intrinsic interest

Samian

A samian sherd from pit AF163(257) of very unusual form and was kindly reported by Joanna Bird.

Small samian plate some 140mm in diameter and 15mm high, with a simple bead rim and a pair of shallow concentric footrings; the fabric is characteristic of Rheinzabern. Only one parallel has been noted for multiple concentric footrings, a large (450mm diameter) shallow dish or tray from Silchester, also in Rheinzabern ware, with barbotine decoration along the rim (Bird, forthcoming). Even single shallow footrings of comparable shape are rare; the closest to the Colchester pot are two little plates of similar dimensions, one from Rheinzabern with a white-painted dedication to Mithras on the centre of the floor (Thomas 2004, fig 3), the other a waster from the Trier potteries with a moulded frieze on the rim (Weidner 2009, 182-3 and Abb 51). Other similar footrings are recorded on an oval Central Gaulish tray with a moulded frieze on the rim (British Museum acc Towneley GR 1814.7-4, 1548: illustrated, but without the profile, in Walters 1908, M108, fig 67 and pl 14, and in Oswald and Pryce 1920, pl 57, 1), a heavily modelled shallow bowl from Lezoux (Bet *et al.* 1989, type 67), and a shallow platter from the potteries at Dinsheim-Heiligenberg (Pastor 2009, fig on 73).

Vessels of similar dimensions, but with the usual angled samian footring, are also uncommon. They include three slightly larger plates, all with heavy knob-like rims and all probably in Rheinzabern ware, from Colchester, Silchester and London (Oswald and Pryce 1920, pl 66, 2 and 4; Stanfield 1929, fig 11, 53). Ludowici's forms Tt' and Tv', both recovered from graves at Rheinzabern, are again slightly larger, and somewhat more dish-like in profile (Oswald and Pryce 1920, pl 69, 5 and 6).

Table and ritual use are both possible suggestions for the function of this little pot. The double footrings may indicate that it served as a stand for something heavier, with the inner footring providing extra support, but it seems rather small and finely potted for such a purpose. The only close parallel noted for which a use can be suggested is the Mithraic pot from Rheinzabern, which may have served as a small patera for offerings, while it is likely, from its decoration, that the much larger tray from Silchester was also used for offerings or for display in a shrine. It is conceivable, then, that the pot may have been used for ritual purposes, and its presence in the pit may therefore represent a votive element in the pit's filling.

Such a unique pot cannot be closely dated, but the rather ovoid shape of the rim, together with the heavy round rims of the three comparable small pots found in Britain, would suggest a date in the 3rd century, perhaps *c*AD 220-260.

Fig 82 AF163(257). Rheinzarben samian (Fabric BAEG(RH)) Small plate some (140mm in diameter and 15mm high) with a simple bead rim and a pair of shallow concentric footrings (weight 13 g). Pot 66

18.4 Medieval and post-medieval pottery

Introduction

Although all pottery has been quantified and spot dated, only that from the top fill of Dyke ditch (JF2) and from the fill of the siege work ditch (AF55/AF143/AF155 & AF177) is reported on here.

Pottery from Dyke ditch JF2

A small quantity of medieval, post-medieval and modern pottery was recovered from the surviving topmost (surface) fill of both sections (SX 1 & Sx 2) cut across the ditch. This is listed in Table 18.5. That this pottery was recovered from both sections suggests that the ditch remained a partly open and visible feature into the post-medieval period, and most of the ditches and banks of the large dykes located to the west of the town were certainly still striking features in the landscape during the 18th century (CAR **7**, 10-20).

Fabric	count	weight (g)	Eve.
13/20	3	66	
20	10	265	0.23
21A	1	11	
40	10	168	0.37
40A	1	10	
45D	3	30	
48D	1	26	
98	1	4	
Total	30	580	0.60

Table 18.5 Dyke ditch JF2 post-Roman pottery from the upper fill (JL4.S & JL14.S) by fabric

Illustrated medieval pottery from the ditch JF2 (Fig 81.0)

Fig 81 P63 JL4.S (10) Fabric 13 cooking pot rim, simple, everted, flat-topped, oxidised apart from part of rim edge (128g, Eve 0.12) Dated L11-13C

Fig 81 P64 JL4.S (10) Fabric 13 cooking pot rim, thickened, squared bead reduced exterior, oxidised brownish interior (23g, Eve 0.05) Dated L11-13C

Fig 81 P65 JL4.S (10) Fabric 13 cooking pot rim, externally thickened into pointed bead reduced interior, patchy oxidised brownish-orange exterior (12g, Eve 0.07) Dated L11-13C

Pottery from the fort ditch (AF55/AF143/AF155) and siege ditch (AF177)

In total 193 sherds of post-Roman pottery with a combined weight of 2368 g and an estimated vessel equivalence (Eve) of 2.05, were recovered from the fort ditch and siege ditch. The average sherd weight is 12.2 g. Most of this (184 sherds, 2308 g, Eve 2.05), was recovered from the fort ditch (AF55/AF143/AF155). A much smaller quantity (9 sherds, 60 g) came from the siege ditch (AF177).

Only a small quantity of pottery has previously been recorded from the siege works. This consists of just three virtually complete vessels (a large storage jar, a jug & a cup/bowl) all in post-medieval red earthenware (Fabric 40). All are from a redoubt at Sheepen encountered during excavations in the 1930's and were probably retained because of their completeness (*CAR* **7** 218-19). As such, the pottery here is of considerable interest as it is the first quantified assemblage from the siege works. The quantities of pottery recovered are shown by fabric in Table 18.6. The pottery is quite broken-up with very few pieces which would merit illustration.

Fabric	no.	% no	wt (g)	%wt	Eve
13	2	1.0	16	0.7	
20	3	1.5	21	0.9	6
21A	7	3.6	84	3.5	2
23A	1	0.5	27	1.1	
31A	1	0.5	3	0.1	

Fabric	no.	% no	wt (g)	%wt	Eve				
40	119	61.6	1706	72.0	140				
40A	1	0.5	4	0.2	6				
40B	24	12.4	130	5.5					
42	13	6.7	216	9.1					
43	3	1.5	16	0.6					
45	4	2.1	29	1.2					
45A	1	0.5	5	0.2					
45C	2	1.0	20	0.8	15				
45D	6	3.1	32	1.3	30				
45F	1	0.5	24	1.0					
46	5	2.6	35	1.5	6				
Total	193	99.6	2368	99.7	205				
Table 10 C	[art.	ditab and	alara dite	h auanti	tion of me				

 Table 18.6
 Fort ditch and siege ditch, quantities of pottery by fabric

The siege works are historically dated precisely to June-August 1648. As might be expected there is a small quantity of pottery among the assemblage which is, or is probably residual. All of the these sherds come from the fort ditch. The residual pottery consists of a small number of sherds (13 sherds, weight 148 g) of medieval pottery (Fabric 13, Fabric 20, Fabric 21A & Fabric 23A). Two other sherds might be residual. These are a sherd (5 g) which appears to be Langerwehe stoneware (Fabric 45A) and one which appears to be Raren stoneware (20g). However, these stoneware sherds also might be mis-identified and be of later date contemporary with the siege. One small sherd of Martincamp ware may also be residual as it is a type II stoneware fabric (Hurst Fabric II) which is dated to the 16th century (*CAR* **7**, 264).

The remainder of the pottery consists of types which, although some have broad date ranges, are current in the period of the mid 17th century and none need date later. As such they could all form part of a contemporary assemblage in use among the parliamentary army in the summer of 1648.

The most common fabric type represented is post-medieval red earthenwares (Fabric 40) which account for between 60% (by count) and 70% (by weight) of the post-medieval pottery recovered. The vessel forms have been mostly recorded based on rim sherds and identification of the exact vessels type is not always clear from the rim alone. These can be divided between deep vessels and open forms. Deep vessels are storage jars, bowls and small bowls or possibly chamber pots, a mug or tyg and a probable pipkin. The open forms are a dish or pancheon and probable pancheon. There is also one lid.

Stock-type black glazed ware (Fabric 40B) is the second most common fabric type by sherd count at 12% of the assemblage. Most of the sherds are glazed inside and out and appear probably to be from mugs or tankards, although one base sherd had no internal glaze. All the sherds are without decoration, although some are rilled.

Border ware (Fabric 42) is the second most common fabric type by weight accounting for 9% of the assemblage. This is of interest as among contexts in the town, which are generally less closely dated, Border ware seems to make a very late appearance at Colchester and does not appear to be very common until the mid-late 17th century (*CAR* **7**, 228). However, the sherds may derive from just two or possibly three pots. There are sherds from a chafing dish and at least one other vessel which is a beep bowl or jar form.

Other post-medieval fabric types are represented by six sherds or less, but there is a considerable range of fabric types. There are several imports, most obviously sherds of German stoneware vessels from Frechen (Fabric 45D) and Westerwald (Fabric 45F) and sherds of French Martincamp wares (Fabric 43) and a sherd which is probably a North Holland slipware (Fabric 31A). A sherd from a carinated bowl with trailed white slip decoration appears (based on the fabric and glaze) to be of metropolitan slipware (Fabric 40A) which previously at Colchester appear to be mostly or exclusively North Holland slipware (*CAR* **7**, fig 183). Sherds of Tin-glazed earthenware (Fabric 46), representing at

least two different plates or chargers and a bowl form, might be either English pieces or imports form the Netherlands. There is also a sherd (JF143(220)) from drinking jug in this fabric with a purple spotted glaze. These have been recovered from contexts dated to the mid 17th century date in the town, but are more common in the late 17th and 18th century (*CAR* **7**, 244). The Martincamp wares probably represent flasks (possibly originally individually wicker covered) which probably contained apple brandy. There are two in two fabric variants represented here. Most are of type III in a fine orange red fabric, but include one sherd in a type II stonewares fabric (Hurst Fabric II) which might be residual (*CAR* **7**, 264).

Many of the vessels are connected with drinking and eating. While how the siege lines were manned, especially along the ditch linking the several forts, redoubts and gun platforms is not known in detail, the large quantity of pottery from the fort ditch compared to the siege ditch appears to indicate (as might be expected) that the forts formed a focus of activity on the siege lines. This is possibly directly related to the manning of the forts themselves, but might also relate to the forts serving as a base and as a mess for soldiers manning, or responsible for adjacent parts of the siege lines.

18.5 Flint

by Adam Wightman

18.5.1 Early Neolithic flint from EF13/31

Nine worked flints were recovered from the pit. Six are blades exhibiting soft hammer characteristics and platform preparation (Table 18.7). They have little or no cortex indicating that they came from late in the knapping sequence. These blades are typical of the Early Neolithic. The largest blade (EF31(24)) had been delicately retouched with semiabrupt retouch on both lateral edges (F1 Fig 76.8). This could be subtle scraper retouch although it is most likely that the blade was utilised for various cutting and scraping tasks rather than used exclusively as a scraper. A probable blade fragment and a flake and two burnt worked flints were also recovered.

ctxt	find no.	type	% cortex	soft/ hard hammer	retouch	date
EF13	9	blade	-	soft		
		blade	-	soft		
		flake	10	either		
		flake/blade	-			
		?flake	85			
F31(T23)	24	blade	15	soft		Neolithic
		blade	-	soft		Neolithic
		blade	5			Neolithic
		blade- retouched	25	soft	semi-abrupt, R&L lateral,	Neolithic
					dorsal	

Table 18.7Flint from EF13/31

Illustrated flint (F13/31)

F1 Fig 76.8. Retouched blade (25% cortex) soft hammer struck, semi-abrupt retouch right and left lateral, dorsal blade retouched (dated Neolithic) (F31(24))

18.5.2 Neolithic-Bronze Age flint

Apart from the flint from pit F13/31, twenty-two flints were recovered from the excavated Sites and from the evaluation. These are listed in Table 18.8.

ctxt	find no.	type	% cortex	soft/ hard hammer	retouch	date
F198 (T1)	116	?flake	5			natural?
F210 (T2)	129	?flake	-			natural?
F151 (T5)	98	flake- scraper (nosed)	35	hard	abrupt, left lateral, ventral,	Neo
F154 (T5)	101	flake retouched	15		semi-abrupt/ invasive, R. lateral & distal, ventral & dorsal	
CF20	7	?core fragment	-			natural?
CF22	12	flake	-		usewear/damage	
EF16	5	flake- retouched	35	hard	abrupt, R lateral, dorsal	
E U/S	8	flake	50	hard		
F3 (T24)	1	flake	15	hard		
F27 (T37)	17	flake	10	hard		
F38 (T34)	32	flake	-	hard		
F42	34	blade	45			Neolithic

ctxt	find no.	type	% cortex	soft/ hard hammer	retouch	date
(T34)						
FF80	41	flake	30	either		-
FF57	26	discarded				-
HF27	40	flake	5	either		-
HF33	49	flake	15	soft	Usewear/ damage	-
F81(T61)	51	blade- retouched	1		abrupt, L. lateral, dorsal	Neolithic
JL4	7	flake	-	either		
JL4	8	flake	20	hard		
JL9	34	flake	10	hard		
JL16	52	blade	-	soft		
KF8	11	flake	15	hard		Neolithic

Table 18.8 Flints by site context

Although several of the flints are blades, dated to the Early Neolithic, it is probable that a number of hard hammer flakes are of later date. As such, it is probable that the flints recorepresent background prehistoric activity in the landscape from the Early Neolithic period to the Bronze Age. Considering the scale of the excavations and distribution of the flints this activity was not particularly large or wide scale.

All the Site A were either natural, unworked flints or probable worked flints which lacked sufficient knapping characteristics to assign them with any certainty. Two have been recorded as probable flakes below as it is possible that the proximal end of the flake, where the primary knapping characteristics are to be found, have been broken away.

Four flint artefacts were recovered from Site C. A possible core fragment which exhibits the characteristics of a thermally fractured flake (CF20) and a nosed-scraper (F151) were recovered from Roman contexts and soft hammer flake with edge damage/usewear (CF22) was recovered from a probable natural linear with intrusive Roman pottery. The only artefact recovered from the small pit F154 was a flake with large retouch removals overlain by smaller abrupt retouch which can only be dated roughly to the Neolithic/Bronze Age. The residual artefacts, in particular the scraper, probably date to the early Neolithic.

Three residual worked flints were recovered from Roman contexts on Sites H & K. Two of these flakes appear to have been knapped with a soft hammer and have prepared platforms indicating that they may also be from the early Neolithic.

On Site E, apart from the flints stratified in pit EF13/31, there are a retouched flake from a modern pit and an unstratified secondary flake recovered from T23. Near to Site E, single secondary flakes were recovered from evaluation features F3 (T22) and F27 (T37).

Three worked flints were recovered from Site F, two flakes and another blade which could similarly be early Neolithic in date. One flake was residual in a modern pit, the blade was in a tree throw and the other flake was from a linear that may be prehistoric in age.

A long, thin black flint blade of Early Neolithic date was recovered from a tree-throw (F81) in Site J. The blade is of exceptional quality and must have been made on excellent raw material, probably indicting it was made elsewhere and imported into the area. The blade has very small abrupt retouch removals up the whole of its left lateral edge and half of its right lateral edge. There is also edge damage on the edges where it hasn't been retouched, including a small notch. The blade was probably utilised for various cutting and scraping tasks and is an expedient tool. The remainder of the flints were all residual in the fill of the Late Iron Age/Roman dyke JF2. The soil filling the dyke must have come from nearby and no doubt the flints were residual in that soil. The flints consist of three unremarkable flakes and another tertiary blade, this time a little smaller, more slender with less uniform previous removals than the long blade from F81.

A residual secondary flake with platform preparation (and therefore probably of early Neolithic date), came from a Roman ditch on Site K (KF8)

18.6 The Hyderabad Barracks coin hoard (GAL A1 Area J SF 21) by Nina Crummy

The Hyderabad Barracks hoard (SF 21) consists of 1,247 coins, the earliest a *denarius* of Severus Alexander, AD 222-35, and the latest an *antoninianus* of Tetricus I, AD 271-4. The majority are *antoniniani* of the Gallic Empire rulers Postumus (AD 260-9) and Victorinus (AD 269-71). The coins had been packed into a grey ware flask (CAM 281) and then buried in the fill of the ditch of the Berechurch Dyke, close to the slope of the rampart. The top of the flask was damaged and some of the uppermost coins disturbed, but many of the coins lay in stacks, so in order to determine if they had been placed in the vessel in any particular order, such as by emperor or reverse image, each was planned before being excavated and was given a unique identifying number, given here in bold where individual coins are referred to. Where possible, it was also recorded whether the obverse or the reverse lay uppermost. Most coins were reasonably well-preserved and could be lifted individually, but a small number had corroded together and were lifted as pairs, or in groups of three or four. In these cases one or both faces were partly or wholly obscured. From these corroded clusters alone it was apparent that the coins had not been deposited in either emperor or reverse groups, or with one particular face uppermost.

The flask had a cubic capacity of just over a litre, and the coins were very tightly packed inside it, no doubt contributing to the reasonably uncorroded state of the metal. The total weight of the coins is just over 4 kg (about 12.5 Roman pounds at 327.45 grams to the pound). Both the earliest and the latest coins were scattered throughout the hoard, suggesting that the vessel was filled in one episode. This does not preclude the hoard having been added to at intervals, as the coins may have been emptied out and counted as new ones were added, each refilling then appearing to be a single episode.

The coins are summarised by ruler in Table 18.9, and divided into Central and Gallic Empire issues where appropriate. A full catalogue is given in Appendix1.

Table 18.9 Summary of contents of GAL A1 Area J coin hoard.

	Date	No	%		Date	No	%	Total
Severus Alexander	222-35	1	0.08					
Philip I	244-9	1	0.08					
Trebonianus Gallus	251-3	1	0.08					
Valerian I	253-60	101	8.09					
Mariniana	253-60	2	0.16					
Gallienus (Joint)	253-60	37	2.97					
Salonina (Joint)	253-60	27	2.17					
Valerian II	255-60	8	0.64					
Saloninus	255-9	4	0.32					
subtotal		182	14.6					
Central Empire				Gallic Empire				
Gallienus (Sole)	260-8	110	8.82	Postumus	260-9	589	47.23	
Salonina (Sole)	260-8	7	0.56	Laelian	269	7	0.56	
Claudius II	268-70	14	1.12	Marius	269	15	1.2	
Quintillus	270	4	0.32	Victorinus	269-71	318	25.5	
				Tetricus I	271-4	1	0.08	
subtotal		<u>135</u>	<u>10.8</u>					
TOTALS		317	25.4			930	74.6	1247

Apart from the *denarius* of Severus Alexander, all the coins are *antoniniani*. All are of copper alloy, including the *denarius*, which is a contemporary forgery of copper alloy with a small quantity of added silver. Many of the *antoniniani* are poorly formed, some of the Gallic Empire exceptionally so, but many still retain traces of silver wash on the surfaces and on some much of the wash survives intact. The degree of wear is very varied. Several coins of the Gallic Empire are very little worn and may have been collected soon after minting, while others, including issues of Victorinus (AD 269-71), have clearly been in circulation. No irregular issues were noted.

The earliest coin (**1065**) is the contemporary forgery of Severus Alexander, AD 222-35, and belongs to the latest years of his reign. The latest (**327**) is of Tetricus I, AD 271-4; it belongs to Issue III and was struck AD 271-2 (Besley & Bland 1983, no. 2583; Bland & Burnett 1988). The hoard was probably closed and deposited sometime in AD 271, and certainly no later than AD 272.

In Appendix 1 the coins are listed by ruler in chronological order, with Gallic Empire issues listed after those of the Central Empire. Within ruler they are listed by reverse legend, with those of Gallienus and Salonina divided into those of the former's joint and sole reigns. The sixteen columns used in the appendix provide the following data:

1) unique coin number,

2) ruler,

- 3) broad date of reign/issue,
- 4) obverse legend,
- 5) obverse type,
- 6) reverse legend,
- 7) reverse type,
- 8) mint mark,
- 9) mint,
- 10) issue or series,
- 11) die axis,
- 12) maximum diameter (mm),
- 13) weight (g),
- 14) Roman Imperial Coinage reference, or Elmer 1941 reference,
- 15) Cunetio reference (Besley and Bland 1983),
- 16) notes.

Where possible the coins have been referenced to Besley and Bland 1983, the report and catalogue of the large two-container hoard from Mildenhall (*Cunetio*) in Wiltshire. Found in 1978 by a metal detectorist, this hoard consisted of 54,951 coins, most of which were *antoniniani* with a start date of *c*. AD 251-3 and a closing date of *c*. AD 270-1 that had been deposited in a large Savernake ware storage jar (*Cunetio* I, 46,067 coins), while some earlier *denarii* and later *antoniniani* were probably deposited separately *c*. AD 274-5 in a lead box found near the jar (*Cunetio* II, 8,861 coins; Besley & Bland 1983, 18, 179-80). The *Cunetio* I hoard is therefore very similar in its date range to that from Area J.

Just under 15 per cent of the coins pre-date the formation of the Gallic Empire in AD 260, and just under 11 per cent are Central Empire issues; most are of Valerian I and Gallienus. Of the coins of Gallienus the majority date to his sole reign (AD 260-8) rather than to his joint reign with Valerian I (AD 253-60). In contrast, most of the coins of his empress Salonina are of the early IVNO REGINA reverse from the 1st series of the joint reign. Only ten coins are of Claudius II (AD 268-70) and only four of Quintillus (AD 270). No commemorative coins of Claudius have been noted, although they are usually well-represented on occupation sites in Colchester. This suggests a closing date fairly early in 271, allowing for some delay as Central Empire coins percolated across to Britain.

The Gallic Empire coins

Gallic Empire coinage forms the major part of the hoard (74.6 per cent). Coins of Postumus account for 63.3 per cent of this group and 47.2 per cent of the full hoard. The mint, series

or issue and phase data are summarised in Table 18.10; phase group data is given in Appendix 1. Only one double struck coin could not be attributed to a mint. Most of his coins are from the principal mint (93 per cent), with only a few from Cologne (5.4 per cent) and even fewer from Milan (1.4 per cent), which only produced coins in his name from late in AD 267 into 268 (Besley & Bland 1983, 36). All the Cologne coins are of its 1st series (AD 268), and all but one are reverse IOVI VICTORI, the exception being one COL CL AGRIP COS IIII. All seven series of the principal mint are represented, with coins of the 1st and 3rd series being the most numerous, the 7th the least. A wide range of reverse types are present, with MONETA AVG and PAX AVG the most numerous.

Mint	Series/Issue	Reverse legend	Nos	Phase totals	Series /Issue totals	Mint totals
Principal						
	1st series, 2nd phase	SALVS PROVINCIARVM	4			
	1st series, 2nd phase	VICTORIA AVG	<u>5</u>	9		
	1st series, 3rd phase	FIDES MILITVM	15			
	1st series, 3rd phase	HERC DEVSONIENSI	22			
	1st series, 3rd phase	LAETITIA / AVG in exergue	16			
	1st series, 3rd phase	PM TR P COS II PP	43			
	1st series, 3rd phase	VICTORIA AVG	<u>20</u>	<u>116</u>	125	
	2nd series, 1st phase	SALVS AVG	6	6		
	2nd series, 2nd phase	HERC PACIFERO	22			
	2nd series, 2nd phase	IOVI PROPVGNAT	2			
	2nd series, 2nd phase	MINER FAVTR	2			
	2nd series, 2nd phase	NEPTVNO REDVCI	5			
	2nd series, 2nd phase	VIRTVS AVG	15	<u>46</u>	52	
	3rd series, 1st phase	FELICITAS AVG	10			
	3rd series, 1st phase	MONETA AVG	38			
	3rd series, 1st phase	PAX AVG	14			
	3rd series, 1st phase	PM TR P IIII COS III PP	8			
	3rd series, 1st phase	PROVIDENTIA AVG	<u>10</u>	80		
	3rd series, 2nd phase	FELICITAS AVG	14			
	3rd series, 2nd phase	MONETA AVG	20			
	3rd series, 2nd phase	PROVIDENTIA AVG	<u>26</u>	60		
	3rd series, 1st or 2nd phase	MONETA AVG	1	1		
	3rd series, 2nd phase?	MONETA AVG	<u>1</u>	1		
	(3rd series)	MONETA AVG, struck over different reverse	<u>1</u>	1	143	
	4th series, 1st phase	DIANAE LVCIFERAE	4			
	4th series, 1st phase	FORTVNA AVG	5			
	4th series, 1st phase	SAECVLO FRVGIFERO	3			
	4th series, 1st phase	SALVS AVG	10			
	4th series, 1st phase	SALVS EXERCITI	3			
	4th series, 1st phase	SALVS POSTVMI AVG	5			
	4th series, 1st phase	SERAPI COMITI AVG	<u>5</u>	35		
	4th series, 1st and 2nd phases	SAECVLI FELICITAS	24	24		

Table 18.10 Summary of mint, series or issue and phase data, Postumus.

Mint	Series/Issue	Reverse legend	Nos	Phase totals	Series /Issue totals	Mint totals
	4th series, 2nd phase	SERAPI COMITI AVG	10			
	4th series, 2nd phase	VBERITAS/VBERTAS AVG	10 (1/9)			
	4th series, 2nd phase	VIRTVTI AVGVSTI	<u>1</u>	<u>21</u>	80	
	5th series	IOVI STATORI	15			
	5th series	ORIENS AVG	5			
	5th series	PAX AVG	29			
	5th series	PM TR P VIIII COS IIII PP	<u>1</u>	-	50	
	6th series	COS IIII	16			
	6th series	ORIENS AVG	16			
	6th series	PAX AVG	<u>50</u>	-	82	
	7th series	COS V	2			
	7th series	IMP ·X· COS ·V·	11			
	7th series	IMP X COS V	2			
	7th series	PACATOR ORBIS	<u>1</u>	-	<u>16</u>	548
Cologne						
	1st series	COL CL AGRIP COS IIII	1			
	1st series	IOVI VICTORI	31	-	<u>32</u>	32
Milan						
	Issue II or III	CONCORD/-	1	-	1	
	Issue III	CONCORD EQVIT	2			
	Issue III	VIRTVS EQVIT	1			
	Issue III	VIRTVS·EQVIT	1	-	4	
	Issue IV	FIDES EQVIT	1			
	Issue IV	VIRTVS EQVIT	1	-	2	
	Issue V	VIRTVS EQVITVM	1	-	1	8
unknown	-	double struck	<u>1</u>	-	1	1
		Total				589

Coins from the short reigns of Laelian and Marius number seven and fifteen respectively (Table 18.9), together representing 2.4 per cent of the Gallic Empire coins and 1.8 per cent of the full hoard. Those of Laelian are all VICTORIA AVG, Issue III. Mint and issue data for Marius is summarised in Table 2. Both mints are almost equally well represented.

Mint	Issue	Reverse legend	Nos	Issue totals	Mint totals
1					
	Issue II	CONCORD MILIT	1		
	Issue II	CONCORDIA MILITVM	2		
	Issue II	SAEC FELICITAS	<u>4</u>	<u>7</u>	7
11					
	Issue 1	VICTORIA AVG	4		
	Issue II	VICTORIA AVG	<u>3</u>	7	
	Issue III	VIRTVS AVG	<u>1</u>	<u>1</u>	<u>8</u>
		Total			15

Table 18.11 Summary of mint and issue data, Marius.

Coins of Victorinus number just over half those of Postumus (Table 1), representing 34.2 per cent of the Gallic Empire coinage and 25.5 per cent of the full hoard. The mint, issue and phase data are summarised in Table 18.11. The coins are fairly evenly split between the two mints. Coins of Issue III predominate among those from Mint 1, with INVICTVS and PAX AVG the most frequently occurring reverse types. Coins of Issues II and III are the most numerous from Mint II, with SALVS AVG accounting for just over 60 per cent of the group, and PIETAS AVG 28 per cent. Among the latter there are 33 examples of the Pietas diademed type compared to ten of Pietas veiled. From both mints the earliest and latest issues are the least well represented, and there are none at all from Issue I of Mint I or Issue IV of Mint II.

Mint	Issue	Reverse legend	Nos	Phase totals	Issue totals	Mint totals
Ι	Issue II	COMES AVG	1			
	Issue II	FIDES MILITVM	7			
	Issue II	INVICTVS	2			
	Issue II	PAX AVG	<u>15</u>	-	25	
	Issue III, 2nd phase	INVICTVS	30			
	Issue III, 2nd phase	PAX AVG	59	89		
	Issue III, 3rd phase	INVICTVS	24	24		
	Issue III, 2nd or 3rd phase	INVICTVS	9	<u>9</u>	122	
	Issue IV	LAETITIA AVG N	1			
	Issue IV	VICTORIA AVG	2			
	Issue IV	VIRTVS AVG	1	-	4	
	Issue V	SALVS AVG	7			
	Issue V	VIRTVS AVG	<u>4</u>	-	11	
	uncertain issue	PAX AVG	<u>2</u>	-	<u>2</u>	164
11	Issue I	AEQVITAS AVG	<u>6</u>	-	6	
	Issue I/II	AEQVITAS AVG	<u>1</u>	-	1	
	Issue II	SALVS AVG	<u>93</u>	-	93	
	Issue III	PIETAS AVG	<u>43</u>	-	43	
	Issue V	PROVIDENTIA AVG	<u>11</u>	-	11	<u>154</u>
		Total				318

Table 18.11 Summary of mint, issue and phase data, Victorinus.

Mules, hybrids and other specific coins

As well as the contemporary forgery of Severus Alexander noted above (1065), a number of individual coins should be mentioned here. Among the coins of Valerian I 185, 228, 538, 1169 and 1235 are mules and 1060 is a hybrid with an obverse of Valerian I and reverse type of Gallienus. Coin 1115 is particularly unusual; the obverse is of Valerian I and the reverse has the legend APOLINI CONS AVGG combined with the figure of Uberitas (Fig 20, coin 2). From the joint reign period of Gallienus 450, 889, 974 and 1141 are mules and 262, 725, 748, 850 and 855 are hybrids with reverses of Valerian I, and from his sole reign 178 and 393 are mules. Coins 236 and 780 of Postumus are double struck. Coin 1050 of Victorinus is a mule. One coin of Postumus, 625, is rare (Fig 20, coin 1); it has reverse type SALVS AVG, Aesculapius, with globe to left instead of right (www.gallic-empire.com, ID: Pant-73, accessed 18th February 2014).

Comparable hoards from the Colchester area

Hoards found locally with a closing date within the late 260s or early 270s are the East Mersea hoard and three hoards from Oliver's Orchard at Gosbecks. The so-called 'Jarmin hoard' may be another, but the details of its discovery and composition are far from clear.

The East Mersea hoard consisted of 657 *antoniniani* found by a metal detectorist in about 1980 near Fen Farm on Mersea Island (Burnett 1984). The earliest coins were of Gallienus dating to his joint reign with Valerian I (AD 253-60), the latest were of the Tetrici (AD 270-4). There was no evidence for a container.

In 1983 three hoards deposited in pottery vessels were found close together at Oliver's Orchard about 400 m (0.248 miles) due south of the Roman theatre and temple at Gosbecks and to the east of the junction of Oliver's Dyke with Kidman's Dyke South (Table 18.12; *CAR* 11, fig.6.1; Bland & Carradice 1986, fig. 1). Hoard I consisted of 1558 coins with a closing date of AD 269; Hoard II of 4071 coins with a closing date of *c*. AD 273; and Hoard III of 494 coins with a closing date of *c*. AD 274 (Davies 1983; Bland & Carradice 1986, 65, tables I-IV). Nearly all the coins in these hoards were *antoniniani*. The earliest issues in Hoards I and II belonged to the 2nd and 1st century respectively, while Hoard III began with 1st series issues of Valerian I, *c*. AD 253. In Hoard II the finer coins were concentrated in the upper part of the vessel, a flagon sealed with a lead bung and deposited upside down, but there was no evidence of any sorting in the other containers (*ibid.*, 65).

	Hoard I		Hoard		Hoard III	
Reign	No	%	No	%	No	%
Pre-Severus Alexander	11	0.71	3	0.07	-	-
Severus Alexander	6	0.38	1	0.02	-	-
Gordian III	56	3.6	-	-	-	-
Philip I and family	53	3.4	-	-	-	-
Trajan Decius and family	36	2.31	2	0.05	-	-
Trebonianus Gallus and Volusian	31	1.99	3	0.07	-	-
Aemilian	3	0.19	1	0.02	-	-
Valerian I, Gallienus and family	442	28.37	116	2.86	11	2.23
Gallienus and Salonina	3	0.2	653	16.05	121	24.5
(Quietus,) Claudius II & Quintillus	-	-	626	15.38	123	24.9
Aurelian			2	0.05	1	0.2
subtotals	641	41.15	1407	34.57	256	51.83
Gallic Empire						
Postumus	904	58.02	533	13.09	34	6.88
(Laelian and) Marius	-	-	30	0.73	3	0.6
Victorinus	-	-	1569	38.54	138	27.94
Tetricus I and II	-	-	482	11.84	54	10.93
subtotals	904	58.02	2614	64.2	229	46.35
irregular issues	13	0.83	50	1.23	9	1.82
TOTAL	1558	100	4071	100	494	100

Table 18.12 The Oliver's Orchard coin hoards: totals and percentages of coins by reign (source: Bland & Carradice 1986, table I). Emperors shown in brackets are represented in Hoards II and III but not Hoard I.

A note in the *Journal of the British Archaeological Association* for 1906 records 'a considerable find' of coins at Colchester, 50 of which were acquired by Colchester Museum, together with fragments of their pottery container (*JBAA* n.s. XII, 210; Robertson 2000, 141, hoard 623). This group may be the museum's so-called 'Jarmin hoard', which in 1958 consisted of 49 *antoniniani*, three of Gallienus, one each of Claudius II and Quintillus, 22 of Victorinus, and 22 of the Tetrici (Hull 1958, 277). By 1987 only 34 *antoniniani* were documented by the museum as from this hoard, one of Claudius II, eleven of Victorinus, and 22 of the Tetrici (*CAR* 4, 69). Hull suggested that the Jarmin hoard may be part of the Baldwin hoard, found a few miles from Colchester (1958, 277, note 3), but while this did contain some coins of the 260s and 70s, it consisted principally of coins of Carausius and Allectus from the later 280s and 290s (Baldwin 1930; *CAR* 4, 69).

Discussion

Although high, the proportion of coins of Postumus in the Hyderabad Barracks hoard is well below that of the 63.1 per cent of the Purbrook Heath (Hampshire) hoard, which ended with a single coin of Tetricus I, and below the 58.02 per cent of Oliver's Orchard Hoard I (Table 18.12; Besley & Bland 1983, table 3; Bland & Carradice 1986, table 1). In Table 18.12 the Oliver's Orchard hoards demonstrate how rapidly coins of Postumus disappeared from circulation in this area in the late 260s and early 270s, a decline matched in other hoards from Britain closing *c* AD 273-4, where they can form less than 2 per cent of the total (Besley & Bland 1983, table 3).

The high numbers of coins of Postumus in the Hyderabad Barracks hoard and Oliver's Orchard Hoard I are in marked contrast to the few found on occupation sites in Colchester. On the major sites excavated between 1971 and 1984 only twenty coins of Postumus were found, compared to 70 of Gallienus and Salonina from the sole reign period of 260-8 alone, and 81 of Victorinus (*CAR* 4, 84-92, 128-272; *CAR* 6, 406-7). Just how much hoards such as Oliver's Orchard I and Hyderabad Barracks contributed to the local decline in availability of *antoniniani* of Postumus in the early 270s is difficult to assess, but the removal of such high numbers of these coins from circulation must have been an important factor.

Reece has argued that the high number of non-recovered hoards dating to between 260-94 is a result of the low quality of the coinage at that period, suggesting that they were of such low value that their owners did not even attempt to recover them (2002, 77). This might be true of smaller hoards, particularly where the closing date was late in Reece's range, but melting down and extracting the silver from larger hoards dating to early in the range, such as that from Hyderabad Barracks, would be a profitable exercise. Reece is also wary of attributing both deposition and non-recovery of hoards to periods of unrest or the threat of invasion (*ibid.*, 74-6), but Philip Crummy has pointed out elsewhere in the report on the excavations at Colchester Garrison that changes to the defences of Colchester, the abandonment of the circus and a decline in the use of the suburbs in the late 260s and early 270s point to a major civic sense of threat that coincides with the date of deposition of the Hyderabad Barracks and Oliver's Orchard hoards (CAR 4, 71). Plots of the quite limited number of coin hoards closing with Postumus and Victorinus show a scatter across Britain, with most found near the coast from the Wash round to Devon and along both sides of the Severn estuary (Robertson 2000, map 12), while the very much more numerous and widespread hoards closing with the Tetrici are found both inland and on the coast (ibid., map 14). Even allowing for Reece's caveats, this suggests that any perception of threat from the late 260s up to early AD 271 was chiefly felt along the Saxon shore, but that by c. AD 274 a feeling of insecurity had penetrated the whole country.

18.7 The small finds and bulk metalwork

by Nina Crummy

ROMAN FUNERARY FEATURES

Small finds or bulk metalwork came from pyre debris pits, cremation burials and inhumations. Very few of these features contained objects other than nails. Hobnails are the next most frequently occurring artefacts, but other pyre or burial deposits are rare.

The deposits from the pyre debris pits and cremations are summarised in Table 18.13. The number of nails varied considerably, from seven in AF183 to a minimum of 184 (estimated on the number of heads) in cremation burial AF211. All the nails are of Type 1b, less than 150 mm in length, with a flat or slightly convex head, generally round but in a few cases oval or subrectangular (Manning 1985, 134). They are incomplete unless stated otherwise. Many are charred and have a slaggy surface, some have fragments of charred bone attached, others have corroded internally so that the shank is now hollow, and most are encrusted with sandy soil embedded in the corrosion; measurements taken from these nails are in many cases only estimates. A few nails appear to be remarkably uncorroded, a feature occasionally seen in pyre debris from funerary features in Colchester, and these are noted as 'well-preserved 'in the catalogue. However, where broken across the shank, these nails too may be internally hollow.

Feature	Туре	Nails	Hobnails	Other ironwork	Coin	Other burial deposit
AF22	pyre debris pit	х	-	-	-	-
AF33	pyre debris pit	х	-	-	-	-
AF80	pyre debris pit	х	-	х	-	copper-alloy vessel
AF144	pyre debris pit	х	х	-	-	-
Trench 2 F204	cremation burial	x	-	х	-	-
AF73	cremation burial	x	x	х	-	copper-alloy shank
AF100	cremation burial	x	x	-	-	-
AF130	cremation burial	x	x	-	-	wooden box (copper-alloy nail, copper-alloy studs)
AF154	cremation burial	x	-	-	-	-
AF178	cremation burial	?	?	x	-	-
AF183	cremation burial	x	-	-	-	-
AF211	cremation burial	х	x	-	х	-

Table 18.13 Objects in pyre debris pits and cremation burials.

The intact iron nails, or those with the head surviving, are in general too large to have come from small boxes or other items of wooden furniture. A few may come from large chests, but the majority are indistinguishable from those found in association with structural timberwork. Many would have been used to construct pyres or perhaps biers, while others may be have been fixed in building timbers recycled as fuel. Reuse of timber in this way is demonstrated by the presence of a hinge pivot or wall-hook among the ironwork in the burial urn in evaluation Trench 2 cremation F204. The same burial produced a number of small thin-shanked nails, one of which is clenched and gives a wooden board thickness of 10 mm. This group no doubt come from a single wooden object, perhaps a box or chest, or a coffin for a child.

The other ironwork consists of the hinge pivot or wall-hook from evaluation Trench 2 F204 mentioned above, a stud from cremation burial AF73, and some strap fragments from pyre debris pit AF80 and cremation burial AF178. The stud and the straps may come from wooden chests burnt as pyre goods or from structural timbers used as pyre fuel.

The number of hobnails present from leather footwear also varies considerably, and although the Area A sample is quite small it appears that the hobnails are far more likely to be deposited in cremation burials than in pyre debris pits, implying a deliberate intent to collect them from the pyre and include them in the burial. In all cases they were probably worn by the deceased on the pyre, but the 80 present in cremation burial AF 211 may represent either one set of heavily nailed leather footwear or two(+) lightly nailed sets, with one pair worn and the other placed on the pyre along with other extra clothing.

Other primary pyre goods consist of part of a copper-alloy vessel from pit AF80, and a wooden box, represented by some copper-alloy studs and a copper-alloy nail from cremation burial AF130. A copper-alloy shank fragment from cremation burial AF73 is probably from a hairpin, needle or spoon handle.

The only certain secondary deposit in these cremation burials is an unburnt coin that was added to the pyre debris in cremation burial AF211 as the ferryman's fee. It is very worn but may be of Trajan, AD 98-117, and it probably pre-dates the burial by a considerable length of time, perhaps as much as two centuries. Hoard and site-find evidence both in Britain and on the continent shows that the good-sized copper-alloy coinage of the later 1st to early 3rd century continued in circulation at least until the late 3rd century if not into the early 4th (Davies and Gregory 1991, 67-8; Reece 2002, 42-4) and were therefore available for use as grave deposits until that time.

The objects from inhumation burials AF122, AF128, AF189 and HF1 are likely to be residual, but grave goods were found in AF188 and HF26 and coffin nails were found in AF188. A 1st-3rd century coin corroded onto the jaw of AF188 was a ferryman's fee that was probably originally placed in the mouth. Like the coin in cremation burial AF211 it was old when buried. A group of very poorly-preserved iron and copper-alloy dress accessories and an iron knife found close to the head in HF26 had been either placed in a cloth purse or bag or wrapped in a piece of fabric before being buried. A similar deposition rite for dress accessories has been noted in other female burials in the Butt Road and St John's Abbey cemeteries in Colchester, and in two cases the deposit also included a knife (*CAR* 9, 129-30, 205, fig. 2.77, grave 171, fig. 5.8). In contrast, knives in the extensive late Roman cemeteries at Lankhills, Winchester were found with male burials (Clarke 1979, 249; Booth *et al.* 2010, 172-3; Philpott 1991, 176-8).

Catalogue

Pyre debris pit AF22 (Fig 27)

Only iron nails came from AF22 (Table 18.14). Complete examples range in length from 47 to 88 mm, with most between 55 and 66 mm.

SF no	Find no	Description	Length (mm)
79	A10	shank fragment	50
82	A11	complete, round flat head	58
-	A12	round flat head	66
80	A14	complete, round flat head	56
87	A16	complete, round flat head	55
-	A17	round flat head	27
-	A18	round flat head (most of shank shattered)	26
-	A19	1 complete, round flat head; 1 shank fragment	88; 46

Table 18.14. Nails from pyre debris pit AF22.

-	A20	round flat head	50
88	A22	well-preserved, complete, subrectangular flat head	58
83	A23	well-preserved, complete, subrectangular flat head	51
84	A24	round flat head	35
81	A25	round flat head	34
-	A26	2, round flat head (1 clenched)	46 (bent), 21
85	A27	well-preserved, complete, round flat head	58
86	A28	complete, round flat head (shattered)	-
-	A41	shank fragment (shattered)	-
-	A42	3, round flat head	55, 48, 34
-	A43	complete, round flat head	66
108	44	well-preserved, complete, subrectangular flat head	65
-	A45	complete, round flat head	56
-	A48	complete, round flat head	47

Pyre debris pit AF33 (Fig 29)

Several iron nails were scattered throughout the fill of AF33, many of them complete and several uncorroded from burning (Table 18.15). The complete and more or less straight examples range in length from 44 to 59 mm. Five are clenched, with three having gaps of 24 or 25 mm between the underside of the head and the top of the bent shank, the gaps for the other two being 38 and 43 mm. Assuming each clenched nail fixed two pieces of wood together, the thinner boards would have been about 12 mm thick, the others 19 and 21.5 mm.

Table 18.15	Nails from	pyre AF33.
-------------	------------	------------

SF no	Find no	Description	Length (mm)
-	A127	shank fragment	20
-	A128	complete, round flat head	58
65	A129	complete, well-preserved, round flat head, neatly clenched; 43 mm between the underside of the head and the top of the bent shank	48 (bent)
-	A143	complete, round flat head	50
-	A144	round flat head	38
-	A145	complete, round flat head, clenched; 25 mm between the underside of the head and the top of the bent shank	37 (bent)
66	A146	complete, well-preserved, oval flat head, clenched at about the midpoint of the shank; 24 mm between the underside of the head and the top of the bent shank	30 (bent)
-	A153	complete, round flat head	59
-	A154	complete, round flat head	58
61	A155	complete, well-preserved, subrectangular flat head	53
-	A158	round flat head	48
-	A159	shank fragment	43
-	A160	round flat head	25
-	A161	shank fragment	29
68	A162	well-preserved, round flat head	19
67	A165	complete, well-preserved, round flat head	48
64	A166	complete, well-preserved, round flat head, neatly clenched at about the midpoint of the shank: 24 mm between the underside	31 (bent)

		of the head and the top of the bent shank	
62	A167	complete, well-preserved, round flat head	50
74	A168	round flat head	11
-	A172	shank fragment	36
-	A173	complete, round flat head	50
70	A174	complete, well-preserved, round flat head	44
72	A175	shank fragment	28
69	A176	complete, round flat head	54
63	A177	complete, well-preserved, subrectangular flat head, neatly clenched; 38 mm between the underside of the head and the top of the bent shank	42 (bent)

Pyre debris pit AF80 (Fig 41)

A few fragments of copper-alloy and iron objects were found in AF80, together with a number of iron nails (Table 18.16). One of the copper-alloy fragments is part of the rim of a cast vessel ornamented with a row of bosses (Fig 41), SF 101). Two of the iron objects are straps that may have come from a large chest burnt on the pyre, as may the small complete nails. Several of the nails are complete and a few are well-preserved. They range in length from 23 to 83 mm, with some clustering around 60 mm. Only one clenched nail gave a clear measurement between the underside of the head and the top of the bent shank. At 43 mm it gives the same board thickness of 21.5 mm as seen for the upper range in AF33.

Fig 41.2, SF 96. A(131). Copper-alloy T-shaped object with tapering shaft (tip only missing), the crosspiece is badly damaged and the original form uncertain. Length 11 mm, crosspiece 12 mm wide.

Fig 41.3 SF 101. A(117). Four sheet copper-alloy fragments. The largest is a scorched and distorted rim fragment (31 by 22 mm) from a cast vessel with a diameter of about 100 mm and a line of bosses set 9 mm in from the edge. The smaller fragments are thin and flat and almost certainly come from a different object, 12 by 7 mm, 10 by 8 mm, 8 by 7 mm.

Fig 41.4 SF 97. A(169). Copper-alloy pellet, pyre debris; weight 1.6 g.

Fig 41.5, SF 102. A(122). Iron strap fitting, bifurcated for part of its length, and with a hinged loop bent at an angle at the other end; possibly a strap-fitting from a large chest. Length (bent) 136 mm, width 30 mm.

Fig 41.6 A(123). Iron strap fragment, length 62 mm, width 20 mm.

SF no	Find no	Description	Length (mm)
-	A52	shank fragment	40
-	A111	complete, round flat head, double clenched; 43 mm between the underside of the head and the top of the bent shank	55 (bent)
-	A112	round flat head	35
-	A113	round flat head	39
-	A115	complete, round flat head	27
-	A119	round flat head	71
-	A120	complete, round flat head	63
-	A121	complete, round flat head	60
-	A124	complete, round flat head	55
-	A125	round flat head	38

Table 18.16. Nails from pyre AF80 (all Fig 41.7)

	1		
-	A126	shank fragment	51
-	A133	shank fragment	37
-	A134	round flat head	31
-	A135	round flat head	34
-	A136	complete, round flat head	62
-	A137	complete, round flat head	60
-	A139	complete, round flat head	83
-	A140	round flat head	37
99	A141	complete, well-preserved, subrectangular flat head	50
107	A148	complete, well-preserved, subrectangular flat head	55 (bent)
-	A148	2 complete, round flat head (1 clenched); 2 round flat head; shank fragment	60, 42 (bent); 38, 34; 25
-	A149	2 complete, round flat head (1 clenched); amorphous fragment, ?nail head	45, 36 (bent); -
98	A150	well-preserved shank fragment	30
100	A151	complete, well-preserved, round flat head	23

Fig 41.8 Glass

Pyre debris pit AF144 (Fig 51)

Six iron hobnails and a minimum of 45 nails (estimated on the heads) were in the fill of pyre AF144 Table 18.17). Complete nails varied in length from 30 to 87 mm, with most at the lower end of the range. There is one clenched nail with a gap of 27 mm between the underside of the head and the top of the bent shank, giving a board thickness of about 13 mm.

A(222). Iron hobnail, shattered, length >14 mm.

A(222). Iron hobnails. AO) complete, length 21 mm. AP) length 18 mm. BL) complete, length 18 mm. BP) length 15 mm.

SF 212. A(227). Iron hobnail, length 7 mm.

SF no	Find no	Nail	Description	Length (mm)
-	A222	А	shank fragment	39
-	A222	В	round flat head	44
-	A222	D	round flat head	34
-	A222	E	round flat head, clenched	36 (bent)
-	A222	F	round flat head	21
-	A222	G	amorphous lump	-
199	A222	н	round flat head	48
-	A222	I	shank fragment	12
-	A222	к	round flat head	35
-	A222	L	amorphous lump	-
-	A222	0	round flat head	32
-	A222	Р	complete, round flat head	35
-	A222	Q	complete, round flat head	53 (bent)
-	A222	R	shank fragment	12
-	A222	S	shank fragment	16
-	A222	Т	round flat head	27

Table 18.17. Nails from pyre AF144.

SF no	Find no	Nail	Description	Length (mm)
203	A222	U	round flat head	38
-	A222	W	shank fragment	23
-	A222	Х	shank fragment	13
-	A222	Y	small amorphous lump	-
-	A222	AA	small amorphous lump, ?shank fragment	-
-	A222	AB	round flat head	29
-	A222	AC	shank fragment (?hobnail)	13 (bent)
-	A222	AD	round flat head	28
-	A222	AE	round flat head	18
202	A222	AF	complete, round flat head, clenched; 27 mm between the underside of the head and the top of the bent shank	36
-	A222	AGi	shank fragment	29
-	A222	AGii	round flat head	35
-	A222	AH	shank fragment	19
-	A222	AJ	shank fragment	22
-	A222	AK	round flat head	43
-	A222	AL	shank fragment	16
-	A222	AM	well-preserved shank fragment	15
-	A222	AQ	round flat head	26
-	A222	AR	shank fragment	43
200	A222	AS	complete, round flat head	53
-	A222	AT	round flat head	51
-	A222	AU	shank fragment	22
-	A222	AV	complete, round flat head	39
-	A222	AW	round flat head	20
-	A222	AX	shank fragment	51
-	A222	AY	round flat head	33
-	A222	AZ	round flat head	43
-	A222	BA	complete, round flat head	87
-	A222	BB	shank fragment	37
-	A222	BC	round flat head	15
126	A222	BDi	shank fragment	17
-	A222	BDii	well-preserved shank fragment	23 (bent)
-	A222	BE	shank fragment	24 (bent)
-	A222	BF	round flat head	47
-	A222	BG	shank fragment	33
-	A222	BH	shank fragment	32
-	A222	BI	shank fragment	30
-	A222	BL	round flat head	13
-	A222	BM	round flat head	15
-	A222	BN	complete, round flat head	30
-	A222	во	complete, round flat head; shank fragment	33; 16
217	A222	BQ	shank fragment	29
_	A222	BR	complete, round flat head	58
-	A222	BS	complete, round flat head	59

SF no	Find no	Nail	Description	Length (mm)
-	A222	BT	round flat head	38
-	A222	BU	round flat head	51
-	A222	BV	well-preserved, round flat head	25
-	A222	BW	complete, round flat head	73
-	A222	BX	round flat head	13
-	A222	BY	complete, round flat head, clenched	62 (bent)
201	A222	BZ	shank fragment, clenched	34 (bent)
-	A222	CA	complete, round flat head	59
-	A222	СВ	complete, round flat head	68
-	A222	CC	complete, round flat head, clenched	36
-	A222	CD	round flat head	44
-	A222	CE	shank fragment	45
-	A222	CF	complete, round flat head	53 (bent)
-	A222	CG	round flat head	40
-	A222	-	shank fragment	52
146	A233	-	head damaged	32

Evaluation Trench 2 Cremation F204

A hinge pivot or wall hook and a minimum of 72 nails were in the cremation urn. Many of the nails were complete. A minimum of 47 nails are marked with an asterisk after their length in column 5 of Table 18.18. These are all small and thin shanked, and range from 23 to 34 mm long; one is clenched, giving a board thickness of 10 mm. While they probably all come from a single wooden object, they were not found in close association as if collected together from the pyre debris and then immediately placed in the urn, and they are perhaps more numerous than might be expected for a wooden box or chest, even though the board thickness would be appropriate for a box. They may instead derive from a coffin for a child. Seventeen complete larger nails vary from 42 to 87 mm long, with several at the upper end of the range.

SF 244i. A(135), G. Iron hinge pivot or wall hook. Length of tapered spike 58 mm, length of upright arm 23 mm.

SF no	Find no	Nail	Description	Length (mm)
-	A135	А	round flat head	30 *
-	A135	В	round flat head	30 *
-	A135	C1-2	round flat head; shank fragment	27 *; 22 *
-	A135	D	well-preserved, complete, round flat head	26 *
-	A135	E	well-preserved, complete, round flat head	28 *
-	A135	F	round flat head	26 *
-	A135	Н	round flat head	21 *
-	A135	I	round flat head	31 *
-	A135	J	round flat head	26 *
-	A135	К	round flat head	20 *
-	A135	L	complete, round flat head	74
-	A135	M1-2	1) complete, round flat head; 2) round flat head	32 *; 25 *
-	A135	N	complete, round flat head, clenched; 10 mm between the underside of the head and the top of the bent shank	17 (bent) *

Table 18.18. Nails from cremation AF204.

SF no	Find no	Nail	Description	Length (mm)
-	A135	01-2	2 complete, round flat head, corroded together	28, 26 *
-	A135	Р	complete, round flat head	30 *
-	A135	Q	complete, round flat head	31 *
-	A135	R	round flat head	20 *
-	A135	S	complete, round flat head	53
-	A135	Т	complete, round flat head	30 *
-	A135	U	round flat head	21 *
-	A135	V	well-preserved, complete, round flat head	25 *
-	A135	W	well-preserved, shank fragment	12 *
-	A135	Х	well-preserved, complete, round flat head	23 *
-	A135	Y	complete, round flat head	28 *
-	A135	Z	complete, round flat head	30 *
-	A135	AA	round flat head	12 *
-	A135	AB	round flat head	21 *
-	A135	AC	shank fragment	59
-	A135	AD	complete, round flat head	48 (bent)
-	A135	AF	complete, round flat head	25 *
-	A135	AG	complete, round flat head	81
-	A135	AH	3, round flat head; 1 complete, with another corroded to it at 90° at about the midpoint of the shank	87, 60, 25
-	A135	AI	complete, round flat head	83
-	A135	AJ	round flat head	63
-	A135	AK	shank fragment	50
-	A135	AL	complete, round flat head	29 *
-	A135	AM	well-preserved, round flat head	20 *
-	A135	AN	2, round flat head, 1 is complete; corroded together at 180° at the head	26 *, 21
-	A135	AO	complete, round flat head	28 *
-	A135	AP	round flat head	23 *
-	A135	AQ	round flat head; shank fragment	17 *; 23 *
-	A135	AR	nail cluster	61
-	A135	AS	complete, round flat head, clenched	48 (bent)
-	A135	AT	complete, round flat head, with a shank fragment corroded across the shank	65, 35
-	A135	AU	well-preserved, complete, round flat head	26 *
-	A135	AV	round flat head	23 *
-	A135	AX	well-preserved, complete, round flat head	29 *
-	A135	AZ	well-preserved, complete, round flat head	25 *
-	A135	BB	complete, round flat head	60
-	A135	BC	complete, round flat head	32 *
-	A135	BD	complete, round flat head	34 *
-	A135	BE	complete, round flat head	26 *
-	A135	BF	well-preserved, complete, round flat head, shank bent into a U	24 (bent)
-	A135	BG	complete, round flat head	32 *

SF no	Find no	Nail	Description	Length (mm)
-	A135	BH	well-preserved, complete, round flat head	24 *
-	A135	BI	complete, round flat head	29 *
-	A135	BJ	complete, round flat head	31 *
-	A135	BK	complete, round flat head	27 *
-	A135	BL	complete, round flat head	28 *
-	A135	BM	2 fragments	20, 17
-	A135	BN	complete, round flat head, with a shank fragment corroded at 90° onto the end of the shank	42, 44
-	A135	BO	complete, round flat head, clenched	45 (bent)
-	A135	BP	complete, round flat head	83
-	A135	BQ	complete, round flat head, with a curved shank fragment corroded onto the upper part of the shank	49, 30 (bent)
-	A135	BR	2, complete, round flat head, the heads and upper shanks corroded together	59 (bent), 35 (bent)
-	A135	BS	complete, round flat head	55
-	A135	BT	complete, round flat head	47
-	A135	BU	round flat head	48
-	A135	BV	complete, round flat head	28 *
-	A135	BW	complete, round flat head	31 *
244ii	A135	BX	round flat head	23
-	A135	BY	complete, round flat head; shank fragment	32 *; 30 (*)
-	A135	BZ	round flat head, shattered	-

Cremation AF73 (Fig 39)

A small copper-alloy shank fragment, part of an iron stud head, one certain iron hobnail and some probable hobnail shank fragments, and several iron nails had been deposited in AF73 (Table 18.19), all primary pyre debris. The hobnails derive from nailed leather footwear, probably worn by the deceased. Only four of the nails are complete, with three ranging from 43 to 47 mm, and one being 63 mm.

SF 93. A(109). Copper-alloy shank fragment, length 11 mm.

SF 241. A(108). Seven iron fragments. 1) Hobnail, length 15 mm. 2) Three shank fragments, probably from hobnails, lengths 18, 12 and 10 mm. 3) Hollow convex stud head, scorched and distorted, diameter 10 mm, height 6 mm. 4) Two amorphous fragments from nails or hobnails, 10 by 9 by 7 mm, 12 by 9 by 6 mm.

SF no	Find no	Nail	Description	Length (mm)
92	A102	-	shank fragment	57
-	A105	А	complete, round flat head	47
-	A105	В	complete, round flat head	48
-	A105	С	shank fragment	21
-	A105	D	round flat head	15
-	A105	E	2 shank fragments (?hobnails)	21, 18
-	A105	F	round flat head	51
-	A105	G	complete, round flat head	63
-	A105	Н	round flat head	28

Table 18.19. Nails from cremation AF73.

-	A105	I	round flat head	14
-	A105	J	round flat head	23
-	A105	К	shank fragment, clenched	37
-	A105	L	complete, round flat head	43
-	A105	М	round flat head	38
-	A105	N	round flat head	28
-	A105	Р	shank fragment	33
-	A105	Q	shank fragment	36
-	A105	R	2, round flat head	35, 18
	A105	Т	shank fragment	31
-	A106	-	2 shank fragments	18, 10

Cremation AF100 (Fig 43)

Three iron hobnails and a probable hobnail shank fragment from leather footwear and a few iron nails (Table 18.20) were scattered throughout the fill of AF100, with most coming from the upper fill and all being primary pyre debris. The complete nails range in length from 26 to 82 mm. The wide range implies that reused timber may have been used as fuel, while the smallest examples could be from wooden furniture. One well-preserved clenched nail gives a board thickness of 14 mm, close to the 12 mm of the thinner boards in AF33.

SF 240. A(194). 1) Three iron hobnails and a ?hobnail shank fragment, lengths 12, 11, 10 and 9 mm. 2) Amorphous iron fragment, 6 by 4 by 3 mm.

SF	Context	Nail	Description	Length (mm)
-	A183 (upper fill)	А	complete, round flat head	44
-	A183 (upper fill)	В	complete, round flat head	59
-	A183 (upper fill)	С	round flat head	26
-	A183 (upper fill)	D	complete, round flat head	82
-	A183 (upper fill)	E	complete, round flat head, tip clenched	26
-	A183 (upper fill)	F	well-preserved, complete, round flat head, clenched; 28 mm between the underside of the head and the top of the bent shank	32 (bent)
-	A183 (upper fill)	G	round flat head	11
-	A183 (upper fill)	Н	round flat head	22
-	A183 (upper fill)	I	shank fragment	17
-	A183 (upper fill)	J	round flat head	42
-	A183 (upper fill)	L	round flat head	36
-	A183 (upper fill)	М	complete, round flat head	66
-	A183(mid fill)	К	round flat head	35
-	A183 (mid fill)	Ν	complete, round flat head	39

Cremation AF130 (Fig 49)

The fill of AF130 contained several copper-alloy studs, a copper-alloy nail, a few iron hobnails from leather footwear and a minimum of 124 iron nails (estimated on the number of heads), all primary pyre deposits. The copper-alloy studs all have a large low convex head of 29-30 mm in diameter and a copper-alloy shank that gives an overall length of about 26 mm; at least one

appears scorched. These studs and the copper-alloy nail probably come from a wooden box or chest (Riha 2001, Abb. 4-5, 24, Tafn. 48-9).

A few of the nails were well-preserved and many were complete (Table 18.21). The 45 complete straight nails ranged in length from 25 to 108 mm. Only three nails formed the upper end of this range, with lengths of 79, 102 and 108 mm. In contrast to many of the other pyre-related features and cremations, over half the nails were below 40 mm in length, with a cluster at around 31 to 36 mm. Some of the smallest nails may derive from wooden furniture, such as the box represented by the copper-alloy studs, some were probably used to construct the pyre or a bier, and others probably came from reused timber serving as fuel. On nine clenched nails the distance between the underside of the head and the top of the bent shank varied considerably: 11, 15, 17, 18, 22, 32, 47, 54 and 68 mm. Assuming that only two boards were nailed together in each instance, the individual boards ranged from about 5 to 34 mm thick. This range again suggests that items of wooden furniture were burnt on the pyre, that some nails may come from a purpose-built bier or similar structure, and that reused structural timber was used as fuel.

Fig 49.1 SF 149. A(262). Small amorphous fragments of scorched copper-alloy. Total weight >1 g.

Fig 49.2 SF 140. A(231). Copper-alloy stud with low convex head and square-section shank (made separately and brazed on), diameter 29 mm, length 25 mm.

Fig 49.3 SF 136. A(206). Copper-alloy stud as SF 140, parts of circumference missing, diameter 30 mm, length (incomplete) 12 mm.

Fig 49.4 SF 137. A(224). 1) Copper-alloy stud as SF 140, with an iron nail attached by corrosion, diameter 26 mm, length (incomplete) 13 mm. 2) Complete iron nail with small round flat or slightly convex head, length 32 mm.

Fig 49.5 SF 145. A(223). Copper-alloy stud fragments as SF 140, diameter approx. 30 mm, length (incomplete) 16 mm.

Fig 49.6 SF 151. A(207). Copper-alloy stud head fragment, as SF 140, diameter approx. 30 mm.

Fig 49.7 SF 239. A(203). Copper-alloy stud shank, as studs SF 140, diameter 5 mm, length 18 mm.

Fig 49.8 SF 147. A(208). One copper-alloy nail and one iron nail corroded together, the heads are almost at 180°, lengths 18 mm and 30 mm respectively. There is a small thin piece of copper-alloy sheet between them.

Fig 49.9a A(201). Iron hobnails, none is complete. Fig 49.9b D) two, length 13 mm; G) two, length 8 mm.

Fig 49.10 A(225), R. Iron hobnail, length 18 mm.

Fig 49.11a A(263). Two iron hobnails. I) length 11 mm; Fig 49.11b O) length 17 mm.

SF no	Find no	Nail	Description	Length (mm)
-	A201	А	round flat head	28
-	A201	В	shank fragment	19
-	A201	С	rectangular convex head	25
-	A201	E	shank fragment	20
-	A201	F	round convex head	23
-	A201	Н	thin shank fragment	21
-	A201	J	small round flat head	23
-	A201	К	round flat head	8

Table 18.21. Nails from cremation AF130 (all Fig 49.12)

SF no	Find no	Nail	Description	Length (mm)
-	A201	L	round convex head	21
-	A201	М	shank fragment	23
-	A201	Ν	rectangular flat head	20
-	A201	0	round flat head	27
-	A201	Р	round flat head	15
-	A201	R	round flat head	41
-	A201	Т	shank fragment	36
-	A201	U	round flat head	50
-	A201	V	round flat head	28
-	A201	х	round flat head	37
-	A201	Y	round flat head	31
-	A201	Z	round flat head	43
-	A201	TZ	round flat head	67
-	A209	A, B	2 shank fragments	14, 13
-	A225	A	round flat head	29
-	A225	В	round flat head	30
-	A225	C	2, round flat head	51, 19
	A225	D	complete, round flat head, clenched; 47 mm	58 (bent)
-	AZZJ		between the underside of the head and the top of the bent shank	
-	A225	E	round flat head	19
-	A225	F	complete, round flat head	59
-	A225	G	complete, round flat head	31
159	A225	Н	complete, well-preserved, round flat head	55
-	A225	I	shank fragment	15
-	A225	J	complete, round flat head	35
-	A225	К	complete, round flat head, clenched; 18 mm between the underside of the head and the top of the bent shank	28 (bent)
-	A225	K2	well-preserved, complete, round flat head	34
-	A225	L	round flat head	31
-	A225	М	round flat head	37
-	A225	N	complete, round flat head, clenched; 22 mm between the underside of the head and the top of the bent shank	40 (bent)
-	A225	Р	2 complete, round flat head	45, 43
-	A225	Q	round flat head	39
-	A225	S	complete round head; shank fragment	60; 36
-	A225	Т	round flat head	32
-	A225	U	round flat head	15
-	A225	V	complete, round flat head	48
-	A225	Х	round flat head, clenched; 15 mm between the underside of the head and the top of the bent shank	26 (bent)
-	A225	Y	amorphous mass, ?nail head	-
-	A225	Z	complete, round flat head	39
148	A226	-	2 shank fragments (?hobnails)	12, 11
-	A227	В	complete, round flat head; ?round flat head	55; 37

SF no	Find no	Nail	Description	Length (mm)
-	A229	А	2 shank fragments	25, 21
-	A229	В	complete, round flat head	102
-	A229	С	shank fragment	13
-	A229	D	complete, round flat head	28 (bent)
-	A229	E	cluster of fragments	-
-	A229	F	shank fragment	30
-	A229	G	round flat head	34
-	A229	Н	round flat head	20
-	A229	к	round flat head	21
-	A229	L	round flat head	18
-	A229	М	complete, round flat head, clenched; 17 mm between the underside of the head and the top of the bent shank	27
-	A229	N	complete, round flat head	29
-	A229	0	complete, round flat head	30
-	A229	Р	shank fragment	16
-	A229	Q	round flat head	26
-	A229	S	2 complete, round flat head; 1 is clenched, with 68 mm between the underside of the head and the top of the bent shank	108, 85 (bent)
-	A229	Т	shank fragment	17
-	A229	V	round flat head	32
160	A229	X	complete, well-preserved, round flat head, bent shank; 32 mm between underside of head and top of bent shank	43 (bent)
-	A229	Y	shank fragment	23
161	A229	-	flat round head	42
192	A250	-	3 shank fragments	14, 11, 9
-	A258	A	complete, round flat head	46
-	A258	В	complete, round flat head	67
-	A258	С	shank fragment	38
-	A258	D	shank fragment	27
-	A258	E	complete, round flat head, clenched; 54 mm between the underside of the head and the top of the bent shank	65 (bent)
-	A258	F	complete, round flat head	32
-	A258	G	complete, round flat head	70
-	A258	Н	complete, round flat head	36
-	A258	I	complete, round flat head	55 (bent)
-	A258	J	shank fragment	33
-	A258	К	2, corroded together at 180;	25, 19
-	A258	М	complete, round flat head	34
-	A258	N	round flat head	35
-	A258	0	round flat head	24
-	A258	Р	round flat head	49
-	A258	Q	round flat head	22
181	A258	R1	well-preserved, round flat head, tip only missing	27
-	A258	R2	2 complete, round flat head; 1 round flat head	79, 46; 48

SF no	Find no	Nail	Description	Length (mm)
-	A258	S	shank fragment	27
-	A258	Т	shank fragment	22
-	A258	U	round flat head	40
-	A258	V	shank fragment	25
-	A258	W	complete, round flat head	62
-	A258	Х	complete, round flat head; shank fragment	32; 29
-	A258	Y	2, round flat head	45, 26
-	A258	Z	round flat head	40
185	A260	-	3 shank fragments	15, 12, 7
-	A263	А	round flat head	32
-	A263	В	shank fragment	21
-	A263	С	complete, round flat head	35
-	A263	D	round flat head	31
-	A263	E	round flat head	41
-	A263	F	round flat head	46
-	A263	G	complete, round flat head, clenched	29 (bent)
158	A263	Н	complete, well-preserved, round flat head	28
162	A263	J	complete, well-preserved, round flat head bent over on two sides, bent shank; 11 mm between the underside of the head and the top of the bent shank	23 (bent)
-	A263	К	round flat head	33
-	A263	L	round flat head	26
-	A263	М	complete, round flat head	47
-	A263	N	round flat head	26
-	A263	Р	shank fragment	30
-	A263	Q	complete, round flat head	31
-	A263	R	complete, round flat head, clenched	52 (bent)
-	A263	S	cluster	-
-	A263	S & Y	5 with round flat head, very corroded, but two pairs are clearly crossing mid shank at 90°.	-
-	A263	Т	complete, round flat head	36
-	A263	U	complete, round flat head	34
-	A263	V	complete, round flat head	32
-	A263	W	complete, round flat head	34
-	A263	х	round flat head	22
-	A263	Z	complete, round flat head	25
-	A270	А	round flat head	31
-	A270	С	round flat head	19
-	A270	D	3 complete, round flat head	49, 37, 32
-	A270	E	complete, round flat head	26
-	A270	F	complete, round flat head	39
-	A270	G	complete, round flat head	43 (bent)
-	A270	н	shank fragment	17
-	A270	I	round flat head	16
-	A270	J	round flat head	40

SF no	Find no	Nail	Description	Length (mm)
-	A270	L	complete, round flat head	61
168	A270	М	complete, well-preserved, round flat head	27
-	A270	Ν	round flat head	22
-	A270	0	shank fragment	26
-	A270	Q	round convex head	14
-	A270	R	shank fragment	34
-	A270	S	complete, round flat head	33
-	A270	Т	shank fragment	28
-	A270	U	complete, round flat head	26
-	A270	Z	shank fragment	18
138	A276	-	complete, well-preserved, round flat head	66

Cremation AF154 (Fig 53)

The pyre debris from AF154 consisted of a single iron nail and two shank fragments.

A(237). One complete iron nail and two iron nail shank fragments, lengths 53 (bent), 37 and 26 mm.

Cremation AF178

The pyre debris from AF 178 consists of two small pieces of burnt ironwork that may be parts of either nails or hobnails, and a fragment of an iron strap, probably from a chest or similar wooden object, or possibly from reused timber used as fuel.

Fig 57.1 SF 141. A(279). Iron strap fragment, length 44 mm, width 31 mm.

SF 150. A(282). Amorphous iron fragment (nail or hobnail), 9 by 7 by 5 mm.

SF 177. A(293). Amorphous iron fragment (nail or hobnail), 7 by 7 by 6 mm.

Cremation AF183 (Fig 58)

Very little pyre debris, only one complete nail and six other nail fragments, came from the fill of AF183 (Table 18.22).

Find	Nail	Description	Length (mm)
A288	С	complete, round flat head	65
A288	D	amorphous fragment (nail shank and other pyre debris)	35 x 30 x 17
A288	E	shank fragment	22
A288	F	shank fragment	20
A288	G	shank fragment	15
A288	Н	flat round head	23
A288	J	shank fragment	22

Table 18.22 Nails from cremation AF183.

Cremation AF211 (Fig 62)

The primary pyre debris in AF211 consisted of a minimum of about 80 iron hobnails from nailed footwear and a minimum of 184 iron nails (estimated on the number of heads); in some corroded clusters of nails the precise number present could not be estimated. A single coin used as the ferryman's fee does not appear to have been burnt and was probably added to the burial as a secondary deposit. It is very worn, but may be an issue of Trajan, AD 98-117. Although the coin provides a *terminus post quem*, it may be very much earlier than the burial (*see above*).

The high number of hobnails (Table 18.23) probably represent only one pair of heavily nailed boots or shoes worn by the deceased, but they may instead represent two (or more) pairs of lightly nailed shoes or sandals, with one pair worn and the other placed on the pyre along with other unworn items of clothing.

The complete nails range in length from just over 22 to 82 mm, with most being between 35 and 65 mm (Table 18.24). There are no clear concentrations at particular lengths within the more limited range. Context A (307), ND, consists of two nails of the same length (47-8 mm) corroded together at 90°; this position may be fortuitous (see nail NE for a shank corroded onto a head), but they may represent the junction of two boards. On well-preserved clenched nails the distances between the underside of the head and the top of the bent shank ranged from 8 mm to 54 mm. The nail with the 8 mm gap was clenched well up the shaft and was too long (>28 mm) to be used in the construction of a box or other piece of furniture with a board thickness of only 4 mm; it is more likely to represent a botched insertion. The other nails represent boards from about 10 to 27 mm thick, with most between 10 and 16 mm. The range in nail length and board thickness implies that a range of items were burnt on the pyre, the thinner boards probably representing furniture and the larger structural timber.

Fig 62.1 SF 171. A(337). Very worn copper-alloy *as*, ?Trajan (AD 98-117), reverse worn smooth. Diameter 26 mm; weight 9.46 g.

SF no	Find no	Nail	Number	Length (mm)
-	A307	I	1	16
-	A307	J	1	21
-	A307	0	1	15
-	A307	R	1	18
-	A307	U	1	16
-	A307	Х	1 and 1 shank fragment	18, 11
-	A307	Y	2 shank fragments	45, 33
183	A307	AB	1 and 2 shank fragments	9, 6 x 2
186	A307	AC	shank fragment	14
-	A307	AD	1	16
193	A307	AO	1	15
190	A307	AQ	1	12
184	A307	AS	2	17, 14
187	A307	AU	4	12 x 3, 8
-	A307	AYi	2	15, 11
-	A307	AZ	1	19
-	A307	CD	1	22
-	A307	DO	1	21
-	A307	DQ	2	15
-	A307	EY	1	21
-	A307	JB	1	22
-	A307	LG	cluster	-
155	A309	В	1	18
157	A310	С	1	15
154	A311	G	1	20
-	A312	Ν	1	13
178	A313	Р	2	15 x 2

Table 18.23. Hobnails from cremation AF211 (all Fig 62.2).

SF no	Find no	Nail	Number	Length (mm)
176	A316	S	1	13
175	A317	Т	1	12
179	A319	AA	1	10
-	A323	СТ	2	11
156	A325	DP	46, includes shank fragments	11-17
172	A332	EN	1	13
224	A341	JW	1	18
234	A341	JW	6	17 x 3, 16, 15, 10
349	A349	NB	6	25, 16, 15 x 3, 13

Table 18.24.	Nails from	cremation	AF211	(Fia 62.3)
10010 10.27.	i vans nom	Cicination	π	(1 19 02.0)

SF no	Find no	Nail	Description	Length (mm)
-	A307	D	shank fragment	34
-	A307	Е	2 shank fragments	32, 31
-	a307	F	shank fragment	20
-	A307	Н	complete, round flat head	76
-	A307	К	complete, round flat head	43
-	A307	L	complete, round flat head	46
-	A307	М	complete, round flat head	52
-	A307	Q	round flat head	28
-	A307	V	round flat head	14
188	A307	W	round slightly convex head only	-
-	A307	AA	round flat head	37
-	A307	AE	round flat head	32
-	A307	AF	3 shank fragments (?hobnails)	20, 15, 11
-	A307	AG	round flat head	24
-	A307	AH	round flat head	31
-	A307	AI	round flat head	43 (bent)
-	A307	AJ	complete, round flat head	51
-	A307	AK	round flat head	48
-	A307	AL	round flat head	41
-	A307	AM	round flat head	20
-	A307	AN	shank fragment, clenched (?hobnail)	13 (bent)
-	A307	AR	2 shank fragments	27, 16
-	A307	AT	round flat head	62
-	A307	AV	shank fragment	34
-	A307	AW	round flat head	56
-	A307	AX	head and 2 shank fragments	-, 11 x 2
-	A307	AYii	round flat head	29
-	A307	BC	complete, round flat head, clenched shank	60 (bent)
-	A307	BD	shank fragment	37
-	A307	BE	shank fragment	28
-	A307	BF (x 2)	head and 5 shank fragments	1, 44, 30, 24, 20, 17

SF no			Length (mm)	
-	A307	BG	shank fragment	22 (bent)
191	A307	BH	complete, well-preserved, small round flat head, clenched shank tip; 19 mm between underside of head and top of bent tip	22 (bent)
-	A307	BJ	shank fragment	31 (bent)
-	A307	BL	round flat head	38
-	A307	BM	shank fragment	37
-	A307	BN	shank fragment	47
-	A307	во	round flat head	41
-	A307	BP	round flat head	35
-	A307	BQ	shank fragment, clenched	35 (bent)
-	A307	BR	complete, round flat head	38
-	A307	BS	round flat head	25
-	A307	BT	shank fragment	43
-	A307	BU	round flat head	38
-	A307	BV	shank fragment	17 (bent)
-	A307	BW	round flat head	24
-	A307	BX	shank fragment	35
-	A307	BY	shank fragment	23 (bent)
-	A307	ΒZ	1 round flat head and 1 shank fragment	47 (bent), 30
-	A307	CA	shank fragment	27
-	A307	СВ	amorphous lump	-
-	A307	CE	round flat head	21
-	A307	CF	complete, round flat head	51
-	A307	CG	complete, round flat head	53
-	A307	СН	shank fragment	37
-	A307	CI	round flat head	39
-	A307	CJ	shank fragment	31
-	A307	CK	shank fragment	34
-	A307	CL	shank fragment	25
-	A307	CM	round flat head	37
-	A307	CN	round flat head	28
-	A307	CO	round flat head	53
-	A307	CP	complete, round flat head	56
-	A307	CQ	round flat head	20
-	A307	CR	round flat head	12
-	A307	CU	shank fragment	28
-	A307	CV	shank fragment	25
-	A307	CW	round flat head	25
-	A307	СХ	shank fragment	24
-	A307	CY	round flat head	42
-	A307	CZ	round flat head	30
-	A307	DA	shank fragment	58
-	A307	DB	shank fragment	38
-	A307	DC	round flat head	40

SF no	Find no	Nail	Description	Length (mm)
-	A307	DD	round flat head	70
-	A307	DF	2 shank fragments	38, 23
-	A307	DH	complete, oval flat head, clenched; 22 mm between the underside of the head and the top of the bent shank	30 (bent)
-	A307	DI	complete, round flat head	53
-	A307	DJ	complete, round flat head	41 (bent)
-	A307	DK	shank fragment; amorphous slaggy lump	31; -
-	A307	DL	complete, round flat head, hooked	35 (bent)
-	A307	DM	shank fragment, clenched	42 (bent)
-	A307	DN	complete, round flat head	44
-	A307	DR	head?; shank fragment	-; 26
-	A307	DS	round flat head	19
-	A307	DT	shank fragment	23
-	A307	DU	round flat head	19
-	A307	DV	complete, round flat head	43
-	A307	DW	round flat head	31
-	A307	DX	complete, round flat head	82
-	A307	DY	shank fragment, clenched	32 (bent)
-	A307	DZ	complete, round flat head, clenched	50 (bent)
-	A307	EA	round flat head	40
-	A307	EB	round flat head	24
-	A307	EC	shank fragment	24
-	A307	ED	round flat head	23
-	A307	EE	complete, round flat head	44
-	A307	EF	complete, round flat head	42 (bent)
-	A307	EG	shank fragment	32
-	A307	EH	round flat head (shattered)	-
-	A307	EI	round flat head	35
-	A307	EJ	shank fragment	40
-	A307	EK	shank fragment	26
-	A307	EL	complete, round flat head	37
-	A307	EM	round flat head	41
-	A307	EO	round flat head	28
-	A307	EP	round flat head	27
-	A307	EQ	round flat head	22
-	A307	ER	round flat head; amorphous lump	34 ; -
-	A307	ES	shank fragment	58
-	A307	ET	round flat head	33
-	A307	EU	round flat head	17
-	A307	EV	round flat head	27 (bent)
-	A307	EW	shank fragment	28
-	A307	EX	round flat head	48
-	A307	FA	complete, round flat head, clenched; 28 mm between the underside of the head and the top of the bent shank	34 (bent)
-	A307	FB	complete, round flat head	67

SF no	Find no	Nail	Description	Length (mm)
-	A307	FCii	shank fragment	32
-	A307	FD	cluster of shank fragments	-
-	A307	FE	round flat head	33
-	A307	FF	shank fragment	39
-	A307	FG	2, round flat head	52, 49
-	A307	FH	shank fragment	77
-	A307	FI	round flat head	37
-	A307	FJ	complete, round flat head	75
-	A307	FK	complete, round flat head	75
-	A307	FL	complete, round flat head	66
-	A307	FM	complete, round flat head	65
-	A307	FN	complete, round flat head, clenched	44 (bent)
-	A307	FO	shank fragment, clenched	25 (bent)
-	A307	FP	complete, round flat head, clenched; 24 mm between the underside of the head and the top of the bent shank	35 (bent)
-	A307	FQ	shank fragment	53
-	A307	FR	shank fragment	51
-	A307	FS	2 shank fragments	40, 24
-	A307	FT	round flat head	46
-	A307	FU	shank fragment	61
-	A307	FV	complete, round flat head	73
-	A307	FW	round flat head	41
174	A307	FX	round flat head	37
-	A307	FY	shank fragment	18
-	A307	FZ	round flat head	21
-	A307	GA	shank fragment	60
-	A307	GB	complete, round flat head	43
-	A307	GC	round flat head	35
-	A307	GD	complete, round flat head	63
-	A307	GE	complete, round flat head	43
-	A307	GF	round flat head	35
-	A307	GG	complete, round flat head	54 (bent)
-	A307	GH	shank fragment	53
-	A307	GJ	shank fragment	57
-	A307	GK	round flat head	61
-	A307	GL	shank fragment, clenched	28 (bent)
-	A307	GM	complete, round flat head, clenched	37 (bent)
-	A307	GN	2 shank fragments	38, 28
-	A307	GO	2 shank fragments	40, 26
-	A307	GP	shank fragment	23
-	A307	GQ	shank fragment	29
		GR	complete, round flat head	54
-	A307			
-	A307 A307	GS	complete, round flat head	39

SF no			Description	Length (mm)	
-	A307	GU	complete, round flat head, clenched well up the shank; 8 mm between the underside of the head and the top of the bent shank	28 (bent)	
-	A307	GV	cluster of shank fragments	-	
-	A307	GW	4 shank fragments	34, 29, 26, 21	
-	A307	GX	amorphous lump	60	
-	A307	GY	round flat head	40	
-	A307	GZ	2 shank fragments	53, 36	
-	A307	HA	cluster of shank fragments	-	
-	A307	HB	shank fragment	32	
-	A307	HC	shank fragment	38	
-	A307	HD	shank fragment	30	
-	A307	HE	shank fragment	27	
-	A307	HF	2 shank fragments	62, -	
-	A307	HG	shank fragment	55	
-	A307	HH	shank fragment; amorphous lump	42; -	
-	A307	HI	shank fragment	31	
-	A307	HJ	shank fragment	38	
-	A307	HK	round flat head	61	
-	A307	HL	2 small amorphous lumps	-	
-	A307	HM	shank fragment	30	
-	A307	HO	round flat head	43	
-	A307	HP	complete, round flat head	77	
-	A307	HQ	shank fragment	26	
-	A307	HR	shank fragment	38	
-	A307	HS	shank fragment	39	
182	A307	HT	shank fragment	25	
-	A307	HU	round flat head	44	
-	A307	ΗV	shank fragment	36	
-	A307	HW	shank fragment	53	
-	A307	HX	amorphous lump	-	
-	A307	HY	round flat head	42	
-	A307	HZ	shank fragment	34	
-	A307	IA	shank fragment	29	
-	A307	IB	shank fragment	28	
-	A307	IC	2 shank fragments	41, 29	
-	A307	ID	round flat head	33	
-	A307	IE	cluster of shank fragments	-	
-	A307	IF	2 shank fragments	43, 40	
-	A307	IG	cluster of shank fragments	-	
-	A307	IH	shank fragment	47	
-	A307	11	shank fragment	64	
222	A307	IJ	shank fragment	25	
-	A307	IK	shank fragment	50	
-	A307	IL	shank fragment	62	

SF no	Find no	Nail	Description	Length (mm)
-	A307	IM	shank fragment	30
-	A307	IN	shank fragment	29
-	A307	IP	shank fragment	22
-	A307	IQ	shank fragment	31
-	A307	IR	round flat head	25
-	A307	IS	2 shank fragments	32, 29
-	A307	IT	round flat head	42
-	A307	IU	round flat head	32
-	A307	IV	round flat head	41
-	A307	IW	round flat head	53
-	A307	IY	shank fragment	51
-	A307	IZ	shank fragment, clenched	47 (bent)
-	A307	JA	complete, round flat head	39
-	A307	JC	round flat head	39
-	A307	JD	shank fragment	45
-	A307	JE	round flat head	31
-	A307	JF	shank fragment	54
-	A307	JG	shank fragment, clenched	31 (bent)
-	A307	JH	2 shank fragments	24, 11
-	A307	JI	cluster of shank fragments	-
-	A307	JJ	shank fragment	64
-	A307	JK	shank fragment	55
-	A307	JL	complete, round flat head, clenched tip; 54 mm between the underside of the head and the top of the bent shank	69 (bent)
-	A307	JM	complete, round flat head	61
-	A307	JN	nail cluster	-
-	A307	JO	shank fragment, clenched	30 (bent)
-	A307	JP	round flat head	49
-	A307	JQ	shank fragment	39
-	A307	JS	shank fragment	52
-	A307	JT	complete, round flat head	50
-	A307	JU	complete, round flat head	57
-	A307	JV	shank fragment	47
-	A307	JX	shank fragment	35
-	A307	JY	shank fragment	31
-	A307	JZ	nail cluster	-
-	A307	KA	complete, round flat head	48 (bent)
-	A307	KB	2 shank fragments	35, 32
-	A307	KC	shank fragment	58
-	A307	KD	complete, round flat head, clenched	35 (bent)
-	A307	KE	round flat head	36
-	A307	KF	shank fragment	22
-	A307	KG	round flat head	50
-	A307	КН	round flat head	46

SF no	Find no	Nail	Description	Length (mm)
-	A307	KI	amorphous lump	-
-	A307	KJ x 2	2, round flat head (1 clenched)	38, 29 (bent)
-	A307	KK	shank fragment	26
-	A307	KM	complete, round flat head, clenched	28 (bent)
-	A307	KN	shank fragment	59
-	A307	KP	shank fragment	25
-	A307	KQ	shank fragment	30
-	A307	KR	shank fragment	36
-	A307	КТ	round flat head, shank fragment	27, 34
-	A307	KU	round flat head, clenched	50 (bent)
-	A307	KV	shank fragment	40
-	A307	KW	round flat head	25
-	A307	КΧ	shank fragment	36
-	A307	KY	round flat head	43
-	A307	ΚZ	shank fragment	32
-	A307	LA	shank fragment	15
-	A307	LB	shank fragment	35
-	A307	LC	complete, round flat head	50
-	A307	LE	complete, round flat head	45
-	A307	LF	shank fragment	35
-	A307	LH	shank fragment	37
-	A307	LI	shank fragment	36
-	A307	LJ	complete, round flat head	47
-	A307	LK	cluster of shank fragments	-
-	A307	LL	complete, round flat head	58
-	A307	LM	round flat head	36
-	A307	LN	round flat head	34
-	A307	LO	round flat head, clenched	32 (bent)
-	A307	LP	shank fragment	38
-	A307	LQ	shank fragment, clenched	51
-	A307	LS	round flat head	68
-	A307	LT	shank fragment	43
-	A307	LU	shank fragment	36
-	A307	LV	round flat head	39
-	A307	LW	2 shank fragments	35 x 2
-	A307	LX	shank fragment	53
-	A307	LY	shank fragment	27
-	A307	LZ	shank fragment	48
-	A307	MA	round flat head	29
-	A307	MB	round flat head	38
-	A307	MC	shank fragment	38
-	A307	ME	complete, round flat head	51
-	A307	MF	shank fragment, clenched	57 (bent)
-	A307	MH	shank fragment	49

SF no	Find no	Nail	Description	Length (mm)
-	A307	MI	round flat head	26
229	A307	MJi	nail cluster	-
-	A307	MJii	shank fragment	41
-	A307	MK	complete, round flat head, clenched	49 (bent)
-	A307	MKL (sic)	complete, round flat head, clenched	33 (bent)
-	A307	MM	shank fragment, clenched	39 (bent)
-	A307	MO	round flat head	50
-	A307	MP	complete, round flat head	51
-	A307	MQ	complete, round flat head	60
-	A307	MR	amorphous lump	-
-	A307	MS	shank fragment	89
-	A307	MT	round flat head	40
-	A307	MU	shank fragment	45
-	A307	MV	round flat head	44
-	A307	MY	shank fragment	45
-	A307	MZ	round flat head	29
-	A307	NA	shank fragment	45
-	A307	NB	complete, round flat head, clenched	38 (bent)
-	A307	ND	2 complete, round flat head, corroded together at 90°	48, 47
-	A307	NE	1 complete, round flat head, with a shank fragment corroded at 90° onto the head	52, 16
-	A307	NF	shank fragment	47
-	A307	NG	round flat head	57
-	A307	NH	shank fragment	47
-	A307	NI	round flat head	40
-	A307	NJ	shank fragment	28
-	A307	NK	complete, round flat head, shattered	-
-	A307	NL	shank fragment	35
-	A307	NM	round flat head	38
-	A307	NN	round flat head	39
-	A307	NO	shank fragment	43
-	A307	NP	round flat head	54
-	A307	NQ	shank fragment	67
153	A308	-	complete, well-preserved, round flat head, neatly clenched shank; 30 mm between underside of head and top of bent shank	37 (bent)
165	A318	Z	complete, well-preserved, round flat head	36
173	A322	AP	complete, well-preserved, round flat head, clenched shank; 20 mm between underside of head and clenched shank	28 (bent)
167	A322	BB	complete, well-preserved, round flat head	37
164	A323	CC	complete, well-preserved, round flat head, bent shank	31 (bent)
-	A323	CS	shank fragment	21
166	A324	DG	well-preserved, subrectangular flat head	34
169	A333	EZ	complete, well-preserved, subrectangular flat head, neatly clenched shank; 44 mm between underside of head and top of bent shank	52 (bent)
180	A334	GI	complete, well-preserved, round flat head	65

SF no	Find no	Nail	Description	Length (mm)
170	A336	HN	complete, well-preserved, round flat head, clenched shank; 25 mm between underside of head and top of bent shank	32 (bent)
232	A338	IO	well-preserved, round flat head	15
231	A339	IX	complete, well-preserved, oval flat head	36
221	A340	JR	complete, well-preserved, oval flat head	36
230	A342	КО	complete, well-preserved, oval flat head, neatly clenched shank; 25 mm between underside of head and top of bent shank	31 (bent)
233	A343	KL	complete, well-preserved, subrectangular flat head, neatly clenched shank; 32 mm between underside of head and top of bent shank	42 (bent)
227	A344	LD	complete, well-preserved, round flat head, neatly clenched shank; 29 mm between underside of head and top of bent shank	35 (bent)
223	A345	MD	complete, well-preserved, round flat head, neatly clenched shank tip; 26 mm between underside of head and top of bent shank	31 (bent)
226	A346	MG	complete, well-preserved, subrectangular flat head	39
228	A347	MX	complete, well-preserved, subrectangular flat head, neatly clenched 28 (shank; 20 mm between underside of head and top of bent shank	
225	A348	MW	complete, well-preserved, round flat head, bent shank	35 (bent)

Inhumation AF122 (Fig 47)

A nail shank fragment was residual in the fill of this burial.

A(195). Iron nail shank fragment, length 22 mm.

Inhumation AF128 (Fig 48)

Two iron nails, a possible iron finger-ring and a copper-alloy shank fragment were in the fill of AF128. All are probably residual.

Fig 48.1 SF 122. A(197). Copper-alloy shank fragment, length 21 mm.

Fig 48.2 A(199). Iron ?finger-ring, plain, incomplete, in two fragments, diameter approx. 18 mm.

Fig 48.3 A(198). Two complete small iron nails with round flat head. A) bent shank, length 33 mm. B) neatly clenched shank, length 24 mm, with 17 mm between the underside of the head and the top of the bent shank.

Inhumation AF188 (Fig 58)

A coin for the ferryman's fee was found in association with the jaw of AF188. It is very worn and cannot be closely dated but would have been old when deposited. An iron nail in a very good state of preservation is residual; as noted above, its condition is only seen on nails from pyre debris. Coffin nails were found close to the arm bones and pelvis, outlining the skeletal remains so closely that the coffin seems only just wide enough for the body.

SF 144. A(306), found corroded onto underside of jaw. Copper-alloy 1st-3rd century *as*?, both surfaces worn, severely pitted and illegible. Obverse, outline of a right-facing head; reverse, outline of a standing female(?) figure. Diameter 24 mm; weight 8.82 g.

SF 236. A(288). Complete and well-preserved iron nail with subrectangular flat head, length 50 mm.

A(295). Iron coffin nails A-AR, poorly preserved, heavily encrusted in corrosion products, sand and in some cases mineral-replaced wood. Intact examples measure between about 105 and 120 mm.

Inhumation AF189 (Fig 59)

A small iron fragment was residual in the fill of AF189.

SF 237. A(294). Iron fragment with part of a corrosion bubble, probably from a nail shank. Weight 2 g.

Inhumation HF1 (Fig 64) An iron nail was residual in the fill of HF1.

H(3). Complete iron nail with round convex head, length 37 mm.

Inhumation HF26 (Fig 71)

A cluster of poorly-preserved copper-alloy and iron dress accessories and an iron knife with a wooden(?) handle were found at the head end of this uncoffined female inhumation. Traces of textile on some of the iron fragments are all that survive of a cloth bag or a piece of fabric use to wrap the objects. Dress accessories in some burials at the Butt Road and St John's Abbey late Roman cemeteries in Colchester had also been buried in leather or cloth bags or wrapped in cloth, and in two graves a knife was also deposited with them (*CAR* **9**, 129-30, 205, fig. 2.77, grave 171, fig. 5.8). The dress accessories in HF26 included a copper-alloy finger-ring and two iron rings, at least one of which was threaded over a probable iron armlet fragment, while some copper-alloy wire fragments may be from a distorted penannular brooch or a wire armlet.

Fig71.1 SF 26. H (34). Copper-alloy D-section penannular finger-ring, probably plain, with each terminal tapering to a point. The outer surfaces are badly affected by contact with iron corrosion. Diameter 25 mm, section 3.5 by 2 mm.

Fig71.2 SF 27. H (35). Three fragments of curved and bent copper-alloy circular-section wire, one thinner than the rest; possibly the remains of a broken and distorted penannular brooch and its pin. Length 38 mm, diameter 2 mm; length 25 mm, diameter 2 mm; length 15 mm, diameter 1 mm.

Fig71.3 SF 28/29. H (36/33). Iron knife with a worn straight edge and a straight back that tapers to the point. The tang is slightly offset from both the edge and the back, and retains slight traces of mineral-replaced organic material (?wood) from the handle. Total length 141 mm, blade length 101 mm, maximum width 15 mm.

Fig71.4 SF 30. H (36), B. 1) Iron stud head fragment with traces of mineral-replaced wood on the underside, diameter 18 mm. 2) Iron nail shank fragment, with a small piece of mineral-replaced wood on one side, length 17 mm. 3) Three amorphous iron fragments, one incorporating mineral-replaced wood, another includes a thin ?shank fragment and mineral-replaced textile. 16 by 9 mm, 11 by 10 mm, 11 by 6 mm.

Fig71.5 SF 31. H (36), C. Cluster of fragmented iron objects, all have a slaggy surface appearance. 1) Thin tapering curved armlet(?) fragment with part of a small ring corroded around it (see 2); length of armlet(?) 59 mm, diameter of ring 16 mm. 2) Small ring fragment, probably the remaining part of the ring in 1, diameter 16 mm. 3) Thin shank fragment in two pieces, length 41 mm. 4) Thin shank fragment, probably part of 3, length 15 mm. 5) Four amorphous fragments, probably all originally one piece, two with slight traces of copper alloy and one with mineral-replaced textile.

Fig71.6 SF 32. H (36), D. Fragmented iron objects as SF 31. 1) Thin tapering shank, length 63 mm. 2) Iron ring fragment, in two pieces, with part of a thinner curved shank or slightly larger ring corroded onto it; diameter of ring approx. 26 mm, length of curved shank 18 mm.

Fig71.7 SF 33. H (36), E. Iron ring fragment, probably part of the ring in SF 32, diameter approx. 26 mm.

ANGLO-SAXON INHUMATIONS

Seven inhumations can be dated to the Early Anglo-Saxon period on the basis of the grave goods. The contents of the burials are summarised in Table 18.25.

Burial	Spear	Shield	Buckle	Knife	Beads	Other
AF20	х	х	хх	х	-	firesteel
AF21	х	-	-	-	-	repaired wooden vessel
AF38	х	х	х	х	-	-
AF57	-	-	х	х	x (23)	Roman coin
AF58	-	-	-	х	-	-
AF60	-	-	-	х	-	-
AF159	х	-	-	-	-	-

Table 18.25. Grave goods from the Early Anglo-Saxon inhumations.

At least four of the seven are male burials (AF 20, AF 21, AF38 and AF159), and at least one is female (AF57). No gender can be assigned to AF58 and AF60, both of which were truncated, severely so in the case of AF60. Six of the burials were in the north-west corner of Area A, but AF159 lay some distance away to the east.

The grave goods have been catalogued below using both long-established and more recent classification systems. Where possible, the spears, shield bosses, buckles and beads have also been assigned to the typologies defined in a recent seriation study that has established a chronological framework for 6th and 7th century graves and grave goods, although the buckles are of forms not used in the final seriation (Bayliss *et al.* 2013). Using this framework, the female burial AF57 and the three male weapon burials, AF20, AF38 and AF159, all belong within the second half of the 6th or the early part of the 7th century. The various classifications used and the dating available from Bayliss *et al.* 2013 are summarised in Table 18.26. Dating for the buckles is taken from Marzinzik 2003. Other pertinent dating is given below in the burial catalogue.

Burial	Spearhead	Shield boss	Buckle	Beads	Dating
AF20	Swanton Type C1	Bayliss <i>et al.</i> SB4b1; Dickinson & Härke 1992, Group 6	2 x Marzinzik Typegroup 1.10b-i; Bayliss <i>et al.</i> BU8	-	shield boss, second half of the 6th into the 7th
AF38	Bayliss <i>et al.</i> SP2-a3	Bayliss <i>et al.</i> SB4b1; Dickinson & Härke 1992, Group 6	Marzinzik Type II.20	-	spearhead, second half of the 6th into the 7th; shield boss, second half of the 6th into the 7th; buckle type centres on the 6th
AF57	-	-	Marzinzik's Type II.20	 1) Guido 6ii, 8iv, as 4i; Brugmann 8.2.4/CylRound; Bayliss <i>et al.</i> BE1-CylRound. 2) Guido 3i, 4i, 4iic, 6i; Brugmann 8.2.4/SegGlob; Bayliss <i>et al.</i> BE1-SegGlob. 3) Guido 3iiia; Brugmann 8.3.9/Koch34Bl; Bayliss <i>et al.</i> BE1-Koch34Bl. 4) Guido 8xiv; Brugmann 8.3.9/Koch34Ye; Bayliss <i>et al.</i> BE1-Koch34Ye; Bayliss <i>et al.</i> BE1-Koch34Ye. 	beads, relative chronology, second half of the 6th; buckle type centres on the 6th
AF159	Bavliss <i>et al.</i>	-	-	-	second half of the 6th

Table 18.26. Summary of the dating evidence for the Anglo-Saxon burials.

	SP3-a				into the 7th
--	-------	--	--	--	--------------

Although differing slightly, both shield bosses are of Bayliss *et al.*'s form SB4-b1, which dates from the mid 6th century well into the 7th (2013, 157-9, 334, tables 8.16, 10.1). This makes them broadly contemporary, but a note by Stephanie Spain (*see below*), comparing their forms in detail to developments within the Kentish shield boss assemblage and setting them in the context of other bosses from Colchester, argues for more refined dating. The absence of brooches could be taken to imply that the Area A burials all belong in the 7th century, but very few graves are involved here and comparison with the Hadleigh Road cemetery at Ipswich suggests that there is no reason to exclude a date in the later 6th century (Scull & Bayliss 1999, 86-7).

Knives form an important element of the Area A Anglo-Saxon funerary assemblage, occurring in five out of the seven burials, but they cannot be closely dated. They can be classified by the shape of the back, with four of the five being of the curve-backed Type A (AF20, AF38, AF57, AF60) and one of the straight-backed Type B (AF58; Malim & Hines 1998, 217-18). They can also be subdivided by the length of the blade, with the latter being a significant factor in assessing both gender and age at death (Harke 1989a). No juvenile in Harke's sample contained a blade longer than 106 mm, and no female adult burial contained one longer than 128 mm, with large knives increasingly placed in male weapon-free burials by the 7th century. As all the Area A knives fall into the small blade size-group 1, 45-99 mm, which is well-represented across all age spans (*ibid.*, fig. 2), they provide no information as to the age of the individuals buried on Area A, nor to the gender of AF58 and AF60.

The Area A burials contain object types found across the eastern region and beyond, but on the basis of their grave goods the gendered burials AF20, AF38, AF57 and AF159 might perhaps assumed to be people of some status within their community - social rather than economic status, as none is particularly richly furnished and none contained unusual, precious metal or even copper-alloy artefacts (the denarius in AF57 being classed as an antique curated item rather than one acquired through trade). Weapon burials have been shown to be symbolic of social not warrior status (Härke 1989b), and the three Area A weapon graves can be set in various contexts to demonstrate what that social status might be - by the weapons present, by region and by date. A spear on its own, as in AF159, occurs in 44.4% of undisturbed male inhumations with weapons in England, while the shield and spear combination present in AF20 and AF38 occurs in 26% (Härke 1989b, 52, table 4.3). The eastern region has a high proportion of weapon burials to adult male inhumations and although the number of weapon burials in cemeteries decreased over time, it was still relatively frequent in the 6th to 7th centuries (ibid., figs 4.1, 4.3, tables 4.2, 4.4). The status of AF20 and AF159 was therefore by no means particularly notable or unusual, while that of AF38 was enhanced more by its being centred within a ring ditch than by its weapons. It might be assumed that AF20 and AF159 ranked above inhumations with fewer or no grave goods, but even this might not be certain as a male inhumation within a penannular ring ditch in the Springfield Lyons cemetery near Chelmsford was furnished with only a knife and buckle (Tyler and Major 2005, 180).

From this it can be seen that using grave goods to determine status is more difficult for the Early Anglo-Saxon period than, for example, the Late Iron Age (Pader 1982; Haselgrove 1982). With only one certain Area A female burial, and with bead strings frequently occurring in female inhumations, the comparative status of AF57 is impossible to determine, yet it is nevertheless worth defining the burial by its range of identifiable artefact categories (RIAC) in order to compare it in broad terms to female graves in cemeteries in Cambridgeshire. Using this method AF57 scores only 3, compared to a median score of 5-6 at Edix Hill, where 2 was the lowest score for Phase II, late 6th to 7th century (Malim & Hines 1998, 282, 302-3). In contrast, in the Final Phase cemetery at Water Lane, Melbourn (late 6th to later 7th), the median score was 2, and 0 was the lowest score, although a few burials were well-furnished (Duncan *et al* 2003, table 25).

There is thus no evidence for wealth in the Area A burials, indeed, the absence of copper-alloy objects could be evidence for a specifically metal-poor society. The grave goods define the gender status of these burials, but the weapon burials can be described as standard within the

wider region, perhaps rather less so for their date, and the female burial is similarly undistinguished. Given that only a single female burial was present, its low RIAC score cannot be taken as firm evidence of a 7th- rather than 6th-century date.

Within Colchester itself the Area A grave goods join a very limited assemblage of provenanced Early Anglo-Saxon artefacts (CAR 1, 1-22). There are no strikingly similar parallels in the choice of artefacts on Area A burials and in the Springfield Lyons cemetery that might enable a specific north Essex style to be defined, nor were the grave goods from Springfield Lyons used in Bayliss et al. 2013 to allow close dating links to be established. Nevertheless, in the context of the A1 cemetery, some features from Springfield Lyons are worth noting. First, the orientation of the inhumations was very varied (Tyler and Major 2005, 180-4, figs 4, 7-8, 110-111). Second, a family inhumation group with graves orientated east-west was centred on a male burial within a penannular ring-ditch; not all the graves were furnished and few grave goods were closely datable, but those that were present dated to the early-mid 6th, mid 6th or wider 6th century (ibid., 180, Group 4, table 33). Third, a substantial number of cremations was centred on a double cremation burial within a barrow (*ibid.*, Group 5). Fourth, inhumations with no grave goods but occasionally with some evidence for timber coffins (jointed, not nailed) and shrouds were dated to the late 6th and 7th century (ibid., 183-4, Groups 12-13). In this light it would seem that the western group of burials on Area A are probably a kinship group, and that other burials around AF159 may combine with it to form another. Certainly some unfurnished inhumations from Area A, whatever their orientation, may be Anglo-Saxon rather than Roman, and the presence of AF159 some distance to the east of the main furnished group of burials extends this observation across the full width of the area.

A note on the shield bosses

by Stephanie Spain

The small boss from grave AF20 (Fig 24, SF 47) belongs to Dickinson and Härke's Group 6 and is an example of the less common straight-sided variant identified by Evison as her 'low, straight' sub-type (Dickinson & Härke 1992, 20; Evison 1963, 41). The grave AF38 shield was fitted with a boss of transitional type between Groups 3 and 6 (Fig 31, SF 42), reflecting a development from earlier broad, carinated bosses towards a smaller, lighter uncarinated shape (Dickinson & Härke 1992, 16). It retains the wall height of a Group 3 boss but has the narrower flange and uncarinated shape of Group 6. The small knob-headed rivets would normally occur on the narrower flanges of Group 6 bosses. Both bosses were fitted with strap grips of type la(1), essentially flat strips of iron which flare slightly towards the terminals with a rivet at either end for fastening to the shield board (*ibid*, 24). In addition, both shields were furnished with a set of four flat disc-shaped mounts arranged in pairs to either side of the boss (*ibid*, 27, group a).

At first glance, the grave AF38 boss appears to date about a generation earlier than that from Grave AF20. However, its incongruous small knob-headed rivets suggest a date contemporary with the Group 6 boss from AF20. A regional study of shield bosses from Kent has refined the typology and chronology for Group 3 and transitional Group 3/6 bosses in that county (Spain 2000). Generally speaking, the larger, more carinated Group 3 bosses can be dated to the earlier part of the 6th century, a smaller 'standard' Group 3 type occurs in graves datable to the mid 6th century and the transition from Group 3 to the lighter, uncarinated bosses of group 6 can be placed in the second half of the 6th century. On this basis, the Area A shield bosses belong to the late 6th or early 7th century, a date confirmed by a later and much wider study that included bosses from East Anglia and Essex and in which both the Area A bosses class as form SB4-b1 (Bayliss *et al* 2013, 157-8).

Five other shield bosses from Colchester, some of which are believed to have come from the Mersea Road cemetery, were published prior to Dickinson's shield boss typology becoming available. Two bosses found at 10 Mersea Road belong to Group 3 and 3/6 (*CAR* 1, fig 16, 5 and 4 respectively) and thus date to the sixth century. The Area A shield bosses follow on chronologically from these earlier examples and suggest that graves AF20 and AF38 belong to the next phase at the cemetery. Together the four bosses show a typical progression from larger

group 3 through transitional 3/6 bosses to group 6, spanning a date range from the beginning of the sixth to the early seventh century.

Two further bosses from the Joslin Collection considered likely to be from the Mersea Road cemetery are of quite different types: a Group 2 boss dating to the early sixth century (*CAR* 1, fig.20, 12) and a late 7th or early eighth century sugar-loaf boss discussed in detail by Evison elsewhere (*ibid.*, fig.20, 11; Evison 1963, 65). The final Colchester boss, a Group 3 dating to the middle part of the sixth century, is probably not from the Mersea Road cemetery but is mentioned here for comparative purposes (*CAR* 1, fig. 24, 1) \blacksquare

Catalogue

Inhumation AF20 (Figs 23-5)

Truncated male burial AF20 contained a spear, shield, knife, two buckles representing leather belts or straps, and an iron firesteel. The spear lay on the left side of the body, the top of the head level with the chin, the firesteel had been placed on the chest and may have been in a purse or tucked into the clothing, and the knife was on the left side of the chest or upper left arm. The shield boss is aligned with the chin so that the shield would have covered the torso. Both buckles were on the left side, one not far from the knife and close to a pair of shield studs and the other a little lower. The knife, firesteel/purse and buckles would have been covered by the shield.

The spearhead is of Type C1 with small lanceolate blade (Fig 23.1, SF 54). At 118 mm it is at the lower length range for the form (Swanton 1973, 48-9; Härke 1992, 85-7). It does not fit within the classification system for spearheads in Bayliss *et al.* 2013, being shorter than the range of measurements used in that sample. There is some possibility that it is an arrowhead (Underwood 2001, 29), but it lacks the marked angles of lanceolate arrowheads, and is more likely to have been used on a throwing spear (javelin). The shield was fitted with a conical boss of form SB4-b1 by Bayliss *et al.* (2013, 157-9). It was flanked by two vertically-aligned pairs of large round iron shield studs with copper-alloy washers (Figs 23.3, 23.4, 23.5, 23.6, SF 50-53). Stud SF 53 (Fig 25.6) gives a board thickness of 12mm from the underside of the head to the top of the burred shank and its washer; this may be reduced slightly if there was a leather cover on the front and back of the board (*ibid.*, 51). This places the thickness of the shield board at the top of the 5-12 mm range of most examples from Britain (*ibid.*, fig. 35).

Both iron buckles are of Typegroup I.10b-i with enlarged tongue rest (FIg23.9, 10), SF 55, SF 56; Marzinzik 2003, 30-1), which falls within Bayliss *et al.*'s Type BU8 (2013, 146). The form cannot be very closely dated, and was not used for the final seriation in Bayliss *et al.* 2013, but there are several examples from other mid 6th- to mid 7th-century burials in the region (Marzinzik 2003, 30-1). The buckle closest to the waist would have been fitted to a belt (SF 56), the other, which lay higher up the body (SF 55), was from a belt carrying the knife. The latter may have been deposited loose on top of the chest, but, as the knife lies diagonally across the chest with the tang angled towards the right hand, it may instead have been worn crosswise like a baldric (*ibid.*, 59; Walton Rogers 2007, 125). There is no trace of the handle or of a scabbard on the knife (Fig 23.7, SF 49). Its edge is quite angular, which may have been caused by much sharpening or by post-depositional corrosion.

Some firesteels or strike-a-lights were carried in a purse or attached to one; they are often referred to as purse-mounts. No mineral-replaced textile has survived on the example in this burial (Fig 23.8, SF 48), which has no obvious means of attachment so may have been placed loose on the chest, stored in a purse placed on the chest, or tucked into the clothes (Walton Rogers 2007, 138, 201). It has one terminal missing, probably broken through use before deposition. The surviving terminal is worn through use. A similarly plain firesteel with one end missing came from a male weapon burial in the Morning Thorpe cemetery, Norfolk (Green *et al.* 1987, fig. 100, C).

Fig 23.1 SF 54. A(34). Iron spearhead of Type C1, with short leaf-shaped blade and split socket (Swanton 1973, 48-9). Total length 118 mm, blade length 63 mm, maximum width >18 mm.

Fig 23.2, Fig 24 SF 47. A(31). a) Conical iron shield boss of Bayliss *et al.*'s form SB4-b1 and b) a grip of Dickinson and Härke's type 1A1. The discoid apex of the boss is detached (Bayliss *et al.* 2013, 157-9; Dickinson & Härke 1992, 24). Boss: diameter 123 mm, height >76 mm. Grip, broken: 12-18 mm wide, length >105 mm.

Fig 23.3, Fig 25 SF 50. A(35), right side, top. Iron shield stud with mineral-replaced wood on the shank and traces of the copper-alloy washer, diameter 35 mm, length 20 mm.

Fig 23.4, Fig 25 SF 53. A(36), right side, bottom. Iron shield stud with mineral-replaced wood on the shank and part of the copper-alloy washer, diameter 35 mm, length 20 mm.

Fig 23.5, Fig 25, SF 51. A(37), left side, top. Iron shield stud, diameter 35 mm, and a stud shank with mineral-replaced wood, length 12 mm.

Fig 23.6, Fig 25 SF 52. A(38), left side, bottom. Iron shield stud, shank missing, diameter 37 mm.

Fig 23.7 SF 49. A(33). Iron knife with gently curving back and a worn edge that rises to the point. The general profile of the edge is angular, probably caused by much sharpening or by damage close to the tang. Total length 120 mm, blade length 85 mm, maximum width 17 mm.

Fig 23.8, SF 48. A(32). Iron purse mount/strike-a-light, with one end missing. For most of its length it is rectangular in section, tapering slightly towards a thinner end that is triangular in section, length 93 mm, width 13 mm.

Fig 23.9, SF 55. A(39). Small iron D-shaped buckle of Marzinzik's Typegroup I.10b-i, with the outer part of the loop markedly thicker than the axis bar for the tongue (Marzinzik 2003, 30-1). Length 19 mm, width 23 mm.

Fig 23.10, SF 56. A(40). Iron buckle loop of Marzinzik's Typegroup 1.10b-i, in fragments. Length approx. 16 mm, width 25 mm.

Inhumation AF21 (Fig 26)

This disturbed male burial contained the socket from a spearhead (SF 77) and a staple from a repaired wooden vessel (Fig 26.1, SF 78). Similar staples of both copper alloy and iron have been found in Early Anglo-Saxon graves in Cambridgeshire, in one case from a small vessel of maple deposited inside a bucket (Malim and Hines 1998, 52, 73-4, fig. 3.38, fig. 3.55; Duncan *et al.* 2003, fig. 12, SG74, 3).

Fig 26.1 SF 78. A(63). Copper-alloy rectangular staple with pointed terminals. Length 18 mm, width 3 mm, height 7 mm.

Fig 26.2 SF 77. A(59). Fragment of a split socket with solid neck from a spearhead, length 73 mm. There are traces of mineral-replaced wood in the socket.

Inhumation AF38 (Figs 30-32)

Male burial AF38 contained a spear, shield, buckle and knife. The spear lay on the right side of the body, the point level with the top of the head, the buckle lay at the centre of the waist and would have fastened a belt, the knife was at waist level on the left side. The shield lay over the upper body, with the boss over the left breast. It was not aligned as if in use, as one pair of shield studs flanking the boss lay on the right side of the waist and another pair by the left shoulder or beyond it.

The spear is of Bayliss *et al.*'s SP2-a3 and the shield was fitted with a boss of their Type SB4-b1 (2013, 157-9, 175). Flanking the boss were two pairs of vertically-aligned shield studs, smaller than those on the shield in AF20. The studs were in poor condition, but surviving wood fragments give a minimum board thickness of 6 mm.

The buckle is of Marzinzik's Type II.20 with large rivets (2003, 47), which falls into Bayliss *et al.*'s type BU9, which was not used in the final seriation (2013, 146). The type centres on the 6th century and is also present in female burial AF57 (Marzinzik, 2003, 47). Eastern region finds

include two from Edix Hill (Barrington A) in Cambridgeshire, three from Morning Thorpe in Norfolk, one from Little Eriswell in Suffolk, and in Essex two from Great Chesterford and two from Mucking (*ibid.*, 213-15). Several of these pieces were found at the waist of well-preserved skeletons and would have secured belts or girdles (Malim and Hines 1998, 59, fig. 3.73, burial 36, 7, fig. 3.71, burial 19B, 80.2; Evison 1994, fig. 72, burial 18, 5, fig. 75, burial 51, 2). There is mineral-replaced wood and also possibly horn on the tang of the knife, and the outline of a scabbard is visible around its blade. Scabbards were usually of leather, but this example appears to have been of horn, or perhaps of leather lined with horn (Walton Rogers 2007, 138, 227).

Fig 30.1, SF 43. A(65). Iron spearhead of form SP2-a3 (Bayliss *et al.* 2013, 175), with marked angles at the base of the blade and a short solid neck between the blade and the split socket; point damaged, section undetermined. There is mineral-replaced wood in the socket. Total length 247 mm, blade length 147 mm, maximum width 28 mm.

Figs 30.2, 31, SF 42. A(66). Iron shield boss of Bayliss *et al.*'s form SB4-b1, the small discoid apex is detached (2013, 157-9). The flange is narrow and has small knob-headed rivets. The type 1a grip is straight-sided and missing its terminals, but with some slight increase in width towards the broken ends they may have been expanded like those of the grip in burial AF20 (Dickinson & Härke 1992, 24). Boss: diameter approx. 130 mm, height approx.70 mm. Grip: length 85 mm, width 15 mm.

Fig 30.3-4, 32.3-4, SF 46. A (68). Two iron shield studs with fragments of the mineralreplaced wooden shield board on the underside. Diameter of studs 23 mm, maximum surviving length 11 mm.

Fig 30.5-6, 32.5-6, SF 45i. A(69). Two iron shield studs with fragments of the mineralreplaced wooden shield board attached. Diameter of studs 22 mm; wood fragments 46 by 18 mm, 35 by 27 mm, 33 by 22 mm.

Fig 30.7, SF 45ii. A(69). Iron oval buckle of Type II.20 with a folded rectangular iron strapplate secured by two copper-alloy rivets with large round head (Marzinzik 2003, 47). The buckle loop has a slight central lip to seat the end of the tongue. There are two layers of mineral-replaced textile on the underside of the plate. Length 38 mm, maximum width of loop 20 mm, width of strap-plate 15 mm, diameter of rivet heads 7 mm.

Fig 30.8, SF 44. A(67). Iron knife with gently curved back and a straight edge rising to the blunt point. There are traces of mineral-replaced organic material (probably wood and horn) on the tang, and horn or leather from a scabbard at the top of the blade. The clear outline of a scabbard is visible on the X-ray, but is lacking the lower end. Total length 97 mm, blade length 60 mm, maximum width 15 mm.

Inhumation AF57 (Figs 34-5)

In this female burial a Roman silver coin lay near the left hip, a bead string found close to the back of the head would have been worn around the neck, and there was an iron buckle and a knife at the waist.

The coin is a *denarius* of Septimius Severus, minted in AD 204 (SF 76). It is little worn and the reverse of the sky-goddess Dea Celestis riding on a lion is clear. There are numerous examples of Roman coins in Anglo-Saxon burials in England, mostly associated with adult females (White 1988, 62-101). The *denarius* in AF57 could have been placed in the left hand or may have been stored in a bag attached to the girdle, valued for both its material and reverse image (Meaney 1981, 220). A box containing a silver *denarius* of Elagabalus (AD 218-22) and other treasured items was deposited in a late 6th-to early 7th century female burial at Alwalton, Cambridgeshire, while the Roman use of the lion as a protective image in a funerary context continued into the post-Roman period (Crummy 2007, 272; Crummy 2010, 57, 72). A coin of Philip I used as an amulet in a burial at Béruges (Vienne) was pierced so that the emperor's head hung upside down but the reverse a walking lion, was upright (Bertrand 2003, 64).

Given the the absence of brooches to secure the bead string to the shoulders of a garment, it would have been worn around the neck (Walton Rogers 2007, 193, fig. 5.49, top left). It consisted of 23 glass beads, which have been catalogued according to the colour/form groups defined by

Guido (1999) and are summarised in Table 18.26 (Fig 35.2 SF 57). The range of colours is limited to yellow, blue, terracotta (red: Brugmann 2004, 24) and blue-white (originally white). Most beads are monochrome but one blue-white bead has crossed waves from which the glass is now missing, two terracotta beads have loosely-applied white crossed waves, and two decayed beads may also have had crossed waves.

In terms of other classification systems, the blue-white bead with crossed waves and the terracotta or red beads with crossed waves belong to Koch's series 34b and Brugmann's type 8.3.9/Koch34Bl and 8.3.9/Koch 34Ye (Koch 1997; Brugmann 2004, 81). The monochrome round cylindrical beads and segmented (double) globular beads are of Brugmann's type 8.2.4/CylRound and 8.2.4/SegGlob (*ibid.*, 75). It should be noted that most or all of the single globular beads in AF57 were probably originally part of longer segmented beads. All these types fall into Brugmann's bead combination group B, with most of them in the later subdivison B2 (*ibid.*, 44-58, table 3). Under Bayliss *et al.*'s classification the bichrome blue-white bead with crossed waves is BE1-Koch34BI; the monochrome round cylindrical beads are BE1-CylRound; and the segmented globular beads are BE1-SegGlob (2013, 203-4, 207).

Group	Form	Colour	Number 4	Length (mm) 23
3i	globular, single and double	opaque blue-white		
3iiia	globular	opaque blue-white with crossed waves	1	5
4i	globular	opaque yellow	8	25
as 4i	round cylinder	opaque yellow	1	6
4iic	globular, double	opaque yellow	1	7.5
6i	globular	opaque blue	1	5
6ii	round cylinder	opaque blue	3	18
8iv	round cylinder	opaque terracotta	1	5
8xiv	globular, single and double	opaque terracotta with white crossed waves	2	15
-	globular	decayed	1	3

 Table 18.26. Summary of glass beads in AF57 using Guido's colour/form classification (1999).

The buckle would have secured a girdle and had mineral-replaced textile adhering to it (Fig 34.3, SF 58). The knife lay slightly below the level of the buckle and had probably been in a scabbard suspended from the girdle (Fig. 34.4, SF 59). The form of the buckle is Type II.20 with large rivets, an example of which was also found in male weapon burial AF38 (Marzinzik 2003, 47).

Fig 35 SF 76. A(92). *Denarius* of Septimius Severus, *RIC* 266, AD 204. Obverse, SEVERUS PIVS AVG, laureate head right; reverse, INDVLGENTIA AVG, IN CARTH in exergue, Dea Caelestis holding thunderbolt and sceptre riding right on lion, above water flowing left from rocks. Diameter 18 mm; weight 2.11 g.

Fig 35.1-3 SF 57. A(93). Twenty-three glass beads. 1-8) Eight opaque yellow, Group 4i: 1) globular, diameter 6 mm, length 3 mm; 2-5) globular, diameter 5 mm, length 3 mm. 6) globular, diameter 4 mm, length 3 mm. 7) barrel-shaped, diameter 5 mm, length 5 mm. 8) annular/globular, in two fragments, diameter mm, length 2 mm. 9) opaque yellow circular-section cylinder, as Group 4i, diameter 5 mm, length 6 mm. 10) opaque yellow double globular, Group 4iic, diameter 5 mm, length 7.5 mm. 11) opaque blue globular, Group 6i, diameter 7 mm, length 5 mm. 12-14) three opaque blue circular-section short cylinder, Group 6ii: diameter 7 mm, length 7 mm, diameter 7.5 mm, length 5 mm, diameter 5 mm, length 6 mm. 15-18) blue-white globular, two single, two double, Group 3i, beads 15, 17 and 18 have a marked spiral form from the method of manufacture, bead 16 is very decayed and may instead be a Group 3iiia bead with missing crossed waves: single(15), diameter 6 mm, length 3 mm, single (16), decayed, in two fragments, diameter 7 mm, length 5 mm, double (17), diameter 7 mm, length 8 mm, double (18), diameter 7 mm, length 7 mm. 19) opaque blue-

white globular with indents from crossed waves (no dots), the glass used for the waves is now missing but was usually light blue or turquoise, Group 3iiia, diameter 9 mm, length 5 mm. 20) opaque terracotta circular-section cylinder, Group 8iv, diameter 8 mm, length 5 mm. 21-22) opaque terracotta globular with loosely applied white crossed waves, Group 8xiv, one single, one double: single (21), diameter 8 mm, length 5 mm, double (22), diameter 8 mm, length 10 mm. 23) small, surface very decayed, probably opaque terracotta with crossed yellow waves but may be plain yellow, diameter 4 mm, length 3 mm.

Fig 34.3 SF 58. A(95). Iron D-shaped buckle of Type II.20 with a folded rectangular iron strap-plate secured by a copper-alloy rivet with large round head (Marzinzik 2003, 47). There may be mineral-replaced textile on the underside of the plate. Length 39 mm, maximum width of loop 27 mm, width of strap-plate 15 mm, diameter of rivet head 10 mm.

Fig 34.4 SF 59. A(94). Iron knife with the back rising at an angle from the tang, then curving gradually to the point. The edge slopes gently outwards from the tang and is straight for most of its length before rising slightly to the point. Total length 117 mm, blade length 75 mm, maximum width 12 mm.

Inhumation AF58 (Fig 36)

In AF58 an iron knife lay above the pelvis of the skeleton but no buckle from a belt or girdle was found (Fig 36.1, SF 132). A small fragment of iron found close to the left leg may be residual.

Fig 36.1 SF 132. A(74). Iron knife, missing the point and most of the tang. The edge and back are straight and parallel for most of the length of the blade, with the edge rising towards the point. Total length >108 mm, blade length > 89 mm, maximum width 16 mm.

Fig 36.2 SF 133. A(77). Small iron rectangular-section fragment, length 10 mm, width 4 mm.

Inhumation AF65 (Fig 38)

The knife from this truncated burial suggests that it is of Anglo-Saxon date.

Fig 38.1 SF 60. A(163). Iron knife with curved back and a straight edge that rises slightly to the point. The tang has traces of mineral-replaced organic material, probably wood, from the handle. Total length 129 mm, blade length 90 mm, maximum width 15 mm.

Inhumation AF159 (Fig 55)

AF159 is a male burial furnished with a spear, the head of which is Bayliss *et al.*'s form SP3-a (2013, 179).

Fig 55.1 SF 131. A(253). Iron spearhead of form SP3-a, with split socket, a solid neck between the socket and the blade, very slight shoulders, and a long parallel-sided blade (Bayliss et al. 2013, 179). The section is lozenge-shaped. The tip is separate. Total length approx. 300 mm, blade length 202 mm, width 36 mm.

RING-DITCHES

The fills of the ring-ditches contained only Roman objects, apart from an intrusive modern item in AF213.

Ring ditch AF3

The fill of AF3 contained a coin of Gratian, AD 367-75 (SF 75). Although late Roman coins are common in dark earth inside the town walls and in the Butt Road cemetery (*CAR* 4, 5-7), only SF 75 and SF 94 from area B have been found on this site. Modern building works may largely account for this, but there may also have been a genuine low level of coin loss in the area that makes it difficult to assess if SF 75 is residual or a deliberate deposit.

SF 75. A(6). Copper-alloy AE4 issue of Gratian with damaged edge, as CK 529, AD 367-75. Obverse -/ATIANVS AVGG/-, bust right; reverse GLORIA NOVI SAECVLI, Arles mint, no field marks, mintmark missing. Diameter 16 mm; weight 1.67 g.

Ring ditch AF176

Section 2 of AF176 contained a single nail shank fragment, which from its condition is residual pyre debris.

A(283), sx 2. Iron nail shank fragment, length 35 mm.

Ring ditch AF213

A modern fitting, probably of military origin, was intrusive in the fill of AF 213. A smaller example came from F172 in evaluation trench 3.

SF 194. A(315). Dome-headed iron cap or ferrule fragment with copper-alloy plating on the internal surface, which is also lined with wood. A shank, now in fragments, passes through the object. Diameter 34 mm, length 33 mm, surviving length of shank 64 mm.

Ring ditch KF9/ KF16

A tile counter from KF9 is of Roman date but cannot be more closely dated.

SF 130. K(14), sx 1. Tile counter with roughly-shaped circumference and a short part of an original straight edge. Diameter 82 mm, 27 mm thick.

A fragment of decorative stone veneer from KF16 is very weathered. It is probably debris from a Roman funerary monument or shrine in the vicinity.

SF 220. K(220). Fragment of very weathered gastropodic limestone veneer, probably Purbeck marble. 140 by 87 mm, 25 mm thick.

OTHER CONTEXTS

The remaining small finds are catalogued below by area, with the objects from the evaluation trenches grouped together.

Area A

Many of these objects came from the ditch AF117 and AF143. Datable objects from AF117 are a post-medieval stamped fitting, a medieval or post-medieval window came fragment and a modern wire nail. A silver long-cross halfpenny from AF143 dates to 1307-27, but the fill also produced a piece of later medieval or post-medieval lead shot and a window came fragment. Nails form the majority of the other items, but part of a lead cloth seal from pit F158 (SF 135) is matched by a say seal from Colchester's Dutch community dated to 1571 (Egan 1995, 29-30, fig. 12, 25).

SF 143. A(247). Well-preserved iron nail with oval flat head, tip of shank only missing, length 21 mm.

SF 90. A(54) F40, posthole fill. Complete iron nail with subrectangular head, length 57 mm.

SF 91. A(55) F43, posthole fill. Complete well-preserved iron nail with round flat head and sharply bent shank turned through two right angles. Length (bent) 20 mm, with 32 mm of shank beyond the first angle.

A(71) F55, post-hole. Two iron nail shank fragments, lengths 34 and 23 mm. SF 95.

A(104) F74, foundation. Lead shot, diameter 18 mm; weight 34 g.

A(188) F115, ditch fill. Iron nail and nail shank fragment, lengths 71 and 70 mm.

SF 121. A(192) F117, ditch fill. Thin copper-alloy annular fitting with irregular circumference,. There is a worn stamp close to the inner edge on one face, the relief image is worn and may be either a floret or a crowned head. Maximum diameter 30 mm.

SF 139. A(256) F117, ditch fill. Lead window came fragment, length 30 mm.

SF 238. A(244) F117, ditch fill. Lead-working waste puddle. 51 by 26 mm.

SF 242. A(191) F117, ditch fill. Mudstone (?degraded shale) fragment with one original worked surface. 19 by 8 mm.

A(191) F117, ditch fill. Three fragments iron sheet. 45 by 43 mm, 22 by 15 mm, 26 by 17 mm.

A(243) F117, ditch fill. Iron wire nail and nail shank fragment, lengths 52 and 57 mm.

A(255) F117, ditch fill. Four iron nail shank fragments, lengths 47, 38, 29 and 28 mm.

A(205) F134, linear feature. Iron nail shank fragment, length 26 mm.

SF 119. A(218) F143, ditch fill. Silver long-cross halfpenny of Edward II, 1307-27, North 1960, 1069. Obverse, -/ARDVS REX ANG/-, portrait worn; reverse, LONDON CIVITAS, long cross, three pellets in each quarter. Diameter 16 mm; weight 0.57 g.

SF 125. A(215) F143, ditch fill. Fragment of copper-alloy sheet with one original slightly curved edge, 30 by 20 mm.

SF 120. A(216) F143, ditch fill. Complete copper-alloy wire dress pin with globular wound wire head, bent in half, length 11 mm.

SF 152. A(297) F143, ditch fill. Complete copper-alloy wire dress pin with globular wound wire head, length 25 mm.

SF 127. A(214) F143, ditch fill. Folded lead offcut strip, 48 by 45 mm.

SF 123. A(217) F143, ditch fill. Lead shot, diameter 10 mm; weight 5.3 g.

SF 124. A(219) F143, ditch fill. Lead window came fragment, length 29 mm.

SF 197. A(212) F143, ditch fill. Iron strap fragment, length 48 mm, width 28 mm.

SF 198. A(212) F143, ditch fill. Clenched iron shank, probably from a nail. Length (bent) 41 mm.

A(212) F143, ditch fill. Four nail shank fragments, lengths 48, 45, 38, 37 mm.

A(220) F143, ditch fill. One iron nail and four nail shank fragments, lengths 47, 28, 27 x 2 and 23 mm.

A(235) F143, ditch fill. Iron nail with round convex head and nail shank fragment, lengths 42 and 26 mm.

A(296) F143, ditch fill. Four iron nails and five nail shank fragments, lengths 61, 57, 52, 36, 75, 47, 45, 37 and 36 mm.

Fig 83.1 SF 134. AF157 (246). Scorched fragment of a pipeclay figurine, convex in section and with a diagonal groove curving across it. Length 21 mm, width 14 mm. The figurine fragment is too small and lacking in detail to be identified with certainty, but the incised groove may be a rudimentary attempt to depict a fold in the drapery wrapped around the left wrist of a Venus (Rouvier-Jeanlin 1972, 92). Alternative possibilities, although less likely, are that the fragment comes from the back of a bull, with the groove representing a fold of skin, or that it is part of a couch or bed (von Gonzenbach 1995, Taf. 151, 3; Rouvier-Jeanlin 1972, 235-6).

SF 135. A(271) F158, pit fill. Plain disc with holes for two rivets from a two-piece lead cloth seal, part of the connecting strip folded flat against it. Diameter 29 mm. A textile imprint of about 25 warp threads per 10 mm on one face matches that of a Colchester Dutch community say seal of the same form and dated 1571 in the British Museum (Egan 1995, 29-30, fig. 12, 25).

SF 142. A(269) F171, pit fill. Small fragment of copper-alloy sheet, possibly part of a stud head. 11 by 5 mm.

A(268) F171, pit fill. Iron nail shank fragment, length 38 mm.

A(292) F171, pit fill. Three iron nails, lengths 41, 39 and 38 mm.

SF 163. A(321) F199, foundation. Complete well-preserved iron nail with subrectangular flat head, length 52 mm.

SF 89. A(8), unstratified. Copper-alloy finger-ring fragment, the hoop widens towards the bezel, which consists of a round deep cup missing its setting. Diameter 19 mm.

Area B

Apart from a 4th century coin residual in the fill of quarry pit F3, the objects from Area B are all late post-medieval to modern in date.

SF 94. B (12) F3, fill of quarry pit. Worn AE4 issue of Constans with damaged edge, ?copy. Obverse, -/S PF AVG; reverse legend illegible, two victories (VICTORIAE DD AVGGQ NN), AD 341-6(+). Diameter 13 mm; weight 1.2 g.

SF 36. B (6) F3, fill of quarry pit. Hollow hemispherical copper-alloy fitting with notched sides. 38 by 19 by 17 mm,Post-medieval or modern.

SF 37. B (4) F3, fill of quarry pit. Lead tie-nail with bent rectangular head and shank bent double, length (bent) 25 mm.

SF 38. B (4) F3, fill of quarry pit. Lead window came fragment, length 54 mm.

SF 39. B (4) F3, fill of quarry pit. Four fragments of lead-working waste. Total weight 41.5 g.

SF 40. B (5) L3, natural sand. Copper-alloy rectangular double buckle with rectangular tag on one side; the tongue is missing. Length 34 mm, width 25 mm, width with tag 32 mm. Late post-medieval to modern.

B (7) L5, fill of quarry pit. Complete iron nail with round flat head and shank fragment, lengths 41 and 31 mm.

SF 103. B (13), unstratified. Composite two-hole button with traces of ?leather on the underside. Diameter 24 mm. Late post-medieval to modern.

Area C

The fill of ditch F4 contained a post-medieval coin.

SF 41. C (2) F4, ditch fill. Very worn copper-alloy coin with only the outline of a left-facing bust visible; ?George II halfpenny. Diameter 28 mm; weight 8.1 g.

C (3) F4, ditch fill. Iron ?nail shank fragment, length 39 mm.

Area E

A corroded mass of late post-medieval or modern material came from the fill of service trench F7.

SF 110. E (2) F7, fill of service trench. Corroded and broken mass of iron and copper-alloy, including a small dress pin with globular wound wire head (length 22 mm), and part of a ring or eyelet. Total weight 30 g.

Area F

The material from Area F ranges in date from Roman to modern. A fragmented of weathered stone veneer from ditch F7 is probably Roman, and a late Roman needle came from pit F45, along with a medieval or later wire dress pin.

SF 16. F (21) F45, pit fill. Complete Type 3 copper-alloy needle with bent shank (*CAR* 2, 67). Length (bent) 111 mm.

SF 15. F (22) F45, pit fill. Copper-alloy wire dress pin with globular wound wire head, in two fragments, length 17 mm.

SF 116. F (37) F1, ditch fill. Copper-alloy polygonal-section ?curtain ring, diameter 27 mm.

SF 118. F (52) F7, ditch fill. Fragment of very weathered Purbeck marble veneer, with two contiguous original edges set at right angles. 116 by 73 mm, width 39 mm.

SF 112. F (7) F8, ditch fill. Iron nail missing most of the shank, length 38 mm, and an iron nail head, diameter 23 mm.

F (7) F8, ditch fill. Two iron nail shank fragments, lengths 46 and 20 mm.

F (34) F45, pit fill. Iron ?nail or shank fragment, very corroded, length 40 mm.

SF 22. F (53) F80, gully fill. Iron nail with round flat head, length 71 mm.

SF 17. F (2), unstratified. Thin gasket fragment or heel strengthener?, maximum diameter 82 mm.

Area J

Apart from unstratified modern objects and a piece of weathered stone veneer and some iron nails (Table 18.27) from dyke JF02, the majority of the area J small finds came from the fill of the Hyderabad Sector of the Berechurch dyke ditch. They include some hobnails from nailed leather footwear and part of a set of small toilet instruments (Fig 83.2, SF 20). The tweezers and a damaged toilet spoon that survive from this set are plain and cannot be closely dated, although they are most likely to belong to the main period when such sets were popular, from the mid 1st to mid 2nd century AD (Eckardt and Crummy 2008, 62-5, 167-9). A coin hoard from the ditch is separately described and discussed.

SF 115. J(10) F2, ditch fill. Weathered fragment of shelly limestone veneer, probably Purbeck burr from the Dorset beds. 67 by 45 mm, 20 mm thick.

SF 19. J(1) L4, dyke ditch fill. Copper-alloy ring with lozenge-shaped section. Diameter 21 mm, section 2 by 2 mm.

SF 18. J(2) L4, dyke ditch fill. Fragment of thin copper-alloy sheet with a line of small repoussé bosses inside a slightly curved edge. 22 by 11 mm.

SF 109. J(7) L4, dyke ditch fill. Slightly tapering iron loop-hinge fragment with a nail-hole for attachment set close to the eyed terminal. The eye was formed by bending round an extension from one edge of the bar and soldering it to the other edge. Length 117 mm, width 22 mm.

J(19) L4, dyke ditch fill. Iron hobnail, length 20 mm.

Fig 83.2 SF 20. J(3) L5, dyke ditch fill. Part of a small copper-alloy toilet set composed of: complete tweezers with plain flared blades, length 46 mm; a toilet spoon with flat straight-sided shaft but missing its scoop, length 41 mm; and a damaged bar-and-shackle suspension loop, with the shackle made from a strip of flat copper-alloy sheet, height 11 mm, width 2 mm and traces of the iron riveted bar remaining in both sides of the shackle and in the pierced top of the spoon.

Fig 83.3 J(6) JL5 Crucible fragment

SF 23. J(5) L5, dyke ditch fill. Biconical lead weight with flat top and base. Diameter 16 mm, height 12 mm; weight 15.8 g.

SF 24. J(23) L5, dyke ditch fill. Fragment of a puddingstone rotary quern with worn grinding surface (?upper stone). 81 by 55 mm, height 70 mm.

SF 243. J(27) L5, dyke ditch fill. Fragment of grey ware spindlewhorl, slightly convex and with the inner surface flaked away. The spindle hole is well worn and figure-of-eight-shaped. Diameter 36 mm, 5 mm thick; minimum diameter of spindle hole 4.5 mm.

SF 113. J(27) L5, dyke ditch fill. Fragment of lightly fired clay with one flat and one concave surface; probably from a daub structure, such as the roof of an oven. Weight 91g.

SF 25. J(29) L5, dyke ditch fill. Long-armed iron joiner's dog with both arms clenched, length (bent) 74 mm, width 32 mm.

SF 114. J(32) L5, dyke ditch fill. Five amorphous fragments of carbonised organic material, including probable grass stalks, and three fragments with smooth surfaces, two of which may be coarse pottery. Total weight 25 g.

SF 111. J (52) L16, dyke ditch fill. Twelve iron hobnails, maximum length 18 mm.

SF 105. J(56) L17, dyke ditch fill. Iron rectangular-section bar, in two pieces, length 66 mm, section 13 by 5 mm.

SF 104. J(57) L17, dyke ditch fill. Iron nail, missing most of the head and clenched high up on the shank, length (bent) 15 mm.

Fig 83.3 SF 245. J(6) L5, dyke fill, small rim section from a small, thick-walled pot, possibly part of a crucible, buff surfaces with grey sandy fabric core, wiped interior, slightly rough, pitted exterior

SF 34. J(41), unstratified. Copper-alloy composite military button with rear attachment loop. The top has a repoussé design of the royal coat of arms. Diameter 25 mm.

SF 35. J(42), unstratified. Copper-alloy rivet. Diameter 8 mm, length 7 mm.

SF 106. J(113), unstratified. Copper-alloy bullet case fragment, length 15 mm, diameter 5 mm.

Find and context nos	Context description	Description	Length (mm)
J7 L4	dyke ditch fill	complete, round flat head	50
J21 L5	dyke ditch fill	round flat head	42
J21 L5	dyke ditch fill	2 with round flat head; shank fragment	51, 46; 60
J45 L14	dyke ditch fill	round convex head	46
J46 L14	dyke ditch fill	shank fragment	37
J10 F2	ditch fill	round flat head	35
J39 F2	ditch fill	shank fragment	55
J40 F2	ditch fill	2 nails, 1 shank fragment	96, 53, 53
J 6	-	round flat head	43

Table 18.27 Iron nails from Area J.

Area K

A sheet lead offcut from ?pit F4 and an iron nail from ditch F8 may be Roman. The other objects are modern.

SF 129. K(5) F4, ?pit fill. Lead sheet offcut, 32 by 15 mm.

K(11) F8, ditch fill. Iron nail, length 43 mm.

SF 128. K(1), unstratified. Copper-alloy curtain ring, diameter 33 mm.

K(13), unstratified. Two iron nails, one of wire form, lengths 65 and 64 mm.

Evaluation Trenches

Most of the material from the evaluation trenches is modern. While some scraps of metalwork may be of some antiquity, the only certain early items all come from the southern part of the site: fragments of lava rotary querns from ditch F43 in Trench 34 and pit F97 in Trench 61, a fragment of weathered stone veneer also from pit F97, and a copper-alloy furniture nail from linear feature F66 in Trench 50. The veneer and nail are Roman and the quern fragments are probably of the same date, although the trade in these items was re-established in the Middle Saxon period and continued throughout the medieval period, possibly into the early post-medieval period.

SF 3. Trench 3, (106) F172, pit fill. Iron cap with spike on the top wood filling the interior, diameter 25 mm, length 13 mm, length with spike 23 mm.

SF 4. Trench 3, (107) F172, pit fill. Iron knife with slightly curved tang or integral handle. A narrow ?chisel with a short tang is partly attached to it by corrosion. The tang of the chisel is fixed at an angle to the lower part of the blade. Length of knife 165 mm; length of ?chisel 121 mm.

SF 5. Trench 23, (27) F29, pit fill. RAOC (Royal Army Ordnance Corps) copper-alloy plated iron openwork shoulder title, missing both attachment loops. Length 47 mm, width 18 mm.

SF 1. Trench 24, (9) F16, post-hole fill. Small two-hole copper-alloy button with concave centre and somethread remaining in the holes, diameter 12 mm.

SF 7. Trench 24, (4) F10, post-hole fill. Iron strap fragment, length 69 mm, width 23 mm.

SF 13. Trench 30, (81) F128, ditch fill. Part of the base of a tin can, with a small part of the wall, diameter 52 mm, height 13 mm.

SF 6. Trench 32, (93) F147, linear feature. Part of a penannular or annular iron fitting, diameter 88 mm.

SF 14. Trench 34, (32) F38, pit fill. Iron bolt fragment, length 45 mm.

SF 12. Trench 34, (36) F43, ditch fill. Fifteen small weathered fragments from a Mayen lava rotary quern; only one piece has a possible original surface. Largest fragment 48 by 32 by 31 mm; total weight 268 g.

SF 8. Trench 37, (16) F25/26, linear feature. Weathered fragment of shale, with a small part of an original surface. 80 by 55 mm, 24 mm thick.

SF 9. Trench 40, (44) F63, pit fill. Two slate pencil fragments, one with tip, lengths 24 and 35 mm.

SF 2. Trench 50, (47) F66, linear feature. Copper-alloy furniture nail with globular head, length 23 mm.

SF 10. Trench 61, (59) F97, pit fill. Fragment of weathered Purbeck marble veneer, with one original edge, 43 by 33 mm, 18 mm thick.

SF 11. Trench 61, (61) F97, pit fill. Rim fragment from the lower-stone of a Mayen lava rotary quern, with worn grinding surface and rough underside. 88 by 87 mm, 29 mm thick.

18.8 Animal Bone

by Adam Wightman

Introduction

There were 422 bone fragments (weighing 4548g) from the evaluation and subsequent excavation. The bone was hand-collected from 32 archaeological contexts ranging in date from the Late Iron Age to the 20th century. The overall level of bone preservation was moderate to poor.

Methodology

All of the bone was examined to determine range of species and elements present. Species identifications were made using the author's modern comparative collections. All identifiable elements were recorded. However, certain elements were not identified to exact taxon but rather to the level of unidentified small, medium or large taxon. These comprise carpals, tarsals (apart from the astragalus and calcaneus), cranial fragments (except for the zygomatic and occipital), ribs and cervical, thoracic and lumbar vertebrae. Fragments of unidentified large taxa derive primarily from cattle (*Bos sp.*) although may also include horse (*Equus sp.*), and larger deer species. Fragments recorded as medium-sized taxon will predominantly be from sheep (*Ovis sp.*) and pig (*Sus sp.*), although goats (*Capra sp.*), dog (*Canis familiaris*) and smaller deer species (*Cervus sp.*) may also be represented. If it was not possible to determine the element from which a fragment originated it was noted whether the fragment was from the appendicular skeleton (limbs) or the axial skeleton (vertebrae, ribs, etc, including cranial skeleton).

Each bone was inspected to determine if bone-, horn- or antler-working was present in the assemblage. Evidence of butchering and any indications of skinning, horn-working and other modifications were recorded. When available the fusion state of identifiable bones was also recorded and ages were assessed following Silver (1969). A record was made of any other relevant information such as pathologies. Counts and weights were taken and recorded for each context. The side of the body from which the bones were derived was also noted. Measurements were not taken for the bones as there would have been too little data for any meaningful interpretation. Bones of sheep and goats were recorded as Ovis (sheep species) based on the greater frequency of this species in these climes, but diagnostic metapodials, horn cores and deciduous fourth premolars (DPM4) were distinguished between the two species following the criteria of Boessneck (1969). The completeness and parts represented for each specimen were noted using Serjeantson's (1996) eight-zone method of recording (Z1-Z8 in Table 1). Only fragments that accounted for at least 50% of a single zone were recorded. In this instance, the zone was not noted for elements that are not identified to exact taxon (i.e. ribs, vertebrae etc.). Recently broken bones were joined where possible and have been counted as single fragments. Due to the poor bone preservation and small assemblage size, an examination of the nature of fracture patterns was not undertaken on this assemblage.

The analysis was carried out following a modified version of guidelines by English Heritage (Davis, 1992) and also with reference to Cohen & Serjeantson 1996; Hillson 1986 and Payne 1987. A catalogue of the faunal remains is included in the site archive.

The assemblage

The level of bone preservation in this faunal remains assemblage can be described as moderate to poor. Most of the bone is relatively solid in structure but erosion to the cortical surface of the bone is commonplace. This suggests that the bones were either sub-aerially exposed prior to deposition or, more likely, that acidity in the soil has caused post-depositional erosion. Further evidence that the post-depositional conditions were not ideal for bone preservation comes from the high frequency of teeth and burnt bone fragments (as these survive better than other bones) and the absence of the smaller skeletal elements such as carpals, tarsal and phalanges.

82% of the bone recovered was from eleven contexts associated with the Late Iron Age Berechurch Dyke in Area J of the excavation phase. Very little animal bone was recovered from the excavated archaeological contexts in the other ten excavation areas or in the evaluation trenches. A digital copy of the tabulated data from the analysis of the animal bone assemblage can be found in the site archive.

The Late Iron Age dyke in Area J

Animal bone was recovered from the two hand-excavated sections through the dyke ditch during the excavation phase and from the investigations in the upper fill of the ditch during the trial-trenching evaluation. Different episodes of silting-up and infilling were distinguished within the fill of the ditch. Based on the pottery dating evidence, these fills date from the early Roman period through to the medieval period. Animal bone was recovered from eleven of these contexts. A dog metacarpal (JL8) and four horse teeth (JL5) (from a single mandible) were the only bones/teeth recovered which were not ascribable to cattle, sheep or pig. There is a notable difference between the relative quantities of bone from the main three domesticates in the upper and lower ditch contexts. The lower ditch fills (JL8 and JL9) contained a higher quantity of sheep and pig bones than cattle, whereas the mid and upper ditch fills contained more cattle bones. Although the animal bone sample is relatively small, this may represent a change in the local subsistence strategy, probably occurring in the Roman period which is characterised by an increase in the husbandry of cattle (Luff 1993, 129).

In some of the ditch contexts there were a particularly high number of teeth, which probably reflects the poor preservation conditions in some of the contexts (ie the mid-ditch fills JL6 and JL17). The ditch contexts which also had a high charcoal content contained a more even spread of skeletal elements with both long bones and axial bones commonplace. Skull fragments and smaller bones such as carpals/tarsal and phalanges were underrepresented throughout the animal bone assemblage (though this may be due to taphonomic issues). More meat-bearing elements such as scapulae and vertebrae were identified in the assemblage than elements associated with primary butchery waste such as the bones of the lower limbs and the head.

Butchery marks were observed on bones recovered from throughout the ditch fills. Cuts marks were noted on two sheep bones in the uppermost contexts (JL4 and F97) and on a pig scapula, a pig radius, a cattle pelvis and a number of large mammal ribs in the lower fills (JL8 and JL9). The butchery marks observed range from large chop marks to fine cut marks. No evidence of dog gnawing was observed. However, the poor preservation of the cortical surfaces on much of the bone means evidence of gnawing and butchery may not have been discernable on some of the bones. Burnt bone was also identified in contexts throughout the ditch (JL4. JL6, JL6, JL8).¹

With the exception of an unfused tibia in JL4 and an unfused pig ulna in JL8, all the bones with surviving distal and proximal ends had fused epiphyses and the mandibles contained erupted molars with worn occlusal surfaces. This would indicate that the majority of the bone recovered derived from adult/subadult animals which may have been utilised for other purposes such as traction, hides or milk before being slaughtered for food.

The animal bone recovered from the dyke would appear to represent domestic food waste. The quantity of bone recovered indicates that there was probably an occupation site located nearby. A larger quantity of bone was recovered from Sx1 than Sx2, probably indicating that the location of the occupation site was closer to Sx1. The varying quantities of animal bone in contexts throughout the ditch would suggest that this site was not continually occupied and that there were periods of silting-up where very little animal bone was discarded into the ditch.

Area A

Six features in excavation area A contained animal bone. Small quantities of bone were recovered during the evaluation phase from a post-medieval pit (F198 in T1) and from a post-medieval ditch (F209 in T2). Another bone fragment was recovered from ditch F209 during the excavation phase (AF55). Pig and cattle bones were identified in these post-medieval contexts but the bone was highly fragmented and poorly preserved.

The other four contexts containing animal bone in Area A were all associated with burials. Inhumations AF29 and AF35 contained a sheep tibia and a sheep canine respectively, a ringditch surrounding a burial (AF3) contained a sheep radius and an unidentified fragment and a piece of burnt bone was recovered from pyre debris in AF22. It is possible that the animal bone recovered from the inhumations are from cuts of meat provided for the dead in the afterlife (Aldhouse-Green 2001). However, the low frequency of bone in each instance would suggest that they are probably residual in the grave fills.

¹ this bone is unidentified, so it is unclear whether it is aninal or human.

Areas B, C, F and G

In Area B, seven poorly-preserved unidentifiable fragments were recovered from Roman quarry pit (BF3 and BL5). A cattle radius was recovered from a Roman ditch in Area C during the evaluation phase (F182 in T66) and six fragments of sheep and a cattle bone were recovered from a post-medieval ditch in Area C during the excavation phase (CF4), one of which (a sheep humerus) exhibited a large chop mark. In Area F, the fill of a Roman linear (FF6) produced a cattle metatarsal and cattle pelvis and vertebrae fragments and a cattle tibia exhibiting butchery marks was recovered from the post-medieval ditch FF43. Also in Area F, two unidentified bone fragments were recovered from a modern pit (FF45). A horse radius and a cattle humerus were recovered from a probable Roman ditch in Area G during the evaluation phase (F143, T32) and a small fragment of unidentified animal bone was recovered from a Roman inhumation in Area H (HF38).

Contexts examined in the evaluation phase

Six features excavated during the evaluation phase contained small quantities of animal bone (23 fragments in total) but were not further investigated during the subsequent excavation phase. One Roman context, a ditch in T27 (F26), contained a poorly preserved horse radius. A post-medieval pit in T39 (F101) contained a large mammal vertebrae and a rib with cut marks. Two post-medieval ditches (F66 in T50 and F87 in T60) contained small unidentifiable fragments. A modern pit in T40 (F63) contained a gnawed sheep metatarsal and a fragment of burnt bone and a modern ditch in T30 (F128) contained small vertebrae fragments.

Conclusion

The recovery of animal bone in association with pottery and other items of domestic waste from the ditch of the Late Iron Age dyke indicates that this landscape feature was a convenient repository for waste from a nearby area of habitation. A comparison of different concentrations of animal bone within the fills of the dyke ditch appears to indicate a change in the local subsistence strategy between the Late Iron Age and the Roman period and also suggests that occupation in the vicinity may have been intermittent.

Few conclusions can be drawn about the rest of the animal bone recovered from the site based on spatial or temporal patterning as the bone was found in relatively low quantities across a large area. Based on the quantity of other domestic waste (such as pottery) it is probable that this is the result of poor bone preservation conditions on the site rather than their actual absence.

Below is the text from Julie Curl's report on animal bone in burials (Section 18.9 below)

Animal remains

Some animal remains were seen with the inhumations, including cattle skull and mandible fragments in HF24, A37, a canid mandible was noted in HF13, A19 and a sheep mandible in AF58, A87. These animal remains may be residual, or may be from ritual offerings placed within the graves. It is possible that the canid mandible may have been part of a pelt, which may have been worn, it may, of course, be residual.

18.9 Human remains and cremated/burnt bone

by Julie Curl (March 2012)

Introduction

The analysis of an assemblage of 32 inhumations and 10 cremations was carried out following excavations in two areas at this site. The remains are of late Roman to early Anglo-Saxon date and were found in a variety of burials, some within ring-ditches; some of the burials were recovered with spearheads, shield bosses, beads and knives. The human burials consist of mostly adults, with some older juvenile, sub-adult and mature adult remains.

Methodology

The human remains were recorded and analysed following modified guidelines produced by English Heritage (Mays, 2004) and the IfA (Brickley and McKinley 2004). All of the bones were quantified by skeleton number or context and an estimate of the minimum number of individuals was recorded based on counts of the most frequent elements recorded, estimation of sex and ages of those present. Bones were scanned for any pathologies, genetic traits and modifications which were recorded. Fusion of bone and tooth eruption and wear were noted when possible to allow estimation of ages following Brothwell (1981). A complete range of measurements were taken of the skulls that are complete, following Buikstra & Ubelaker 1994, Brickley and McKinley 2004) and Bass 1995, for analysis of cranial features that may allow determination of facial features, race and possibly family relationships. Measurements of post-cranial bones were taken where possible, following Bass, 1995 for assessment of sex and stature. Where complete and suitable elements were present, these were recorded for the number of elements that could provide measurements for estimation of stature using the regression formulae of Trotter and Gleser (1952 and 1958).

For cremations, the contents were dry-sieved through a stack of 10, 5, 2mm sized mesh to maximise recovery and assess the degree of fragmentation. Fragments measuring over 5mm were manually separated. A record was made of the degree of fragmentation, levels of burning, damage and modifications. All fragments were examined and an attempt made to identify the element.

All of the information for this analysis report was made on the skeleton recording sheet and the information input into an Excel database for analysis. A catalogue is provided with this report giving summary tables of results and the full analysis data, including additional counts, is available in the digital archive.

The whole assemblage – quantification, provenance and preservation

A total 17,391g of bone, consisting of 3786 pieces, was recovered from excavations at this site. Of this total weight, the vast majority (16,341g) of the bone was derived from inhumations and 1,050g was produced from cremations. The remains are of a late Roman to early Anglo-Saxon date. Quantification of the assemblage by burial type, weight and quantity can be seen in Table 18.28.

Burial type	Total weight	Total Count
Boxed cremation	214g	340
Cremation /Pyre debris in ditch	90g	340
Cremation? / Pyre debris	533g	760
Urn cremation	213g	495
Inhumations	16341g	1852
Totals	17391g	3786

Table 18.28. Quantification of the human remains by burial type, weight and count of fragments

Preservation in the bone assemblage was better in the remains from Area A compared to Area H. Area H produced a greater number of poorer condition bones, showed more erosion and had suffered a greater degree of fragmentation. However, an additional fifty-seven inhumations were identified in excavation Area A and an additional twelve inhumations from excavation Area H, which had no surviving bone, which would showing overall that bone is better preserved from Area H.

The generally poor preservation has affected the assemblage in many ways. The erosion of the adult remains has limited the pathological or injury data that can be obtained; similarly, it has destroyed many bones so that metrical data cannot be recorded for estimation of stature and ethnicity. Poor survival has undoubtedly affected the assemblage in terms of the age groups represented, resulting in a complete lack of neonatal and younger juvenile remains, whose more fragile and porous elements are likely to have been included in this burial ground, but any remains have been completely destroyed. Poor preservation of the bone may have resulted in an under representation of juveniles and certainly neonatal in this burial group.

A small amount of gnawing was seen on human bone from HF1, (1); this gnawing was carried out by a rodent. Rodent gnawing is often seen on a range of bone, this gnawing serves to maintain the teeth and for the rodents (particularly breeding females or juvenile animals) to obtain calcium.

Inhumations

Quantification and preservation

A total of thirty-three inhumation burials, containing preserved bone, were recorded amounting to a total weight of 16, 341g and consisting of 1,852 pieces. Generally, the condition of the inhumations is fair, some remains have been better preserved, but many bones are quite fragmentary and eroded. None of the inhumations were complete, with some only represented by fragments of skull, fragments of teeth or limb bones. Although fragmentation has occurred, many bones are sufficiently complete and well preserved to allow estimation of age and stature. In addition, eight cremations were recorded. Other inhumations or graves were recorded during excavations at this site, but some bone had been destroyed by adverse soil conditions.

Age and sex

Twenty-four of the thirty-three inhumations examined could be assigned to an age group, with most of those remains in the adult range, with a majority of these in the 20-35 age group. Three individuals (1 male, 1 female and 1 uncertain sex) were in the mature group (based on tooth wear) with and estimated age of 40-50 or older. Six of the burials were classed as possible adults and three were in such poor condition they could not be aged.

The youngest age group represented in this assemblage are three individuals in the 10-17 year old range. It is quite possible that younger juveniles and perhaps neonates were originally placed in this burial area, but given the preservation of the adult remains, it is quite probable that any of the very fragile, porous juvenile or neonatal bones would have been destroyed by the adverse soil conditions. It is also possible that the absence of young children or neonates may be due to a difference in burial rites, they may have been buried in a different area or cremated and the ageing evidence destroyed.

Of the thirty-three inhumations that had bone surviving, eighteen could have an estimation of sex, fifteen surviving inhumations showed no diagnostic bone that could estimate sex of the individual. The full analysis shows that the assemblage consists of a roughly equal number of males and females (See Table 18.29).

Age	Juvenile <10 yrs	Juvenile 10-17	Sub- Adult 18-20	Adult 20-35	Mature 40-50 +	? Adult	Uncertain	Totals by sex
Male	n/a	-	-	4	1	-	-	5
?Male	n/a	1	2	-	-	1	-	4

Female	n/a	-	2	4	1	-	-	7
?Female	n/a	-	-	2	-	-	-	2
Uncertain	n/a	2	-	4	1	5	3	15
sex								
Total by	None	3	4	14	3	6	3	33
age group								

Table 18.29. Quantification of the surviving inhumations by age group and sex.

Ethnicity

The skull is of prime importance for estimating ethnicity in skeletal remains. While isotope analysis can indicate regions that an individual was raised in, the skull in particular can give an indication of racial origin, ancestry and sometimes family relationships. Three skulls in this assemblage were sufficiently well preserved to allow a full range of metrical data to be obtained to access the facial features to provide an indication of ethnicity. A complete range of measurements were taken of these skulls following Buikstra & Ubelaker (1994), Brickley and McKinley (2004) and Bass (1995).

AF56

One skull in particular shows features that suggest an individual of mixed race. The skull from the female AF56, (A83) shows some strong characteristics that suggest Negroid or Mongaloid ancestry, perhaps mixed with a Caucasoid influence (Bass, 1995 and Ubelaker, 1989). The initial impression of the skull from the tooth wear, in particular the occlusal wear on the incisor teeth, suggests an edge-to-edge bite, characteristic of Mongaloid skulls (Bass, 1995), with the mandible and maxilla and tooth wear not suggesting the prognathism that is commonly seen in Negroid skulls and with an over-bite common in many Caucasoid skulls, in addition, the cheekbones are quite prominent, a characteristic of Mongaloid skulls. Metrical data from AF56 shows a very broad face, a very broad palate, wide orbits and a wide nasal aperture, all are characteristic of Negroid skulls, with a wider nasal area and palate also seen in Mongaloid skulls. There is a slight bregmatic depression on the skull, which is another trait of Negroid skulls. Overall, the features would perhaps suggest an individual with a probable Negroid/mixed race ancestry, with additional influences from a possibly Asian and probably some white background.

Cranial index	78.1
Cranial Length-Height index	66.1
Mean Height index	74.2
Total facial height	57.8
Upper facial index	46.8
Palatal index	139.5
Nasal index	56.8
Orbital index	77.5

Cranial indexes for AF56 (A83). Female. Aged *c*.40-50 years.

AF57

The female skull from AF57, A87, shows some similar features to AF56, with a fairly broad palate and a wide nasal aperture, but the orbits are narrow. The similarities might suggest some family relationship with AF56 and at least the suggestion of another possible individual of mixed race.

Cranial index	76.7
Cranial Length-Height index	58.7
Mean Height index	66.46
Total facial height	68.1
Upper facial index	50
Palatal index	124
Nasal index	56.25
Orbital index	102.8

Cranial indexes AF57 (A87). Female. Aged c.20-25 years.

AF188

The female skull from AF188 (A305) produced metrical data suggesting an individual of typically white/Caucasoid origin, in particular with a markedly contrasting, narrow nasal aperture compared to AF56 and AF57.

Cranial index	78.3
Cranial Length-Height index	61.1
Mean Height index	68.5
Total facial height	67.6
Upper facial index	53.4
Palatal index	114.2
Nasal index	45.4
Orbital index	89.2

Family relationships

The similarity in some of the cranial indexes between AF56 and AF57, with both suggesting mixed race origin, with Negroid or possibly some Mongaloid features, might suggest a family relationship between these women. In addition, Cribra orbitalia was noted in two skulls, the adult AF57, A96 and the juvenile skull AF57, A91, interestingly, both from the same grave fill. These two individuals in AF57, sharing the same grave fill and suffering the same condition, might hint at another family relationship between this adult and child; similar clusters of this condition were noted in hypothesised family groups with late Roman skeletons at Butt Road, Colchester (CAR 9).

Estimation of stature

Only three skeletons produced elements sufficiently complete for measurements to allow a reasonably accurate estimation of the height of the individual. Recorded heights were as follows:

AF56, A83. Female. Estimated height of 173-174cm, c.69 inches, 5'7" to 5'8".

AF188, A305. Female. Estimated height of 172-173cm, c.69 inches, 5'7".

HF22, H30/31/32/33. Male. Estimated height of 163cm, c.65inches, 5'4".

Studies of Roman skeletal material (Roberts & Cox, 2003) have shown an average height for men of 5'5" and for women an average height of 5'2". For Saxon skeletal material averages are higher, with men averaging at 5'7" and for women the average is 5'3". Comparing these with the material from the Garrison, the male is slightly shorter than average for the Roman period, although still within the range recorded. The two females from this site whose height could be estimated might be of a Saxon date. Both AF56 and AF188 are above average height for that period and certainly above average for Roman skeletons, with their heights placing them towards the maximum end of the Saxon range. Both of the women in this Colchester group are taller than the maximum height estimated for the female skeletons at North Elmham, Norfolk (Wells and Clayton 1980) where the mean height was 5'2", with the maximum height recorded was 5'6³/4". At Butt Road, Colchester (CAR 9), the height ranges in Period 2 varied considerably with females at 4'7" to 5'7" and the males with a range from 5'1" to 6'3", again putting the Garrison male at the lower end of the scale and the female Garrison heights at the top of the range.

The metrical data for this site is restricted and should not be seen as an average for the whole site. Many factors can affect growth and height, including ancestry, sickness and diet and these may have played a part in influencing the height of the individuals in this assemblage.

Pathologies and variations

Several clear pathologies were seen during the analysis. The generally poor condition of much of the assemblage has undoubtedly destroyed a good deal of evidence of disease and injury. Details of individual conditions are recorded for each skeleton in the catalogue.

Dental problems were the most frequently recorded, usually with more mature individuals. The higher number of dental pathologies being due to a generally better preservation of the teeth even when bone has eroded. Wear on teeth (sometimes severe) and calculus build-up suggests the people here largely had a regular coarse diet and probably one reliant on grains and bread. Methods of flour production and use of grinding stone and perhaps unclean grain, would have meant additional grit included that caused further wear to the teeth. Only one clear tooth cavity was seen, but many teeth have been damaged by conditions or even lost, so the number would have probably been higher. Three abscesses were recorded; again, the post-burial damage and loss of some teeth means these numbers are perhaps lower than expected. The teeth of skeleton HF2 showed enamel hyperplasia, ridges on the teeth that develop while the individual is young and which suggest a period of stress, perhaps dietary or even a long illness. There is little evidence apparent for periodontal disease, which would suggest a relatively good diet and good oral hygiene.

Degenerative wear and arthritis were seen on several individuals, again, the poor bone survival has almost certainly destroyed other cases. Metapodials, vertebrae and elements such as the talus and calcaneus are the most affected, all common locations for arthritic problems. Skeleton HF22 had probably suffered with arthritis in the foot for some time, leaving the left calcaneus and talus fused together, perhaps exacerbated or even caused by an injury. Skeleton HF16 showed exotoses around the fusion line on the femur head, indicating an arthritic problem in the hip. All of these would have caused the affected individuals varying amounts of pain and would have affected their mobility.

A probable sinus infection was seen on one adult female (AF188); given the good health of the upper teeth, this condition has not been caused by a dental infection that has spread to the sinuses. Prolonged sinus problems can be caused by respiratory infections; some are also caused by or exacerbated by the smoky atmospheres in most homes at the time.

Cribra orbitalia was noted in two skulls, AF57, A96 and AF57, A91, interestingly, both from the same grave fill. Cribra orbitalia, or porotic hyperostosis, is a condition that arises as a result of anaemia, primarily iron-deficiency anaemia (Mays 1998). This iron deficiency can arise from a lack of iron in the diet (for example, a lack of red meat and green leafy vegetables), but also as a result of disease, particularly gastro-intestinal infections or parasitic infestations. Such a condition is more frequent in children who have greater demands on the bone marrow for red blood cell production (Mays 1998). In adults the condition is more frequently seen in women, who may have a greater loss of iron during menstruation or in childbirth. In this assemblage it is interesting that the condition was only seen on one adult woman and one child skull, both from the same grave fill; this might suggest some relationship between the individuals who may share the same cause of the condition, maybe a dietary deficiency, infestation or disease. It is interesting to note that at Butt Road, Colchester (CAR 9) that this condition was not a scattered occurrence, but clumped within hypothesised family groups and suggesting a different diet or lifestyle; which supports the theory that these two cases at the Garrison were related.

One healed fracture on a rib was seen; such a fracture can arise from injury or even heavy coughing or sneezing and is a common occurrence; it is of course possible that such a fracture may have resulted from trauma.

The skull of AF57, A96, an adult female, showed a rounded lesion of approximately 25mm on the frontal bone, above the right eye and slightly to the side of the head on the temporal line. Such lesions would suggest that this woman had suffered a blunt blow to the head, which was certainly not fatal as there is some healing of the bone around the affected area. This blow may have been from an incident of inter-personal trauma, but could well have occurred from an event such as a fall or other accident.

HF2 showed a slight twisting of the left humerus, which may be occupational, perhaps from long-term awkward lifting or pulling.

Animal remains²

Some animal remains were seen with the inhumations, including cattle skull and mandible fragments in HF24, A37, a canid mandible was noted in HF13, A19 and a sheep mandible in AF58, A87. These animal remains may be residual, or may be from ritual offerings placed within the graves. It is possible that the canid mandible may have been part of a pelt, which may have been worn, it may, of course, be residual.

Grave goods

Many of the graves in this Garrison cemetery included weapons, which suggest an eastern Gaul or German influence. Across Gaul, north of the Loire, cemeteries have included male burials with weapons – spears, shields, swords, axes and knives. The appearance of this type of burial in Colchester suggests that these are the graves of Germanic people in the service of the Roman town. In Gaul, these weapon burials often include more elaborate goods, any lack of these in the Garrison burials might indicate a lower social status for the individuals here.

Cremations

A total of ten cremations or groups of pyre debris were recovered, which amounted to 1,050g and consisted of 1934 fragments. The cremated remains included one urn cremation and one burial in a box. The remaining groups of burnt bone were uncontained, and included a collection of burnt bone in a ring ditch.

Some variation was noted between the condition of the contained cremations and uncontained cremations, with a greater preservation, larger number of fragments and an increase in the size of the pieces with the remains in containers. Some fragments of bone have areas encrusted with iron and sediment, perhaps from the burning of a coffin (and the iron coffin nails), leaving residues on the bones.

Human cremations can contain non-human bone. Generally, the cremation in this assemblage have produced very little evidence for faunal remains. The exception to this is the ?cremation/pyre debris AF73, (108), which contains at least four cremated bird bone fragments which have been identified as probable fowl (chicken/pheasant/guinea fowl). These bird remains may be from food placed in with the person to be cremated or possibly residual and gathered with the cremation for burial.

Clear evidence of arthritis was seen on one carpal from the boxed cremation AF130. Other possible pathologies cannot be identified with certainty due to the distortion occurring during cremation and post-burial destruction.

Cremation weights

There are a number of factors that affect the efficiency of the cremating process and therefore, the size of the cremation that can be collected, including the position of the body, the construction and maintenance of the burning pyre. The weight of the cremation found is also dependant on the thoroughness of the collection of the bone for placing in the cremation pot or burial pit as well as the burial conditions and excavation recovery and post-excavation processes. The smaller size of all the cremations in this assemblage may be due to a range of factors including loss of the volatile portion of bone before burial as well as post-depositional bone decay, much is possibly due to most of the remains not being interred in a vessel or possible due to processing and collection methods during the cremation process.

The weights of the cremations in this assemblage ranged between 3g and 282g, with the urned cremation yielding 213g and the boxed cremation producing 214g. All of the weights for the cremations in this assemblage are on the lower end of the weight range in comparison to other archaeological cremations (range: 57 - 3000 g) (McKinley 1993) and substantially incomplete in comparison to a modern cremation (1000 - 3600 g) (*ibid*). Cremations in containers are normally larger than cremations in pits and finely crushed cremations tend to be smaller due to poor

² For report on animal bone from other contexts, see Adam Wightman's report in Section 18.8 above.

preservation. Juvenile and neonatal cremations may also be more fragmented as the bones are more fragile and obviously smaller in size.

There may have been greater efficiency in burning at the Garrison, more raking of the remains or a different method of collection that resulted in the lower average weights seen here.

Fragmentation and condition

The largest proportion of bone fragments was from the 5mm and 10mm sieves. The degree of bone fragmentation is higher in some cases than that generally seen in archaeological cremations where an average of 50% of bone fragments are over 10 mm in size (McKinley, 1994).

The urned cremation F204, (134) (Eval 2010) showed a relatively high degree of fragmentation with approximately 45% of the fragments of 10mm or greater size, although overall, the fragments were larger than most of the other cremations from this assemblage. Average fragmentation (c.50% at 10mm or longer) was seen with the boxed cremation AF130, (236). Placing the cremated material in a container does generally reduce the erosion and provide a greater survival rate for the bone.

The remains in the ?cremation/?pyre debris AF211, (330), produced many larger fragments of bone and complete carpals and tarsals, overall, better preservation of bone fragments than any of the other cremations in this assemblage. By contrast, the fragments in the ?cremation/pyre debris AF144, (242) consisted of mostly small fragments of 5mm or less, many 2mm or less in length and many powdery fragments. The larger fragments in AF211, (330), which was buried without a container, might suggest that the material was not fully cremated and perhaps not tended and raked as much as others; perhaps this cremation could have been affected by adverse weather conditions.

Overall, the degree of fragmentation might suggest that the pyre was usually well tended and had probably undergone at least some stirring and movement of the pyre, allowing more oxygen into the fire, increasing the burning and destruction of the bone.

Cremation 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 browns or orange 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).

The urned cremation F204, (134) (Eval 2010) showed a majority (*c*.75%) of unburnt fragments of a brown colour, with relatively few fragments burnt to a blue-grey to white colour; similar levels of burning was seen in the boxed cremation AF130, (236) and with the ?cremation/?pyre debris AF211, (330). Other cremations within this assemblage showed a greater number of burnt fragments.

Some cremations were extremely small. The cremation (Pyre) AF100, (184) produced only 24 fragments amounting to 3g in weight, with all fragments of 5mm or less.

The remains seen in this assemblage suggest the normal range of burning, with some variation depending on the area of the body and the range of other factors that affect cremated material.

Surface Changes

Surface changes such as warping, cracking, fissuring and checking 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). The urned cremation F204, (134) (Eval 2010) showed relatively little warping, cracking or other surface changes, similar unaffected bones were seen in the ?cremation/?pyre debris AF211, (330). Other cremations show a greater degree of surfaces changes.

Discussion and conclusions

Overall, there is a roughly equal number of males and females and there are no obvious signs of warfare and injury, which would normally suggest that these are the burials from a domestic community. The ages vary, again suggesting deaths from natural causes and disease. However, given the location of the burial site, the weaponry in some of the graves and the styles of some of the burials it is likely that these are burials of a people involved in military service, with a mix of those in service along with wives and perhaps other associates. Perhaps the mixture of burial types and orientations reflects the diverse beliefs that a multi-cultural group would have, as well as showing the increasing impact of Christianity.

The apparent lack of young juveniles and neonates is most likely to be due to the soil conditions which resulted in the poor preservation of even the adult remains; it does not rule out their presence in this community. It might be possible to suggest that this apparent lack of the very young might be due, in part, to a possible loss of women in childbirth (and their young not surviving in these conditions). At Poundbury it was estimated that 18% of the women had died during or shortly after childbirth, the level of hygiene being a possible cause. Infanticide, abortion and contraception were widely practiced and the wide lack of evidence for congenital disease and deformities in this period might suggest natural losses and possible to speculate that women associated with military service, with the pressures that include travel, might attempt to limit their family sizes more than more settled women or even that their fertility might have been adversely affected by such pressures.

The presence of at least two individuals in this cemetery with features indicating a more exotic ancestry is really to be expected, especially given that Colchester was a Roman garrison town. At this time, the British Isles were open to the arrival of newcomers from continental Europe, Asia and Africa (Miles 2006). In the early days of Colchester, around 50% of the legionaries at Camulodunum were individuals from Italy and would have included troops taken from other areas of the Roman empire. Indeed, most of the troops in the Roman army were not Roman, or even Italian by birth (Miles 2006). By the late Roman period the Roman empire had eventually extended into North Africa, Asia, Spain and the Rhineland. In Britain, the population in these Garrison areas in particular would have been a diverse mix of races and religions, with a range of people, including slaves and traders, many integrating with the local population. Religions and influences came to Britain, such as the Persian cult Mithras, which spread through the Roman empire and thrived amongst the soldiers and traders in London and as far north as Hadrian's Wall as well as the continuation of the pagan beliefs and the wider spread and influence of Christianity. By the Saxon period, these trade routes continued and influences extended, with a greater influx of people from Germany and Sweden, there is certainly a Germanic influence in the Garrison inhumations with the inclusion of weapons in some of the burials. These later newcomers are less easy to distinguish using the traditional methods of analysing the human bone. While there are more exotic features indicated by the metrical data, it does not mean a direct influence from Asia or Africa, but perhaps, in this community, via Gaul or a combination of influences.

Other individuals determined as 'mixed race' or in a more precise group such as 'negroid' include a woman buried at Sycamore Terrace, York (Leech, *et al*, 2010) who was shown to be of mixed race and it was stated 'from somewhere warmer than Britain'. This lady in York was buried with unique earrings, beads and a jug that are only paralleled in the Rhineland (Cool 2011, Leach *et al* 2010, Hartley *et al* 2006). At Poundbury, there are 'three skeletons of foreign extraction (Cool, 2011), with isotope analysis suggesting that one of these individuals was probably born in Greece. A Roman cemetery at Brougham, Cumbria included a probable family group with striking features that were identified as Pannonian (Hungarian), horse riders from the Danube area

between Austria and Hungary (Cool 2004). Again in York, the Romano-British cemetery of Trentholme Drive (Warwick 1968) produced at least one skull and several skeletons were found to have negroid features. Another woman of probable African descent is Vibra Picata, who married Flavus Verecundus, a centurion posted to the Antonine Wall. Vibra's husband was of Pannonian (origin, clearly showing an example of a diverse relationship prior to their arrival in Britain (Allason-Jones 1989). A later and isolated example of a Saxon negroid woman comes from the cemetery at North Elmham, Norfolk (Wells and Clayton 1980).

The estimated heights of the women in this assemblage appear to be somewhat higher than the average for this period and their bones were quite robust. Heights and robustness could be affected by many factors such as diet and ancestry, and this could well have affected the individuals in this assemblage. However, classical writers in the Roman period seemed to have the impression of women being as tall and as well-built as their husbands (Allason-Jones, 1989) and this certainly seems to be consistent with the remains of women in this assemblage.

Human bone appendices 1 and 2

Appendix 1

Summary catalogue of the bone from 2011.12 (Areas A1 and H) and 2006.127 Cremations listed first and then inhumations, in feature number order.

Key:

Ages: A = adult, J = Juvenile, SA = Sub-Adult, M = Mature

Condition: g = good, b = burnt, crem = cremated, f = fragmentary, er = eroded, w = warped, c = cracked, p = proversite a proversite a provention of the proventis of the provention of the provention of the proventio

Ctxt/ Grave	F NO	Other	Ctx t Wt	Contex t Count	Male/ F	Age	grey to blue,	Burnt	Fauna	Comments
			vvi	Count						
A134	AF204	Urn crem	213	495		a	crem, f, warp	b-o, g, w		little burning, 35% 10mm>, 45% 5 mm, 20% 2mm
A100	AF65	(Bone A)	38	17			f		1	
A100	AF65	(Bone B)	8	5			f			
A100	AF65	(Bone C)	56	12			f, er			
A236	AF130	boxed crem	214	340		а	f, crem			little white, 50% 10mm>, 35% 5mm, 15% 2mm
A184	AF100	Crem (Pyre)	3	24			crem, f			100% 5mm
A130	AF33	Crem/Pyre in ditch	90	340			crem/c,w,f	w, g-b, b		<1% 10mm>, 90% 5mm, 10%2mm. Majority fully cremated
A242	AF144	Crem? Pyre?	145	400+			p, crem, f	w, g-b		5% 10mm>, 45% 5mm, 50%2mm<, few frags unburnt
A138	AF154	Crem? Pyre?	13	95			crem, f			10% 5-10mm, 90% 5mm<, 0% 2mm. Majority cremated fully
A289	AF183	Crem? Pyre?	11	26			f, p			some unburnt. 5% 10mm, 65% 5mm, 30% 2mm
A330	AF211	Crem? Pyre?	282	290		а	f, crem, w, c	b, b-g, w		some unburnt, 55% 10mm>, 30% 5mm, 15% 2mm
A48	AF22	Crem? Pyre?	30	130			crem, f, warp	w, g-b		10% 10mm>, 85% 5mm, 5% 2mm. Majority fully cremated.
A108	AF73	Crem? Pyre?	49	195			crem, warp, f	w, b-g	4	5% 10mm>, 80% 5mm, 15% 2mm<, few unburnt, 4 frags of bird
A156	AF9		9	11		1	f			from left leg

Ctxt/ Grave	FNO	Other	Ctx t Wt	Contex t Count	Male/ F	Age	Condition	Burnt	Fauna I	Comments
	150									
A156	AF9		1	1		?juv	g-f			
A156	AF9		142	21		?juv	g-f			
A79	AF20		119	15		j/sa	fragmentary			
A82	AF21		87	9			f, er			
A82	AF21		48	11			f, er			
A80	AF24		78	16		а	g-f			
A81	AF24		183	12		а	g-f			
A130	AF33		48	25			c/b, f,			
A64	AF38		72	2			f			
A64	AF38		55	1			g-er			
A64	AF38		18	12			f			
A64	AF38		31	8			f			
A64	AF38		108	20		sa/a	f-g			one unerupted wisdom tooth
A83	AF56		195	12		а	g			
A83	AF56		465	41		а	g-f			
A83	AF56		173	14		а	g			
A83	AF56		124	5		а	g			
A83	AF56		134	16		а	g-f			
A83	AF56		221	12		а	g			
A83	AF56		155	8		а	g-f			
A83	AF56		703	11		а	g			MONGALOID FEATURES? - cranium, cheekbones, bite, facial, well worn teeth
A179	AF57		2	1			f			
A91	AF57		137	35		j/sa	f-g			some unerupted teeth
A96	AF57		158	3		А	g-f			
A96	AF57		120	15		j/sa	g-f			
A96	AF57		120	6		j/sa	g-f			
A96	AF57		21	6		а	g-f			
A96	AF57		65	5		sa	g-f			
A96	AF57		17	1		sa	g-f			
A96	AF57		732	19	F	j/sa	g-f			
A87	AF58		90	2		а	f, er			
A88	AF58		130	24		а	f, f			
A89	AF58		106	14		а	g-f			
A90	AF58		17	6		а	f			
A986	AF58		394	30	?F	а	g-f			One wisdom tooth ER, one UE
A84	AF59		20	6			fragmentary			
A84	AF59		93	6		а	f			
A84	AF59		157	15		а	f, f			
A170	AF65		7	2			g,f			
A305	AF88		165	7		а	g			
A202	AF128		38	3			p, f, f,			
A208	AF178		6	12			p, f, f,			
A277	AF178		8	4			f, p			
A305	AF188		440	9		а	g			
A305	AF188		193	12		а	g			
A305	AF188		460	6		а	g			
A305	AF188		718	15	М	а	g			Excellent skull, worn teeth, sinus infection?
H1	HF1		448	40	М	a/mat	g-f			

Ctxt/ Grave	F NO	t	Xtx Vt	Contex t Count	Male/ F	Age	Condition	Burnt	Fauna I	Comments
H2	HF1	4	194	65	М	mat	g-f			Enamel hypoplasia, well worn teeth, twisted
										humerus
H47	HF2		67	44		а	f			
H5	HF2	2	281	37		а	g-f			
H6	HF2		8	5			f			
H7	HF2		77			а	g-f			
H9	HF4		46	4			f			
H9	HF4		18	7		а	g-f			
H9	HF4		67	10			g-f			
H9	HF4		61	9			f			
H9	HF4		67	15	140		g-f			
H9	HF4		69	77	M?	sa	g/f			very good unworn teeth, unerupted wisdom tooth
H15	HF6		33	6			f, f			
H13	HF9		29	46			f, er			
H14	HF10		59	17			f			
H14	HF10		86	23			f			
H14	HF10		321	106		а	f			
H16	HF11		247	8		а	g-f			
H16	HF11		61	15		а	g-f		10	the state of the state of the later and the
H19	HF13		02	1			g-f		12	inc dog mandible and teeth
H17	HF13 Sx1		26	4			f, er			
H20	H14		138	55	F?	a (young)	g-f			one skull, teeth good, some wear, sutures not fully closed
H20	HF14		43	42			f			
H27	HF16		26	25		а	f			
H27	HF16		33	27			f			
H27	HF16		81	15		а	f			
H27	HF16		20	31		а	f			
H27	HF16		17	13		а	f			
H27	HF16		76	12		а	f			
H27	HF16		242	16		a	g-t			
H27	HF16		14	15		a	g-f			
H27 H23	HF16 HF17		21 22	36 18		а	p, f, f, f, p	+		
H23	HF17 HF17		22 27	31			f, p f, p			
H23	HF17		34	12			f, p			
H23	HF17		51	15			f, p	+		
H24	HF18		78	6			g, f, er			
H24	HF18		01	18			g, i, ci g-f			
H29	HF22		13	12		а	g-f		-	
H30	HF22		549	15		a	g.		-	
H31	HF22		524	14	M?	a	g			
H32	HF22		74	25	М	a	g			
H33	HF22		6	2		а	g			ear bones
H33	HF22	2	204	19		а	g-f	1		
H37	HF24	1	42	14			g-f		6	inc cattle skull and mandible frags
H47	HF24		67	12		а	g-f			
H28	HF25		50	18		j/sa	g-f			
H38	HF25		72	25		a	g-f	1		young adult female with

Ctxt/ Grave	F NO	Other	Ctx t Wt	Contex t Count	Male/ F	Age	Condition	Burnt	Fauna I	Comments
						(young)				little wear on teeth
H38	HF25		95	7			f			
H38	HF25		73	2		j/sa	g-f			
H38	HF25		86	5		j/sa	g-er			
H42	HF26		9	11			f			
H42	HF26		16	10			f			
H42	HF26		21	15			f			
H42	HF26		70	2			er, f			
H41	HF27		46	24			f			
H41	HF27		44	16			f, er			
H41	HF27		67	12			f			
H45	HF28		77	14			f			
H47	HF34		24	21			f			
H47	HF34		48	12			f			
H47	HF34		208	14			g-f			
H47	HF34	1	324	7			g-f			
H47	HF34		66	14			g			mature but no third molars
A320	u/s		190	2			fragile			

Human bone appendix 2. Individual catalogues for each inhumation and cremation. Listed in skeleton/cremation number order.

SK No	Other No's Condition						
AF9	A156	Poor					
Age	Age estimate	Sex					
Adult?							
Completeness	Fragment/Element count	Weight (g)					
Incomplete	33	152					
Associated with	Additional bone						
Elements presents							
Skull fragments, R + L Tib fra	igments						
Estimated height							
Insufficient bone for measurements							
Comments							
No grave goods							

SK No	Other No's	Condition		
AF20	A79	Fair - poor		
Age	Age estimate	Sex		
Teen – Young adult	17-25	Male?		
Completeness	Fragment/Element count	Weight (g)		
Incomplete	25	119		
Associated with	Additional bone	Fragile and fragmented		
Elements presents				
Skull/maxilla/mandible frag	gments			
Estimated height				
Ŭ				

Comments	
Iron shield boss and iron knife	

SK No	Other No's	Condition
AF21	A82	Poor
Age	Age estimate	Sex
Adult		?Female
Completeness	Fragment/Element count	Weight (g)
Incomplete	7	135
Associated with	Additional bone	
Elements presents		
L + R Fe		
Estimated height		
Comments		
Some copper staining on upp	per right femur. Copper alloy buckle	e found in grave.

Cremation Type SK No Other No's AF22 A48 Cremation/Pyre Age Age estimate Sex MNI **Total Fragment count** Total Weight (g) 130 30 >10mm Count 33 Weight 8 64 18 5-9mm Count Weight 2-4mm Count 12 Weight <1 3 Weight <1mm Count <1 Black %/fragment count Blue/Grey %/fragment count White %/fragment count 100% Associated with Animal bone Maximum size 25mm **Elements presents** Skull, rib, limb, unidentifiable fragments Pathologies Comments

Some warping and cracking

SK No	Other No's	Condition
AF24	A81	Poor-fair
Age	Age estimate	Sex
Adult	20+	Uncertain
Completeness	Fragment/Element count	Weight (g)
Incomplete	28	261
Associated with	Additional bone	
Elements presents	•	
L Pelvic, L Fe, L Tib, L Fib, L C	alc, L Tal	
Estimated height		
Insufficient bone for measureme	ents	
Pathologies and Comments		

Small lesion on articular	surface of calcaneus. S	Small amount of iron	adhering to calculus/talus

SK No	Other No's		Cremation Type			
AF33	A130		Cremation/Pyre			
Age	Age estimat	e	Sex			
	Ŭ					
MNI	Total Fragm	ent count	Total Weigh	t (g)		
	340		138			
>10mm	Count	35	Weight	90		
5-9mm	Count	147	Weight	37		
2-4mm	Count	139	Weight	11		
<1mm	Count	19	Weight	<1		
Black %/fragment count	Blue/Grey %	/fragment count	White %/fragment count			
	20%		80%			
Associated with	Animal bone	9	Maximum size			
			42mm			
Elements presents						
Skull, mandible, teeth, clavicle	, misc limb, rad/	ulna, tibia/fib,				
Pathologies						
~						
Comments						
Some warping and cracking, m	nuch unidentifiat	ole				

SK No	Other No's	Condition					
AF38	A64	Poor					
Age	Age estimate	Sex					
Young/Early Teen	Early Teen	Male?					
Completeness	Fragment/Element count	Weight (g)					
Incomplete	43	253					
Associated with	Additional bone						
Elements presents							
Mandible/isolated teeth, R Hu, I	R Rad, L + R Fe,						
Estimated height	· · · · ·						
Insufficient for measurement, b	Insufficient for measurement, but a small, slight build						
Comments							
Found with iron spear head, shi	eld boss, knife blade and possib	le shield decoration					

Tooth record

1000111	0001	u															
Right		7	6	5	/	/	/	/	1	/	2	/	/	6	7	-	Left
	-	1	0	0	/	/	1	1	1	/	3	/	1	0	1	-	Leit
Right	-		/	5	4	3	2	1	1	2	/	4	5	6	7	8u	Left
LD		7															LD

Molar attrition scores:

	Right	M3	M2	M1	Left	M1	M2	M3
Maxilla		/	1	1		1	1	/
Mandible		u	3/4	/		2	1	u

Dental

Bontai	
Calculus	None
Hypoplasia	None
Periodontal disease	None
Cavities	None
Odvilles	None

Abscesses	None

SK No	Other No's	Condition
AF56	A83	Skull:good, bone: fair/poor
Age	Age estimate	Sex
40-50yrs+	40-50yrs+	Female
Completeness	Fragment/Element count	Weight (g)
incomplete	170	2170
Associated with	Additional bone	Missing bone - Right femur
		missing (on site photo)
Elements presents		
Skull, mandible, LFe, L+R	Tib, L+RCalc, L+RTal, Cune, 5 lumb	ar, 9 thoracic, 6 cervical, 1 sac, 4
mc, L+R UI, RRad, Lclav,	L+R scap, 2 mt	
Estimated height		
	o 5'8"	

Right	8	7	6	5	4	3	2	1	1	2	3	4	5	6	7	8	Left
Right	8	7	6	5	4	/	/	/	/	/	3	4	5	6	7	8	Left
							b	b	b	b				а			

Molar attrition scores:

	Right	M3	M2	M1	Left	M1	M2	M3
Maxilla		5+	5	5++		5++	5+	5
Mandible		5	5+	5++		5++	5+	5

Dental	
Calculus	low
Hypoplasia	none
Periodontal disease	Yes
Cavities	None, but worn down into dentine in places
Abscesses	Abscess under lower left M1

Cranial indexes

Cranial index	78.1
Cranial Length-Height index	66.1
Mean Height index	74.2
Total facial height	57.8
Upper facial index	46.8
Palatal index	139.5
Nasal index	56.8
Orbital index	77.5

Pathologies

Growth at right elbow, healed fracture on left rib, degenerative wear on all vertebrae and extotoses on L5 and L4, arthritis on right calcaneus and talus, arthritis on proximal right MT2

Comments

Strong muscle attachments, right arm slightly more robust. Very broad face, broad palate, wide nasal aperture, wide orbits. Related to SK57? No grave goods.

SK No	Othe	r No	'e				00	nditi	<u></u>				1					
							5						-					
AF57					A96							Poor – fair, skull: good						
Age					Age estimate							Sex						
Young adu					20-25 Fragment/Element count							male						
Complete						men	t/Elem	ent	count			eight	(g)					
Incomplete					78							71						
Associated with Additional bone																		
					Remains of a 2 nd skull (child)													
					behin	d th	ighs Al	F57/	A91									
Elements																		
Skull, mar	nd, isola	ated	teeth, I	L UI	, ribs, 3	cer	vical, 2	2 tho	racic,	3 lun	nbar, j	oelvis	<u>, L+R</u>	fe, L	<u>. Tib, L</u>	_ Fib		
Tooth record nfe nfe																		
Right 8	7	6	5	4	3	2	1	/	/	3	4	5	6	7	8	Left		
Right 8		6	5	4	3	2	1		2	3	4	5	6	7	8	Left		
U	nfe 7 0 5 4						•			-		-	-	•	u			
	-							•										
Molar attr	ition sco	ores	:															
	Right		M3		M2		M1		Left		M1		M2		М3			
Maxilla	Ĭ		1		1-2		2+/3				1		1-2		2+/3			
Mandible			1		2 2+/3						2+/3		1-2		uner	upted		
			<u>I</u>														1	
Dental																		
Calculus					Low													
Hypoplasi	a				None													
Periodonta		se			None													
Cavities					None													
Abcesses					None													
Cranial in	dexes																	
Cranial inc	dex				76.7													
Cranial Le	ngth-He	eigh	t index	;	58.7													
Mean Heig	ght inde	ex			66.46													
Total facia					68.1													
Upper faci					50													
Palatal inc					124													
Nasal inde	ex				56.25													
Orbital ind					102.8													
Trauma					Lesion	ove	r right (eye										
Pathologi	ies						-											
Cribia orbi	italia (al	lthou	ugh not	sev	vere)													
Lesion of 2																		
Impacted					•													
Comment Wide nasa Related to Found with Same orbit	al aperti AF56? h Iron b	lade	e, Cu al	loy	coin, gl	ass	beads	and	iron o									
					0 11												1	
SK No					Othe	r No) S				- Co	nditi	on				I	

SK No	Other No's	Condition
AF57	A91	Poor
Age	Age estimate	Sex
Child	c.10 yrs	Uncertain
Completeness	Fragment/Element count	Weight (g)

Incomplete	31	137
Associated with	Additional bone	
AF57/A96	Found in same grave as AF57/A96	
Elements present		

Skull fragments, cervical vertebrae

Tooth record

	u			u					1			u				u	
Right	8	7	6	5	/	/	/	/	/	/	/	4	5	6	7	8	Left
Right	/	7	/	/	/	/	/	/	/	/	/	/	/	/	/	/	Left

Molar attrition scores:

	Right	M3	M2	M1	Left	M1	M2	M3
Maxilla			1	1		1	1	
Mandible			1					

Dental

Dental	
Calculus	None
Hypoplasia	None
Periodontal disease	None
Cavities	None
Abcesses	None

Cranial indexes

Cranial index	Too fragmented for measurements
Cranial Length-Height index	Too fragmented for measurements
Mean Height index	Too fragmented for measurements
Total facial height	Too fragmented for measurements
Upper facial index	Too fragmented for measurements
Palatal index	Too fragmented for measurements
Nasal index	Too fragmented for measurements
Orbital index	Too fragmented for measurements

Pathologies

Some pitting in the orbits - Cribia orbitalia (although not severe)

Comments

This skull was found behind the thighs of AF57/A96. Same orbit pathology as other skull in grave.

SK No	Other No's	Condition
AF58	A87	Poor, fragmented
Age	Age estimate	Sex
Young adult	18-20	Male
Completeness	Fragment/Element count	Weight (g)
Incomplete	106	732
Associated with	Additional bone	
	Sheep mandible with right leg	
Elements presents		
Skull fragments, mand, R Hu	5 x lumbar, L + R pelvic frags, L+R	Fe
Estimated height	· · · · ·	
Insufficient measurements		

Tooth record

																u	
Right	8	7	6	5	4	/	2	1	1	2	3	4	5	6	7	8	Left
Right	/	/	/	/	/	/	/	/	/	/	/	/	5	6	7	8	Left
																u	

Molar attrition scores:

	Right	M3	M2	M1	Left	M1	M2	M3
Maxilla		1	1-2	2+		2+	2	u
Mandible						2+	2	u

Dental

Dental	
Calculus	Low
Hypoplasia	None
Non-metric traits	2-3mm gap between P4 and P3
Periodontal disease	None
Cavities	None
Abscesses	None

Cranial indexes

Uraniai inuexes	
Cranial index	Skull too fragmented and worn
Cranial Length-Height index	Skull too fragmented and worn
Mean Height index	Skull too fragmented and worn
Total facial height	Skull too fragmented and worn
Upper facial index	Skull too fragmented and worn
Palatal index	Skull too fragmented and worn
Nasal index	Skull too fragmented and worn
Orbital index	Skull too fragmented and worn

Pathologies

None evident

Comments

Femur quite robust, mandible female. Found with iron blade and iron object.

SK No	Other No's	Condition	
AF59	A84	Poor, eroded	
Age	Age estimate	Sex	
?Adult			
Completeness	Fragment/Element count	Weight (g)	
Incomplete	133	270	
Associated with	Additional bone		
Elements presents		•	
L pelvic, L + R Femur frag	ments, R Tib, small fragments of sku	I	
Estimated height			
Comments			
No grave goods.			

SK No	Other No's	Condition				
AF65	A170	Poor, eroded				
Age	Age estimate	Sex				
?Adult						
Completeness	Fragment/Element count	Weight (g)				
Incomplete	34	102				
Associated with	Additional bone					
Elements presents	•					
Femur and tibia fragments, left s	side					
Estimated height						
Insufficient bone surviving for measurements						
Comments						
Found with iron blade.						

SK No	Other No's		Cremation Type		
AF73	A108		Cremation/Pyre		
Age	Age estimate		Sex		
Adult					
MNI	Total Fragmer	nt count	Total Weight ((g)	
	195		49		
>10mm	Count	27	Weight	18	
5-9mm	Count	153	Weight	25	
2-4mm	Count	10	Weight	1	
<1mm	Count		Weight		
Black %/fragment count	Blue/Grey %/f	ragment count	White %/fragment count		
	25%		75%		
Associated with	Animal bone		Maximum size		
	2 x Bird distal t four pieces) ?F	,	24mm		
Elements presents					
Skull, teeth, scapula, misc vert	ebrae fragments,	rib, misc limb fra	gments, humeru	s, rad/ulna,	
carpal, proximal phalanges, ?p	elvis fragment, ta	rsal			
Comments					
Some warping					

SK No	Other No's		Cremation Type		
AF100	A184		Cremation/Pyre		
Age	Age estimate	1	Sex	•	
MNI	Total Fragme	ent count	Total Weigh	it (g)	
1	24				
>10mm	Count	1	Weight	<1	
5-9mm	Count	21	Weight	3	
2-4mm	Count	2	Weight	<1	
<1mm	Count		Weight		
Black %/fragment count	Blue/Grey %/	fragment count	White %/fragment count		
			100%		
Associated with	Animal bone		Maximum size		
			12mm		
Elements presents	1		1		
Too fragmented for identification	n				
Comments					

SK No	Other No's	Condition
AF128	A202	Poor, worn
Age	Age estimate	Sex
Completeness	Fragment/Element count	Weight (g)
	14	38
Associated with	Additional bone	
Elements presents		
Tibia and femur fragments		
Estimated height		
Too fragmented and worn for r	neasurements.	
Comments		
No grave goods.		

SK No	Other No's		Cremation Ty	pe	
AF130	A236		Boxed cremation		
Age	Age estimate		Sex		
Adult	Adult		Uncertain		
MNI	Total Fragmer	nt count	Total Weight ((g)	
	340		214		
>10mm	Count	138	Weight	108	
5-9mm	Count	104	Weight	81	
2-4mm	Count	56	Weight	25	
<1mm	Count	5	Weight	<1	
Black %/fragment count	Blue/Grey %/f	ragment count	White %/fragment count		
5%	70%		25%		
Associated with	Animal bone		Maximum size		
			48mm		
Elements presents	I		•		
Skull, mandible, teeth, scapula,	clavicle, misc ve	rtebrae, sternum,	ribs, misc limb,	humerus,	
rad/ulna, carpals, pelvis, sacrum	n, femur, tibia/fib				
Pathologies					
Slight arthritis on one carpal					
Comments					
Some warping and cracking					

SK No	Other No's		Cremation Type			
AF144	A242		Cremation/F	Cremation/Pyre		
Age	Age estima	ite	Sex	•		
MNI	Total Fragr	ment count	Total Weight (g)			
	450+		145			
>10mm	Count	98	Weight	90		
5-9mm	Count	110	Weight	25		
2-4mm	Count	42	Weight	5		
<1mm	Count 200+		Weight	20		
Black %/fragment count	Blue/Grey	%/fragment count	White %/fragment count			
	10%		90%			
Associated with	Animal bor	ne	Maximum s	size		

	7	76mm
Elements presents		
Thoracic vertebrae, misc limb, p	is, femur, Tibia/fib	
Comments		
Warping and cracking		

SK No	Other No's		Cremation Type		
AF154	A138		Cremation/Pyre		
Age	Age estimate	9	Sex	•	
	-				
MNI	Total Fragm	ent count	Total Weigh	it (g)	
	95		13		
>10mm	Count	13	Weight	3	
5-9mm	Count	29	Weight	7	
2-4mm	Count	52	Weight	3	
<1mm	Count	3	Weight	<1	
Black %/fragment count	Blue/Grey %	/fragment count	White %/fragment count		
	20%		80%		
Associated with	Animal bone	;	Maximum size		
			14mm		
Elements presents			1		
Skull, limb misc,					
Comments					
Some warping and cracking					

SK No	Other No's	Condition
AF178	A280 and A277	Poor
Age	Age estimate	Sex
Completeness	Fragment/Element count	Weight (g)
Incomplete	15	14
Associated with	Additional bone	
Elements presents		
Fragments of teeth, bone and	sediment, humerus fragments	
Estimated height		
Insufficient bone for measure	ments.	
Comments		
Found with iron object.		

SK No	Other No's		Cremation Type		
AF183	A289		Cremation/Pyre		
Age	Age estimate		Sex		
MNI	Total Fragme	nt count	Total Weight (g)		
	26		11		
>10mm	Count	19	Weight	8	
5-9mm	Count	7	Weight	3	
2-4mm	Count		Weight		
<1mm	Count		Weight		
Black %/fragment count	Blue/Grey %/1	ragment count	White %/frag	gment count	

	10%	90%				
Associated with	Animal bone	Maximum size				
		36mm				
Elements presents						
Skull, teeth, scapula, misc	vertebrae, misc limb,					
Comments						

SK No	Other No's	Condition
AF188	A305	Skull:good/fair, bone
		eroded/fair
Age	Age estimate	Sex
Adult	25-35 yrs	Female
Completeness	Fragment/Element count	Weight (g)
Incomplete	57	1,516
Associated with	Additional bone	
	none	
Elements present		
Skull, mand, scap, L+R Hu	ı, L=R Rad/ul, Rmc2 and 3, Lmc2, L₁	R Fe, L+R Tib and fragments
Estimated height		
172.7cm/69 inches/5'7"		

Tooth record

10011	0001	ŭ							1								
Right	8	7	6	5	4	3	2	/	/	2	3	4	5	6	7	8	Left
Right	8	7	6	5	4	3	2	1	1	2	3	4	5	6	7	8	Left
																С	

Molar attrition scores:

	Right	M3	M2	M1	Left	M1	M2	M3
Maxilla		2	2+	3+		3+	3	2+
Mandible		2	3	3+		3+	3	2+

Calculus	Low
Hypoplasia	None
Non-metric traits	
Periodontal disease	Slight
Cavities	1 small cavity of 2mm on surface of LLM3
Abcesses	None

Cranial indexes

erana maexee	
Cranial index	78.3
Cranial Length-Height index	61.1
Mean Height index	68.5
Total facial height	67.6
Upper facial index	53.4
Palatal index	114.2
Nasal index	45.4
Orbital index	89.2

Pathologies

Slight periodontal disease

Probable prolonged sinus infection

Comments

Copper staining on inside of rear right mandible - ?coin/object Average face/orbits/palate, narrow nasal aperture. Nails found in grave. Skeleton has right arm folded across body.

SK No	Other No's		Cremation Typ	be		
AF211	A330		Cremation/Pyre			
Age	Age estimate		Sex			
Adult						
MNI	Total Fragmen	t count	Total Weight (g)		
	290		282			
>10mm	Count	186	Weight	267		
5-9mm	Count	66	Weight	12		
2-4mm	Count	25	Weight	3		
<1mm	Count	21	Weight	<1		
Black %/fragment count	Blue/Grey %/fi	agment count	White %/fragment count			
5%	25%		70%			
Associated with	Animal bone		Maximum size			
			72mm			
Elements presents	•		•			
Skull, mandible, scapula, misc v	vertebrae, thoraci	c vertebrae, ribs,	misc limb, hume	erus, rad/ulna,		
pelvis, sacrum, femur, tibia/fib, t	arsal					
Comments						
Comments						

Some warping, twisted bone and cracking

SK No	Other No's	Condition
HF1	H2 and 1	Poor
Age	Age estimate	Sex
Mature	40-50+	Male
Completeness	Fragment/Element count	Weight (g)
Incomplete	196	942
Associated with	Additional bone	
Elements presents		
Skull and mandible fragment	s, iso teeth, Lrad/ul, pel, R + L Fe,	L + R Tib, L + R Fib
Estimated height		
Insufficient bone for measure	ements	
Comments		
No grave goods. Rodent gna	wing.	

Tooth record

														С			
Right	8	7	6	/	4	3	2	/	/	/	/	/	/	6	7	8	Left
Right	8	7	6	5	4	3	/	/	/	/	/	/	/	/	/	/	Left

1

Molar attrition scores:

	Right	M3	M2	M1	Left	M1	M2	M3
Maxilla		3	3-4	4		4-5	4-5	3-4
Mandible		4	4-5	5+				

Dental

Calculus	Low
Hypoplasia	None
Non-metric traits	
Periodontal disease	Present
Cavities	Upper left molar 1
Abscesses	None

Cranial indexes

Cranial index	Skull too frogmonted and worn
	Skull too fragmented and worn
Cranial Length-Height index	Skull too fragmented and worn
Mean Height index	Skull too fragmented and worn
Total facial height	Skull too fragmented and worn
Upper facial index	Skull too fragmented and worn
Palatal index	Skull too fragmented and worn
Nasal index	Skull too fragmented and worn
Orbital index	Skull too fragmented and worn

Pathologies

HF2	H4, H5, H6 and H7	Fair - poor						
Age	Age estimate	Sex						
Adult	25-35	Male						
Completeness	Fragment/Element count	Weight (g)						
Incomplete	104	533						
Associated with	Additional bone							
Elements presents	L							
Skull, maxilla and mandible frag	ments, L Hu, pelvis, L + R Fe, R T	ib, R Fib, L Calc						
Estimated height								
Insufficient bone for measurements								
Comments								
No grave goods.								

Tooth record

Right	/	/	/	/	/	/	/	/	/	/	/	4	5	6	7	8	Left
Right	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	8	Left

Molar attrition scores:

	Right	M3	M2	M1	Left	M1	M2	M3
Maxilla						3-4	3	2+
Mandible								

Dental

Bontai	
Calculus	None
Hypoplasia	None
Non-metric traits	
Periodontal disease	None
Cavities	None
Abscesses	None

Incomplete skull/maxilla/mandible fragments only	
	Incomplete skull/maxilla/mandible fragments only

Pathologies

Enamel hypoplasia. Slight twisting of left humerus - ?occupational.

Comments

Pelvis male.

SK No	Other No's	Condition
HF4	H9	Fair/fragmentary
Age	Age estimate	Sex
Young adult	17-25	?Male
Completeness	Fragment/Element count	Weight (g)
Incomplete	122	628
Associated with	Additional bone	
Elements presents		
Skull and mandible fragme	nts, R Hu, R Rad, L + R Fe	
Estimated height		
Insufficient bone for measu	rements	
Comments		
No grave goods.		

Tooth record

100111	nfe	u															
Right	8	7	6	5	4	3	2	1	1	2	3	4	5	6	7	/	Left
Right	/	7	6	5	4	3	/	1	/	/	/	4	5	6	7	/	Left

Molar attrition scores:

	Right	M3	M2	M1	Left	M1	M2	M3
Maxilla			1	1-2		1-2	1	
Mandible			2	2+		2+	2	

Dental

Dental	
Calculus	Low
Hypoplasia	None
Non-metric traits	
Periodontal disease	None
Cavities	None
Abscesses	None

Cranial indexes

Cranial index	Skull too fragmented and worn
Cranial Length-Height index	Skull too fragmented and worn
Mean Height index	Skull too fragmented and worn
Total facial height	Skull too fragmented and worn
Upper facial index	Skull too fragmented and worn
Palatal index	Skull too fragmented and worn
Nasal index	Skull too fragmented and worn
Orbital index	Skull too fragmented and worn

Comments Incisors more heavily worn

SK No	Other No's	Condition
HF6	H15	Poor
Age	Age estimate	Sex
?Adult		
Completeness	Fragment/Element count	Weight (g)
Incomplete	7	33
Associated with	Additional bone	
Elements presents		
Fragments of R Rad and skull		
Estimated height		
Insufficient bone for measureme	ents	
Comments		
No grave goods.		

SK No	Other No's	Condition				
HF9	H13	Poor				
Age	Age estimate	Sex				
Adult	33-45					
Completeness	Fragment/Element count	Weight (g)				
Incomplete	56	129				
Associated with	Additional bone					
Elements presents						
Skull, maxilla and mandible frag	gments, clavicle					
Comments	-					
No grave goods.						

Tooth record

10001	1000								1								
Right	-	-	-	-	-	-	-	-	-	-	-	-	-	6	7	/	Left
Right	/	/	/	/	/	/	/	/	/	/	/	/	/	6	7	8	Left
				а	а												

Molar attrition scores:

	Right	M3	M2	M1	Left	M1	M2	M3
Maxilla								
Mandible						5+	5	4

Dental	
Calculus	None
Hypoplasia	None
Non-metric traits	
Periodontal disease	Present
Cavities	None
Abscesses	Under Lower right 5 and 6

Cranial indexes

Orumar mackes	
Cranial index	Incomplete skull/maxilla/mandible fragments only
Cranial Length-Height index	
Mean Height index	
Total facial height	
Upper facial index	
Palatal index	
Nasal index	
Orbital index	

Pathologies

Periodontal disease, abscesses on mandible

Comments

No grave goods.

SK No	Other No's	Condition
HF10	H14	Poor
Age	Age estimate	Sex
Adult		Male
Completeness	Fragment/Element count	Weight (g)
Incomplete	146	466
Associated with	Additional bone	
Elements presents		
Skull and mandible (no tee	eth), L + R Fe, L Tib	
Estimated height		
v		
Comments		

Highly fragmented skull, fragile. No grave goods.

SK No	Other No's	Condition				
HF11	H16	Poor				
Age	Age estimate	Sex				
Adult		?Female				
Completeness	Fragment/Element count	Weight (g)				
Incomplete	23	408				
Associated with	Additional bone					
Elements presents	•					
L + R distal Fe, L + R proximal	Tib					
Estimated height						
Insufficient bone for measureme	ents					
Comments						

No grave goods. Femur Bd in female range.

SK/Feature No	Other No's	Condition
HF13	H17 and H19	Poor
Age	Age estimate	Sex
Adult		Uncertain
Completeness	Fragment/Element count	Weight (g)
Incomplete	5 (HSR and Faunal)	128
Associated with	Additional bone	
	H19 SX2 produced remains of	
	a dog/wolf mandible	
Elements presents		
Hu and Fe fragment in Sx1	, Rad and Fe (right) in Sx2	
Estimated height		
Comments		
Could canid mandible be fr	om a pelt? Possible residual bone	

SK No	Other No's	Condition
HF14	H16	Fair - Poor
Age	Age estimate	Sex
Adult		Uncertain
Completeness	Fragment/Element count	Weight (g)
Incomplete	42	143
Associated with	Additional bone	
Elements presents		
Skull fragments		
Comments		
No grave goods.		

SK No						Other No's						Co	onditi	Condition					
HF14						H20					Fair - Poor								
Age						Age	estin	nate				Se	X						
Young	adult	t				18-2	0					Fe	male						
Compl	eten	ess				Frag	men	t/Elen	nent	coun	t	We	eight	(g)					
Incomp	olete					97						58							
Associ	ated	with	1			Add	itiona	al bon	е										
Elemer	Elements presents																		
Skull a	nd m	andik	ole fra	gmer	nts														
Comm	ents			•															
Head u	pside	e dow	vn in f	eatur	e. No	o grav	e goo	ds. M	andik	ole su	ggest	s a n	oticea	able p	ointe	d chir	l.		
							•												
Right	8	/	/	/	4	/	/	/	/	/	/	4	/	/	/	8	Left		
Right	8	7	6	5	4	3	2	1	1	2	3	4	5	6	7	/	Left		
Molar a	attritid	on sc	ores.																

 molai attii	lion scores.							
	Right	M3	M2	M1	Left	M1	M2	M3

Maxilla	1					1
Mandible	1-2	2	2-3	2-3	2	

Dental	
Calculus	Low
Hypoplasia	None
Non-metric traits	None
Periodontal disease	None
Cavities	None
Abscesses	None

SK No	Other No's	Condition						
HF16	H27	Fair - Poor						
Age	Age estimate	Sex						
Adult		Male						
Completeness	Fragment/Element count	Weight (g)						
Incomplete	190	730						
Associated with	Additional bone							
Elements presents	1							
L + R distal Hu, L + R Rad, R U	l, Pelvis, L + R Fe							
Estimated height								
Insufficient bone for measureme	ents							
Pathologies and Comments								
Robust, large femur – Male. Exc	Robust, large femur – Male. Exotoses around femur head fusion line							
Comments								
No grave goods.								

SK No	Other No's	Condition
HF17	H23	Poor, some root damage
Age	Age estimate	Sex
Adult	30-45	Uncertain
Completeness	Fragment/Element count	Weight (g)
Incomplete	76	134
Associated with	Additional bone	Fragile and fragmented
Elements presents		
Maxilla and mandible frage	ments/teeth,Hyoid, L + R Hu, Rad and	d UI, 3 cervical, 1 lumbar, pelvis, L
Comments		
No grave goods.		

Tooth record

10011	10001	ŭ							1								
Right	8	7	6	5	/	/	/	1	/	/	/	/	5	6	7	8	Left
Right	8	/	6	/	/	/	/	/	1	/	/	/	/	6	/	8	Left
		а															

Molar attrition scores:

	Right	M3	M2	M1	Left	M1	M2	M3
Maxilla		3	4	4+		4+	4	3
Mandible		4	/	5+		5+	/(a)	4

Dental	
Calculus	Low
Hypoplasia	None
Non-metric traits	
Periodontal disease	Present
Cavities	None (although some teeth are missing)
Abscesses	Lower left 2 nd molar

Cranial indexes	
Cranial index	Only maxilla and mandible fragments found
Cranial Length-Height index	
Mean Height index	
Total facial height	
Upper facial index	
Palatal index	
Nasal index	
Orbital index	

Pathologies		

SK No	Other No's	Condition
HF18	H24	Poor - Fair
Age	Age estimate	Sex
Adult		
Completeness	Fragment/Element count	Weight (g)
Incomplete	24	179
Associated with	Additional bone	
Elements presents		
Fragments of L+R Tib/Fib, L+R	calc and Tal	
Estimated height		
Insufficient bone for measurem	ents	
Comments		
No grave goods		

SK No	Other No's	Condition			
HF22	H30, H31, H32, H33	Fair			
Age	Age estimate	Sex			
Adult	20+	Male			
Completeness	Fragment/Element count	Weight (g)			
Incomplete	87	1,550			
Associated with	Additional bone	Disturbed. Vertebrae and other			
		fragments found in pelvic area			
Elements presents	•				
Skull fragments, Clav, LHu, LRad, Lul, 4 thoracic, 2 lumbar, pelvis, sacrum, L + R Fe, L + R					
patella, L + R Tib, L + R Calc, L	+ R Tal, ear bones				
Estimated height					
163.44 cm/65.4 inches/ 5'4"					

Tooth record

Right	Left
Right	Left

Molar attrition scores:

	Right	M3	M2	M1	Left	M1	M2	M3
Maxilla								
Mandible								

Dental	
Calculus	Teeth not present
Hypoplasia	Teeth not present
Non-metric traits	
Periodontal disease	Teeth not present
Cavities	Teeth not present
Abscesses	Teeth not present

Cranial indexes Cranial index	Only disarticulated fragments of skull found	
Cranial Length-Height index		
Mean Height index		
Total facial height		
Upper facial index		
Palatal index		
Nasal index		
Orbital index		

Pathologies	
Left calcaneus and talus fused together	
Comments	
Left femur: $Bd=72$, popliteal L = 118. Right femur: $Bd = 73$, popliteal L = 120	

No grave goods.

SK No	Other No's	Condition
HF24	H37	Poor - Fair
Age	Age estimate	Sex
Adult?		?Male
Completeness	Fragment/Element count	Weight (g)
Incomplete	92	209
Associated with	Additional bone	
	3 cattle fragments – mandible and skull.	
Elements presents	·	
Pelvis, Femur, Tibia, Fib, Calc		
Estimated height		
Insufficient bone for measureme	ents	
Comments		
No grave goods		

SK No			Other N	lo's				Condi	tion			
HF25			H38				Fair					
Age			Age estimate					Sex				
Adult			18-25				Female					
Complete	eness		Fragme	nt/Eler	nent	cour	t		Weight (g)			
Incomplet			57				•	476				
Associate			Additio	nal bor	ie.			470				
7100001410			/									
.												
	presents		B 11 1			<u></u>						
	la and man	dible, L +	R Hu, L +	R Rad,	L UI,	2 lun	ibar, p	elvis, sac	crum, L	_ ⊢e		
Estimated												
Insufficien	it bone for r	neasuren	nents									
Tooth roo	ord											
Tooth rec	010				1						nfe	
Right /	/ /	1 1	1 1	1	1	2	3	4 5	6	7	8	Left
Right /	/ /	1 1	2	/	1	2	3	4 5	6	7	8	Left
rugni			2	/		2	3	4 U	U	1	o nfe	LEIL
					I						me	
Molar attr	ition scores	•										
wolar attr	Right	M3	M2	M1		Let	t	M1	M	2	M3	
Maxilla	rugitt	IVIO	IVIZ			201	L	2+/3	2	_	nfe	
Mandible								2+/0	2		nfe	
Manuble								<u></u>	2		IIIC	
Dental												
Calculus			Low									
Hypoplasi	a		None									
Non-metri												
Periodonta			None									
Cavities			None									
Abscesse	s		None									
7100000000	5		None									
Cranial in	dexes											
Cranial in			Only left r	naxilla	and le	eft ma	andible	e found				
	ength-Heigh	tindex										
Mean Heig												
Total facia												
Upper fac												
Palatal inc												
Nasal index												
Orbital index												
2			I									
Pathologie	es											
	area of pel	vis/proxir	nal femur									
0.000	_											
Comment	Comments											
Fairly rob	ust femur at	top end	of female r	ange N	o ara	ve ar	pods					
					J gra	yu						

SK No	Other No's	Condition
HF26	H42	Poor
Age	Age estimate	Sex
?Adult		

Completeness	Fragment/Element count	Weight (g)				
Incomplete	38	116				
Associated with	Additional bone					
Elements presents						
R Hu,L Rad, L + R Fe, L Tib, L	R Hu,L Rad, L + R Fe, L Tib, L + R Fib					
Estimated height						
Insufficient bone for measurements						
Comments						
Found with Cu alloy ring and iron chain.						

SK No	Other No's	Condition			
HF27	H41	Poor, worn			
Age	Age estimate	Sex			
?adult					
Completeness	Fragment/Element count	Weight (g)			
Incomplete	52	157			
Associated with	Additional bone				
Elements presents	-				
L + R Fe fragments, R Tib, Sku	Il fragments				
Estimated height					
Insufficient bone for measurements					
Comments					

SK No	Other No's	Condition
HF28	H45	Poor
Age	Age estimate	Sex
?Adult		
Completeness	Fragment/Element count	Weight (g)
Incomplete	15	77
Associated with	Additional bone	
Elements presents		
Tibia fragments		
Estimated height		
x		
Comments		
No grave goods.		

SK No	Other No's	Condition
HF34	H47	Fair - poor
Age	Age estimate	Sex
Adult	25-35	Female
Completeness	Fragment/Element count	Weight (g)
Incomplete	68	950
Associated with	Additional bone	
Elements presents		
Skull and mandible (inc), R I	Hu, R2nd PPH, R + L Fe, R patella,	L + R Tib, R Fib, R Calc
Estimated height	· · · ·	
Insufficient for measuremen	ts	

Tooth	recor	d															
_	ne															ne	
Right		/	/	/	/	/	/	/	/	/	/	/	/	6	/		Left
Right		7	6	5	/	3	/	/	/	/	3	4	5	6	/		Left
	ne															ne	

Molar attrition scores:

	Right	M3	M2	M1	Left	M1	M2	M3
Maxilla		/	/	/		4	/	
Mandible		ne	/	4		4	2/2+	ne

Dental

Dental	
Calculus	Low
Hypoplasia	None
Non-metric traits	
Periodontal disease	None
Cavities	None
Abscesses	None

Cranial indexes

Oranial indexes	
Cranial index	Skull too fragmented and worn
Cranial Length-Height index	Skull too fragmented and worn
Mean Height index	Skull too fragmented and worn
Total facial height	Skull too fragmented and worn
Upper facial index	Skull too fragmented and worn
Palatal index	Skull too fragmented and worn
Nasal index	Skull too fragmented and worn
Orbital index	Skull too fragmented and worn

Pathologies

Slight arthritis on right 2nd proximal phalange

Comments

Light build. No grave goods.

SK No	Other No's	Condition			
U/S	A320	Poor - Fair			
Age	Age estimate	Sex			
Adult		Uncertain			
Completeness	Fragment/Element count	Weight (g)			
Incomplete	52	190			
Associated with	Additional bone				
Elements presents		I			
2 tibia fragments and 50 sm	naller fragments of bone				
Estimated height					
Insufficient bone for measu	rements				
Comments					
No grave goods					

18.10 Assessment of charred plant macrofossils and other remains

by Val Fryer, Church Farm, Sisland, Loddon, Norwich, Norfolk, NR14 6EF February 2012

Introduction and method statement

Excavations in Area A1 recorded features of probable Late Iron Age to post-Medieval date. Samples for the retrieval of the plant macrofossil assemblages were taken from ditch fills, pyre deposits, cremations and post-hole/stake hole fills, and seventeen were submitted for assessment.

The samples were processed by manual water flotation/washover and the flots were collected in a 300 micron mesh sieve. The dried flots were scanned under a binocular microscope at magnifications up to x 16 and the plant macrofossils and other remains noted are listed in Table 18.30. Nomenclature within the table follows Stace (1997). All plant remains were charred. Modern fibrous roots were also recorded within most assemblages.

The non-floating residues were collected in a 1mm mesh sieve and sorted when dry. All artefacts/ecofacts were retained for further specialist analysis.

Results

Cereal grains/chaff, seeds of common weeds and nutshell fragments were recorded within all but four samples, although most were present as single specimens within an assemblage. Preservation was generally quite poor, with many of the cereals and seeds being puffed and distorted, probably as a result of combustion at very high temperatures.

Although elongated 'drop-form' wheat (*Triticum* sp.) grains of probable emmer (*T. dicoccum*) or spelt (*T. spelta*) type were noted within three assemblages, and spelt glume bases were recorded within a further three samples, most grains were too poorly preserved for close identification. Sample 3, from pyre deposit AF22, contained a single, large, shallow pulse cotyledon, which was tentatively identified as a lentil (*Lens culinaris*).

Weed seeds were particularly scarce, with most occurring within the Roman pyre deposits. All were of common grassland/wasteland taxa including brome (*Bromus* sp.), fat-hen type (Chenopodiaceae), small legumes (Fabaceae), ribwort plantain (*Plantago lanceolata*), knotgrass (*Polygonum aviculare*) and field madder (*Sherardia arvensis*). Onion-couch (*Arrhenatherum* sp.) type tubers were present within all but one of the pyre/cremation deposits, but that one sample (19, from pyre deposit AF154) did contain a single possible pignut (*Conopodium majus*) tuber. Small fragments of hazel (*Corylus avellana*) nutshell were present within three assemblages. Charcoal/charred wood fragments were present at varying densities throughout, and although other plant macrofossils were generally scarce, most of the pyre deposits and cremation assemblages also contained pieces of indeterminate charred root/stem.

Fragments of black porous and tarry material were present throughout. Although most were probable residues of the combustion of organic remains (including the bodies of the deceased) at very high temperatures, those within post-Medieval ditch AF117 (sample 21) were very hard and brittle, and were probable bi-products of the combustion of coal. Small pieces of coal were present within most assemblages although, at the time of writing, it was not known whether these were contemporary with the deposits from which the samples were taken, or later contaminants. Small vitreous globules were noted within eight assemblages including those from the pyre and cremation deposits. Samples 20 (pyre deposit AF144) and 18 (cremation AF130) also included small ferrous concretions.

Discussion

Although small, the four ditch assemblages of Late Iron Age or Roman date (samples 12 and 14 from feature JL5 and samples 15 and 16 from feature JL6) would all appear to be

derived from scattered hearth or midden waste, some or all of which was probably accidentally incorporated within the feature fills.

The Roman pyre and cremation deposits are of particular note as they contain the highest density of material, much of which was probably burnt in situ beneath the pyres. The composition of the assemblages would appear to indicate that the pyres, which were almost certainly built largely of wood and brush, were constructed within areas of uncleared open grassland. Although grains and chaff are recorded, it is unlikely that these are indicative of food offerings to the deceased. It is considered far more probable that the cereals are derived from the use of processing waste as kindling for the pyre, as contemporary parallels for this practise have now been noted from a number of sites within eastern England and the east Midlands. However, the possible lentil seed within sample 3 is potentially of interest. Although lentils were a known food plant within Roman Britain, they were imported from the Mediterranean and, therefore, their occurrence within a cremation deposit may be indicative of some moderate degree of status. It is possibly of note that a pyre deposit from the Garrison Urban Village excavation (Fryer forthcoming) contained a single date (Phoenix dactylifera) fruit, a further indicator of both affluence and influence within the local population. Although evidence for the deposition of food/plant remains within the cremations is minimal, the presence of both vitreous and ferrous residues within the current assemblages may indicate that certain artefacts were included within the pyres, possibly in the form of personal adornments on the bodies of the deceased.

The remaining assemblages are of little note, although pit/post-hole JF 3 (sample 13) does contain a very high density of charcoal/charred wood.

Conclusions and recommendations for further work

In summary, although most of the recovered assemblages are small and sparse, there is evidence that, during the Roman period, the immediate area was acting as a focus for ritual funerary activities, some of which may have involved the inclusion of imported foodstuffs and personal items within the cremation pyres.

As none of the current assemblages contain a sufficient density of material for quantification (i.e. 100+ specimens), no further analysis is recommended. However, a summary of this assessment should be included within any publication of data from the site.

sample no	12	14	15	16	3	9	10	17	19	20	11	18	13	1	2	4	21	
Finds no	J4	J24	J28	J33	A49	A147	A178	A194	238	239	108	203	J20	A2	A3	A52	249	
Feature no	JL5	JL5	JL6	JL6	AF22	AF80	AF33	AF100	AF154	AF144	AF73	AF130	JF3	AF7	AF6	AF32	AF117	
Feature type	ditch	ditch	ditch	ditch	pydep	pydep	pydep	pydep	pydep	pydep	crem	crem	pit/ ph	ph	ph	sh	ditch	\square
Date	LIA/ER	LIA/ER	LIA/ER	LIA/ER	R	R	R	R	R	R	R	R	R?	R/S	R/S	R/S	p-med	\square
Cereals& other food																		
plants																		
Triticum sp. (grains)	xcf		Х		xcf													\square
<i>T. Spelta</i> L. (glume bases)						х	х						xcf					$\left[\right]$
Cereal indet. (grains)		Х	Х	х	Х							Х					xcffg	\square
Lens culinaris Medikus					xcf													\square
Herbs																		
Arrhenatherum sp. (tubers)					x	х	x	xcf		х		xcf						
Atriplex sp.						Х												\square
Brassicaceae indet.							х					Х						\square
Bromus sp.			Х	xcf														\square
Chenopodium album L.						Х												\square
Chenopodiaceae						XX												\square
Conopodium majus L.									xcf									
(tubr)																		
Fabaceae indet.	Х					Х												
Plantago lanceolata L.						Х												
Polygonum aviculare L.						Х	х											
Polygonaceae indet.						XX	х					Х						
Sherardia arvensis L.							х											
Veronica hederifolia L.						Х												
Tree/shrub																		
macrofossils																		
Coryllus avellana L.	Х	Х										Х						
Other plant macrofossils																		
Charcoal >2mm	XXXX	XXXX	XXXX	XXXX	XXX	XXXX	XXXX	XXX	XX	XXXX	XXXX	XXX	XXXX	ХХ	х	х	ХХ	
Charcoal <2mm	XXX	XXX	XX	XXX	XXXX	XXX	XXXX	Х		XXX	XXXX	Х	XXXX	х			Х	
Charcoal >5mm		х	х	х		XX						х	х					
Charred root/stem						XXX	Х	Х	XX	Х		XX	х				Х	
Indet. buds		Х			Х							Х						
Indet seeds						х						Х					х	

Indet tubers						XX	Х										
Other remains																	
Black, porous, 'cokey' material	ХХ	x			x		x	XX	x	x	x	х	x	х	х	x	ХХ
Black tarry material	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х		Х			х	х	XXX
Bone	x xb	xb	x xb	x xb	x xb	x xb	x xb		х	x xxb	xxb	x xxb	x xb				
Burnt/fired clay	х		х	х			х			х	х		х				
Burnt stone							Х										
Ferrous concretions										Х		XX					
Fish bones													х				Х
marine mollusc shell																	Х
mortar/plaster																х	
small coal frags	XX	Х			х	Х	Х	х	XXX	Х	XXX	XX	х	XX	х	х	XXX
small mammal/amphibian bone											x						
vitreous material					XX	х		х	Х	Х			х	х	х		
sample volume (litres)	28ss	28ss	16	28ss	16	16	35	16	16	98	18	56ss	16	16	16	16	28ss
volume of flot (litres)	0.1	0.2	0.1	<0.1	0.5	0.3	0.7	<0.1	<0.1	0.2	0.1	0.1	0.3	<0.1	<0.1	<0.1	<0.1
% sorted	100	50	100	100	25	50	12.5	100	100	50	100	100	50	100	100	100	100

Table 18.30

Key to Table

x = 1 - 10 specimens xx = 11 - 50 specimens xxx = 51 - 100 specimens xxxx = 100+ specimens cf = compare b = burnt ss = sub-sample PD = pyre deposit Crem = cremation ph = post-hole sh = stake hole LIA/ER = Late Iron Age/Early Roman R = Roman R/S = Roman/Saxon PM = post-Medieval

19 References

Aldhouse-Green, M	2001	Dying For The Gods, Human Sacrifice in Iron-Age & Roman Europe. Tempus Publishing.
Allason-Jones, L	1989	Women in Roman Britain
Anon	1648	Siege Map of Colchester
Atkinson, M and Preston, SJ	2015	'Heybridge: A Late Iron Age and Roman Settlement, Excavations at Elms Farm 1993-5' . Internet Archaeology 40 10.11141/ia.40.1.guest
Baldwin, AHF	1930	'A find of coins of Carausius and Allectus from Colchester', <i>Numismatic Chronicle</i> , 5th series, 10, 173-95
Bass, W M	1995	Human Osteology. A Laboratory and Field Manual. Missouri Archaeological Society.
Bayliss, A, Hines, J, Høilund Nielsen, K., McCormac, G, and Scull, C	2013	Anglo-Saxon graves and grave goods of the 6th and 7th centuries AD: a chronological framework, Society for Medieval Archaeology Monograph 33 (London)
Bell, M	1977	Excavations at Bishopstone, Sussex Archaeol Collect 115, 1-
Benfield, S	forthcoming	299 'Late Iron Age and Roman pottery' in Philip Crummy, <i>Excavations in Gosbecks Park 1995-1999</i> (provisional title), CAT Report, forthcoming
Benfield, S	2012	'Finds' in Howard Brooks, Stephen Benfield, Ben Hollaway (CAT) and R Masefield (RPS), <i>Stage 2 archaeological excavations, Alienated Land L/N (Goojerat barracks), Colchester garrison, Colchester, Essex, June-July 2010</i> , CAT Report 588
Bertrand, I	2003	<i>Objets de parure et de soins du corps d'époque romaine dans l'Est picton (Deux-Sèvres, Vienne)</i> , Mémoire de l'Association des Publications Chauvinoises 23 (Chauvigny)
Besley, E, and Bland, RF	1983	The Cunetio treasure: Roman coinage of the third century AD (London)
Bet, P, Fenet, A, and Montineri, D	1989	'La typologie de la sigillée lisse de Lezoux, ler-Ille siecles: considérations générales et formes inédites', SFECAG (ed L Rivet), <i>Actes du Congrès de Lezoux, 4-7 mai 1989: les</i> <i>productions céramiques de Lezoux et du centre de la Gaule,</i> Marseille, 37-54
Bird, J	forthcoming	'Two rare late samian vessels from southern England'
Black, E	1992	'Keyed tile fragments' in Philip Crummy, <i>Excavations at Culver Street, the Gilberd School and other sites in Colchester 1971-85</i> , Colchester Archaeological Report 6, 261-272
Bland, RF and Burnett, A	1988	'Normanby, Lincolnshire in R. F. Bland, and A. Burnett (eds.)
		Coin hoards from Roman Britain VIII: The Normanby hoard and other Roman coin hoards (London), 114-215
Bland, RF, and Carradice, I	1986	'Three hoards from Oliver's Orchard, Colchester', <i>Coin hoards from Roman Britain</i> VI, British Museum Occasional Paper 58 (London), 65-118
Boessneck, J A	1969	Osteological Differences between Sheep (Ovis aries) and Goat (Capra hircus). In D.R. Brothwell & E. S. Higgs (eds.) Science in Archaeology. pp 331-358. London: Thames & Hudson.
Booth, P, Simmonds, A, Boyle, A, Clough, S, Cool, HEM and Poore, D	2010	The late Roman cemetery at Lankhills, Winchester: excavations 2000-2005, Oxford Archaeology Monograph 10 (Oxford)

Drieklass Manal Malfinlass II	0004	Cuidelines to the Standards for recording University Demoirs IFA
Brickley, M and McKinley, JI (eds)	2004	<i>Guidelines to the Standards for recording Human Remains</i> . IFA Paper No.7
Brothwell, D and Higgs, ES	1989	Science in Archaeology. London
Brothwell, DR	1981	Digging Up Bones. Cornell University Press
Brown, N	1992	'The prehistoric pottery' in CAR 6, 317-320
Brown, N	2001	'Pottery' in Atkinson, M., & Preston, S., Prehistoric settlement and burials at Elms Farm, Heybridge, <i>Essex Archaeology &</i> <i>History</i> 32, 57-67
Brugmann, B	2004	Glass beads from early Anglo-Saxon graves (Oxford)
Bryant S. & Niblett, R	1997	'The late Iron Age in Hertfordshire and the North Chilterns'. In Gwilt, A. & Haselgrove C. (eds) <i>Reconstructing Iron Age Societies: new approaches to the British Iron Age</i> . Oxbow Monograph 71. Oxford: Oxbow: 270-281.
Buikstra, JE and Ubelaker, DH (eds)	1994	Standards for Data Collection from Human Skeletal Remains. Arkansas Archaeological Survey Research Series No. 44. Fayetteville.
Burnett, AM	1984	'The East Mersea, Essex, hoard', <i>Coin hoards from Roman</i> <i>Britain</i> 4, British Museum Occasional Paper 43 (London), 39-44
CAR 01	1981	Aspects of Anglo-Saxon and Norman Colchester, Colchester Archaeological Report 1 (Colchester, 1981), by P Crummy
CAR 02	1983	<i>The Roman small finds from excavations in Colchester 1971-9</i> , Colchester Archaeological Report 2 (Colchester, reprinted 1995), by N Crummy
CAR 04	1987	<i>The coins from excavations in Colchester 1971-9</i> , Colchester Archaeological Report 4, Colchester, by N Crummy (ed.),
CAR 05	1988	Nina Crummy, <i>The post-Roman small finds from excavations in Colchester 1971-85</i> , Colchester Archaeological Report 5
CAR 06	1992	<i>Excavations at Culver Street, the Gilberd School, and other sites in Colchester,1971-85</i> , Colchester Archaeological Report 6 (Colchester), by P Crummy
CAR 07	2000	Post-Roman pottery from excavations in Colchester, 1971-85, Colchester Archaeological Report 7, by John Cotter
CAR 09	1993	<i>Excavations of Roman and later cemeteries, churches and monastic sites in Colchester, 1971-88</i> , Colchester Archaeological Report 9, by N Crummy, P Crummy & C Crossan,
CAR 10	1999	Colchester Archaeological Report 10 : Roman pottery from excavations in Colchester, 1971-86, by R P Symonds and S Wade, ed by P Bidwell and A Croom
CAR 11	1995	<i>Camulodunum 2</i> , Colchester Archaeological Report 11 (Colchester) by CFC Hawkes and P Crummy
CAR 12	1993	Animal Bones From Excavations In Colchester, 1971–1985, by Rosemary Luff. Colchester Archaeological Report 12
CAT Report 097	2000	An archaeological desk-based assessment of the Colchester Garrison PFI site, CAT archive report, by K Orr, 2000
CAT Report 184	2002	An archaeological evaluation by fieldwalking and geophysical survey at Colchester Garrison PFI site, Colchester, Essex: January-March 2002, CAT archive report, by H Brooks, 2002
CAT Report 206	2002	An archaeological evaluation by trial-trenching on Areas A, B, D, GJ, H, J, N, V and YP at Colchester Garrison PFI site, Colchester, Essex, June-July 2002, report by Howard Brooks.
CAT Report 246	October 2003	An archaeological watching brief on munitions clearance at Colchester Garrison, Essex, July-October 2002 (evidence for 222

	2003	WWI military practice trenches, CAT project report prepared by Stephen Tyler and Howard Brooks
CAT Report 312	August 2005	Excavations at Abbotstone field, Bell House Pit, Tarmac Colchester Quarry, Warren Lane, Stanway, Colchester, Essex 1999-2001. CAT project report prepared by Laura Pooley and Stephen Benfield.
CAT Report 323	2010	Archaeological excavations at 1 Queens Road, (Handford House, now 'Handford Place'), Colchester, Essex, 2003 and 2004-2005. Report prepared by Kate Orr
CAT Report 345	2006	A Roman temple-tomb at Colchester Royal Grammar School, 6 Lexden Road, Colchester, Essex: August-September 2005. Report prepared by Howard Brooks,
CAT Report 361	2006	Assessment report on the archaeological investigations carried out on Areas C1, C2, E, J1, O, Q, and S1 of the Alienated Land, Colchester Garrison, including the Time Team trenches and the Alienated Land watching brief, 2004-5, CAT archive report, by L Pooley, B Holloway, P Crummy and R Masefield, 2006
CAT Report 588	2012	Stage 2 archaeological excavation, Alienated Land Area L/N (Goojerat Barracks), Colchester Garrison, Colchester, Essex, June-July 2010. Report prepared by Howard Brooks, Stephen Benfield, Ben Holloway (CAT), and R Masefield (RPS), with contributions by Nina crummy, Mark Hassall, Val Rigby, and Adam Wightman
CAT Report 607	2011	Stage 2 archaeological evaluation, Colchester Garrison Alienated Land Area E (formerly Meeanee & Hyderabad Barracks) Colchester, Essex, July 2011. CAT archive report prepared by Howard Brooks, Ben Holloway, and Mark Baister
CAT Report 672	2013	Interim assessment report on Stage 2 archaeological excavations, Alienated Land S2 cross-over, Area S2 (north) Site K, Berechurch Dyke, Colchester Garrison, Colchester, Essex: September-October 2012. Report by CAT in association with RPS, prepared by Stephen Benfield (CAT) and Robert Masefield (RPS).
CAT/RPS Report 292	2005	The Colchester Garrison PFI project, Colchester Garrison, Colchester, Essex: a report on the 2003 excavation of Areas 2, 6, and 10: August-November 2003, CAT archive report, by H Brooks and R Masefield, 2005
Chapman, J and Andre, P	1777	Map of Essex
СІМ	2002	<i>Guidelines on standards and practices for archaeological fieldwork in the Borough of Colchester</i> (Colchester and Ipswich Museums)
Clarke, G	1979	<i>The Roman cemetery at Lankhills</i> , Winchester Studies 3 (Oxford)
Cohen, A and Serjeanston, D	1996	A manual for the identification of bird bones from archaeological sites. Archetype Publications
Cole and Roper	1815	Map of Colchester
Cool, HEM	2004	The Roman Cemetery at Brougham, Cumbria: Excavations 1966 and 1967, Britannia Monograph 21 (London)
Cool, HEM	2011	Diaspora – finding the foreigners.
Crummy, N	2007	'Grave and pyre goods from the cremation and inhumation cemeteries' pp. 261-74 in C. Gibson, 'Minerva: an Early Anglo- Saxon mixed rite cemetery in Alwalton, Cambridgeshire', Anglo- Saxon Studies in Archaeology and History 14, 238-350
Crummy, N	2010	'Bears and coins: the iconography of protection in late Roman infant burials' <i>Britannia</i> 41, 37-93
		223

		infant burials', <i>Britannia</i> 41, 37-93
Crummy, P	2008	'The Roman Circus at Colchester', <i>Britannia</i> , Volume XXXIX, 15-31
Crummy, P, Benfield, S, Crummy, N, Rigby, V, Shimmin, D	2007	<i>Stanway: an elite burial site at Camulodunum,</i> Britannia, Monograph Series, 24
Cunliffe, Barry, and Poole, Cynthia	1991	Danebury: an Iron Age hillfort in Hampshire - Volume 4: the excavations 1979-1988: the site. CBA Research Report 73a
Cunliffe, B	1995	Iron Age Britain (English Heritage/Batsford).
Cunliffe, B	2013	Britain Begins (Oxford University Press)
Davies, B, Richardson, B & Tomber, R	1994	A dated corpus of early Roman pottery from the City of London, CBA Research Report 98
Davies, GMR	1983	'The Oliver's Orchard hoards', <i>Colchester Archaeological Group Bulletin</i> 26, 2-7
Davies, JA and Gregory, T	1991	'Coinage from a <i>civitas</i> : a survey of the Roman coins found in Norfolk and their contribution to the archaeology of the <i>civitas Icenorum</i> ', <i>Britannia</i> 22, 65-101
Davis, SJM	1992	A Rapid Method Of Recording Mammal Bones From Archaeological Sites. English heritage Ancient Monuments Laboratory report 19/92
Dickinson, T, and Härke, H	1992	Early Anglo-Saxon shields, Archaeologia 110 (London)
Drury, PJ	1978	Excavations at Little Waltham 1970-71. CBA Research Report 26, Chelmsford Excavation Committee Report 1, pages 22, 34
Duncan, H, Duhig, C and Phillips, M	2003	'A Late Migration/Final Phase cemetery at Water Lane, Melbourn', <i>Proceedings Cambridge Antiquarian Society</i> 92, 57- 134
Dunnett, R	1971	'Excavations on the site of the former St Mary's Rectory 1967' in <i>Transactions of the Essex archaeological society,</i> Volume III (Third Series) Part 1, 62-77
Eckardt H, and Crummy, N	2008	<i>Styling the body in Late Iron Age and Roman Britain: a contextual approach to toilet instruments</i> , Instrumentum Monograph 36 (Montagnac)
Egan, G	1995	<i>Lead cloth seals and related items in the British Museum.</i> British Museum Occasional Paper 93 (London)
Elmer, G	1941	'Die Münzprägung der gallischen Kaiser von Postumus bis Tetricus in Köln, Trier und Mailand', <i>Bonner Jahrbücher</i> 146, 1- 106
Erith, FH, and Holbert, PR	1970	'The Iron Age "A" Farm at Vinces Farm Ardleigh', <i>Colchester</i> Archaeological Group Bulletin 13 1970, 1-15
Evison, VI	1963	'Sugar-loaf shield bosses', Antiquaries Journal 43, 38-96
Evison, VI	1994	An Anglo-Saxon cemetery at Great Chesterford, Essex, CBA Research Report 91 (York)
Fawcett, A	2005	'The Late Iron Age and Roman pottery' 30-33 in Laura Pooley and Stephen Benfield, <i>Excavations on the cropmark site at</i> <i>Abbotstone Quarry (Bellhouse Farm), Stanway, Colchester,</i> <i>1999-2001</i> , CAT Report 312
Fleming, R	2010	<i>Britain After Rome; The Fall and Rise 400 to 1070</i> , Penguin, London
French	1650	Map of Colchester
Fryer, V	forthcoming	'The charred plant macrofossils and other remains' from the Garrison Urban Village (site 2004.296) Colchester

		Archaeological Trust
Garrow, D, Lucy, S, & Gibson, D	2006	Excavations at Kilverstone, Norfolk: an episodic landscape history, EAA 113
Germany, M	2007	Neolithic and Bronze Age monuments and Middle Iron Age settlement at Lodge Farm, St Osyth, Essex, EAA 117
Gibson, A	2002	Prehistoric pottery in Britain & Ireland
Guido, M	1999	The glass beads of Anglo-Saxon England, c AD 400-700 (London)
Härke, H	1989a	'Knives in Early Saxon burials: blade length and age at death', <i>Medieval Archaeol</i> 33, 144-8
Härke, H	1989b	'Early Saxon weapon burials: frequencies, distributions and weapon combinations' in S. C. Hawkes (ed.), <i>Weapons and warfare in Anglo-Saxon England</i> , Oxford University Committee for Archaeology Monograph 21 (Oxford)
Härke, H	1992	Angelsächsiche Waffengräber des 5. bis 7. Jahrhunderts, Cologne Zeitschrift für Archäologie des Mittelalters 6 (Cologne/Bonn)
Hartley, et al	2006	An inventory of the historical monuments in the city of York. Volume 1, Eburacum, Roman York. Royal Comm. Historical Monuments, England.
Haselgrove, C	1982	'Wealth, prestige and power: the dynamics of late Iron Age political centralization in south-east England' in A. C. Renfrew and S. J. Shennan (eds), <i>Ranking, resources and exchange</i> (Cambridge), 79-88
Haselgrove, C (ed), Armit, I, Champion, TC, Creighton, J, Hill, JD, Hunter, F, and Woodward, A	2001	Understanding the British Iron Age: An Agenda for Action. (The Prehistoric Society)
Havis, R and Brooks, Howard	2004	Excavations at Stansted Airport, 1886-91. East Anglian Archaeology, 107, 101-2.
Hawkes, CFC & Hull, MR	1947	<i>Camulodunum, first report on the excavations at Colchester 1930-39</i> , RRCSAL, 14
Hayden, C. Lawrence, S. and Brady, K with Masefield, R	2015	Great Western Park, Didcot, Oxfordshire. Archaeological investigations to the north of Wantage Road. Post-excavation assessment. Oxford Archaeology South unpub. report
Hillson, S	1986	Teeth. Cambridge Manuals In Archaeology
Hull, MR	1958	<i>Roman Colchester</i> , Report of the Research Committee of the Society of Antiquaries of London, 20 (London)
Jones, A	2003	Dissent and Debauchery: Women and the English Civil War
Koch, U	1997	'Polychrome Perlen in Württemberg/Nordbaden' in U. von Freeden and A. Wieczorek (eds), <i>Perlen: Archäologie, Technik and Statistik</i> , Kolloquien zur Vor- und Frühgeschichte 1 (Bonn), 143-8
Leach, S, Eckardt, H, Chenery, C, G, Müldner, G and Lewis, M	2010	"A 'lady' of York: migration, ethnicity and identity in Roman York," <i>Antiquity</i> 84
Liversidge, J	1968	Britain in the Roman Empire. Redwood Press.
Luff, Rosemary	1993	see CAR 12
Malim, T, and Hines, J	1998	The Anglo-Saxon cemetery at Edix Hill (Barrington A), Cambridgeshire, CBA Research Report 112 (York)
Manning, WH	1985	Catalogue of the Romano-British iron tools, fittings and weapons in British Museum (London)

Archaeological Trust

		<i>in British Museum</i> (London)
Martingell, H	2005	'The prehistoric flints' in Brooks, H, <i>The Colchester Garrison PFI</i> Project, Colchester, Essex, A report on the 2003 excavation of Areas 2, 6, & 10 August-November 2003, CAT Report 292, 53- 54
Martingell, H	2011	'The prehistoric flints' in Pooley, L., Crummy, P., Shimmin, D., Brooks, H., Holloway, B., and Masefield, R., Archaeological investigations on the 'Alienated Land', Colchester Garrison, Colchester, Essex, May 2004-October 2007, 178-181
Marzinzik, S	2003	<i>Early Anglo-Saxon belt buckles, their classification and context,</i> BAR British Series 357 (Oxford)
Masefield, R	2011	Colchester alienated land project, interim report for the Phases 3 to 5 archaeological and heritage investigations, unpublished RPS Report, September 2011
Masefield, R	2016	An assessment of the significance and possible Germanic context of the small ring-ditch defined 'barrow' burials at Colchester Garrison
Masefield, R (ed), Chapman, C, Mudd, A, Hart J, Ellis, P, and King, R	2015	Origins, Development and Abandonment of an Iron Age Village. Further archaeological investigations for the Daventry International rail Freight Terminal, Crick & Kilsby, Northamptonshire 1993-2013 (DIRFT Volume II). Archaeopress, Oxford
Mays, S	1998	The Archaeology Of Human Bones. English Heritage
Mays, S	2004	Human Bones from Archaeological Sites. Guidelines for producing assessment documents and analytical reports. Centre For Archaeology Guidelines. English Heritage.
Mays, S	1998	The Archaeology Of Human Bones. English Heritage
McKinley, JI	1993	Bone fragment size and weights of bone from modern British cremations and the implications for the interpretation of archaeological cremations. <i>International Journal of Osteoarchaeology</i>
Mckinley, JI	2004	Compiling a skeletal inventory: cremated human bone. In Brickley, M and McKinley, J. I. (eds.) <i>Guidelines to the Standards for Recording Human Remains.</i> IFA paper No. 7. BABAO and IFA 2004
McKinley, JI	1994	The Anglo-Saxon Cemetery at Spong Hill Part VIII: the Cremations. East Anglian Archaeology Vol 67
Meaney, AL	1981	Anglo-Saxon amulets and curing stones, BAR British Series 96 (Oxford)
Miles, D	2005	The Tribes of Britain. Who are we? and Where do we come from? Phoenix
Niblett, R	1985	<i>Sheepen, an early Roman industrai site at Camulodunum.</i> Council for British archaeology Research Report 57
Oswald, F, and Pryce, TD	1920	An introduction to the study of terra sigillata, treated from a chronological standpoint, London
Oxford Archaeology	forthcoming	Report on Great Western Park, Didcot, Oxfordshire (2010)
Pader, E-J	1982	Symbolism, social relations and the interpretation of mortuary remains, BAR British Series 82 (Oxford)
Parfitt, K, and Brugmann, B	1997	The Anglo-Saxon Cemetery on Mill Hill, Deal, Kent, Soc
Parkhouse, J and Bonner, D	1997	Medieval Archaeol Monogr 14 , London Investigations at the Prehistoric Site at Coldharbour Farm Aylesbury in 1996, <i>Records of Bucks</i> 39, 73-139

Pastor, L	2009	'La céramique sigillée lisse: des formes très diverses', in E. Kern, G. Oswald and L. Pastor (eds), <i>De terra sigillata. Histoire de la céramique sigillée et des potiers gallo-romains de Dinsheim-Heiligenberg</i> , Collection 'Histoire & Patrimoine' 2, Molsheim, 68-73
Payne, S	1987	Reference codes for wear states in the mandibular cheek teeth of sheep and goats. Journal of Archaeological Science 14, 609 – 614.
Peacock, D, & Williams, D	1986	Amphorae and the Roman economy
Philpott, R	1991	Burial practices in Roman Britain : a survey of grave treatment and furnishing, A.D. 43-410, BAR British Series 219 (Oxford)
Reece, R	2002	The coinage of Roman Britain (Stroud)
Reynolds, A	2011	^{(The} Anglo-Saxon and Medieval Periods' in Booth, P., Champion T., foreman, S., Garwood, P., Glass, H., Munby, J. and Reynolds, A. 2011 <i>On Track: the Archaeology of High Speed 1 Section 1 in Kent.</i> Oxford Wessex Archaeology Monograph No. 4 . 341-399
RIC		Roman Imperial Coinage
Riha, E	2001	Kästchen, Truhen, Tische: Möbelteile aus Augusta Raurica, Forschungen in Augst 31 (Augst)
Roberts, C, and Manchester, K	1995	The Archaeology of Disease. Sutton Publishing Limited.
Roberts, Charlotte, and Cox, Margaret	2003	Health and disease in Britain: from prehistory to the present day
Robertson, A. S	2000	An inventory of Romano-British coin hoards, edited by R. Hobbs, Royal Numismatic Society Special Publication 20 (London)
Rouvier-Jeanlin, M	1972	Les figurines gallo-romaines en terre cuite au Musées des antiquités nationales, Gallia Supplement 24 (Paris)
RPS	2002	Colchester Garrison Alienated Land Outline Archaeological Project Strategy Proposal and Quality Plan. March 2002
RPS	2010	Written Scheme of Investigation (WSI) for Stage 2 archaeological excavations Area A1, Hyderabad and Meeanee Barracks, Colchester Garrison. December 2010, by Rob Masefield
Ryan, P	1993	<i>Cressing Temple, a Templar and Hospitaller manor in Essex</i> (Essex County Council)
Salway. P	1981	Roman Britain. The Oxford History of England. Oxford
Scull, C and Bayliss, A	1999	'Dating burials of the seventh and eight centuries: a case study from Ipswich, Suffolk' in J. Hines, K. Høilund Nielsen and F. Siegmund (eds), <i>The pace of change: studies in early medieval</i> <i>chronology</i> (Oxford), 80-8
Sealey, P	2005	'The pre-Belgic pottery' in Howard Brooks and Robert Masefield The Colchester Garrison PFI project, Colchester, Essex: a report on the 2003 excavation of Areas 2, 6, 10, August-November 2003, CAT Report 292
Sealey, P	2007	'The early and Middle Iron Age pottery', in Crummy <i>et al</i> 2007, <i>Stanway: an elite burial site at Camulodunum</i> , Britannia, Monograph Series, 24, 48-66
Sealey, P	2009	'New light on the wine trade with Julio-Claudian Britain' in <i>Britannia</i> XL, 1-40
Sealey, P	2011	'The pre-Roman pottery' in Pooley, L., Crummy, P., Shimmin, D., Brooks, H., Holloway, B., and Masefield, R., <i>Archaeological</i> <i>investigations on the 'Alienated Land', Colchester Garrison</i> ,

		Colchester, Essex, May 2004-October 2007, 75-86
Serjeantson, D	1996.	<i>The Animal Bones.</i> In S. Needham & T. Spence (eds.) Refuse and Disposal at Area 16 East, Runnymede. Runnymede Research Excavations, Volume 2. pp194-223. London: British Museum Press.
Shimmin, D	1998	'A Late Iron Age and Roman occupation site at Kirkee and McMunn Barracks, Colchester, Essex', in <i>Essex Archaeology</i> and History, 29 , 260-69
Shipman P, Foster G, Schoeninger M	1984	'Burnt bones and teeth: An experimental study of colour, morphology, crystal structure and shrinkage'. <i>Journal of</i> <i>Archaeological Science</i> 1984, 11.
Silver, I	1969	"The ageing of domestic animals", 283-302 in Brothwell and Higgs 1969.
Spain, S	2000	'The Shield in Early Anglo-Saxon Kent: A computer-assisted analysis of shield bosses and an investigation into the use of the shield in the burial rite', unpublished MA dissertation, University of York
Sparrow, Thomas	1767	Map of Colchester
Stace, C	1997	New Flora of the British Isles. Second edition. Cambridge University Press
Stanfield, JA	1929	'Unusual forms of terra sigillata', <i>Archaeological Journal</i> 86 , 113- 51
Stead	1989	Verulamium: . the King Harry Lane site. English Heritage
IM and Rigby V		
Swanton, M. J	1973	The spearheads of the Anglo-Saxon settlements (London)
Tomber, R, & Dore, J	1988	The national Roman fabric reference collection, a handbook, MOLAS Monograph 2
Trotter, M and Glesner, GC	1952	<i>Estimation of Stature from Long Bones of American Whites and Negroes.</i> American Journal Of Physical Anthropology, Volume 10
Trotter, M and Glesner, GC	1958	Re-evaluation of Estimation of Stature based on Measurement of Stature taken during Life and Long Bones after Death. American Journal Of Physical Anthropology, Volume 16.
Tyler, S, and Major, H	2005	The Early Anglo-Saxon cemetery and later Saxon settlement at Springfield Lyons, Essex, East Anglian Archaeology Report 111 (Chelmsford)
Ubelaker, DH	1989	Human Skeletal Remains: Excavation, Analysis, Interpretation 2nd ed Smithsonian Manuals on Archaeology 2. Taraxacum Press: Washington, DC
Underwood, R	2001	Anglo-Saxon weapons and warfare (Stroud)
von Gonzenbach, V	1995	Die römischen Terracotten in der Schweiz (Bern)
Walters, HB	1908	Catalogue of the Roman pottery in the Departments of Antiquities, British Museum, London
Walton Rogers, P	2007	Cloth and clothing in early Anglo-Saxon England (York)
Warwick, R.	1968	The skeletal remains in L.P. Wenham, <i>The Romano British cemetery at Trentholme Drive</i> , York.
Weidner, MKN	2009	Matrizen und Patrizen aus den römischen Trier, Trierer Zeitschrift Beiheft 32, Trier
Welch, M G	2007	Anglo-Saxon Kent. In <i>The Archaeology of Kent to AD 800</i> , Williams, J.H. ed. The Boydell Press, Kent County Council

Wells, C. and Clayton, H	1980	<i>The Human Bones.</i> In Wade-Martins, P,1989, <i>Excavations at North Elmham Park, 1967-1972.</i> East Anglian Archaeology Report No.9. Volume II.
White, R	1988	Roman and Celtic objects from Anglo-Saxon graves, BAR British Series 191 (Oxford)
Wightman, A	2012	'Worked flints' in Brooks, H., Benfield, S., Holloway, B., & Masefield, R., <i>Stage 2 archaeological excavation 37-38,</i> <i>Alienated Land Area L/N (Goojerat barracks), Colchester</i> <i>garrison, Colchester, Essex, June-July 2010,</i> CAT Report 588, 37-38
Wymer, J	1992	'The flints from Culver Street and the Gilberd school' in CAR 6, 320-321

20 Abbreviations and glossary

Anglo-Saxon	period from <i>c</i> AD 410 to Norman conquest of AD 1066
AOD	above Ordnance Survey datum point (Newlyn)
BA	Bronze Age, period from c 2,500 to 700 BC
	courtyard of a castle, usually surrounded by a bank, with a defensive wall or
bailey	
	palisade, and a ditch
barbican	defensive outworks at the entrance to a castle, bailey or town gate; often reinforced
	with towers or turrets
Beaker	late Neolithic to early Bronze Age, or pottery of that period
bgl	below (modern) ground-level
•	
box tile	tile used to form flues in Roman under-floor heating systems (hypocausts)
CAT	Colchester Archaeological Trust
CBA	Council for British Archaeology
CBC	Colchester Borough Council
CBM	ceramic building material
CBM	Ceramic Building Material, ie brick and tile
CIMS	Colchester and Ipswich Museums
context	specific location of finds on an archaeological site (layer or feature)
dark earth	post-Roman topsoil; probably the result of long-term cultivation
daub	clay used in construction (eg of a wall), often found burnt
EAA	East Anglian Archaeology
EAH	Essex Archaeology & History
ECC	Essex County Council
EHER	Essex Historic Environment Record, held by the ECC
ERO	Essex Record Office
faunal	animal
feature	an identifiable thing like a pit, a wall, a drain, a floor; can contain 'contexts'
greensand	a form of sandstone (also 'Kentish Ragstone') from south of the Thames
HEM	Historic Environment Management team (ECC)
lfA	Institute for Archaeologists (formerly the Institute of Field Archaeologists)
imbrex	
	(plural <i>imbrices</i>) curved Roman roof tile pto cover the junction between two <i>tegulae</i>
insula	an area or block within the grid pattern of a Roman town (plural insulae)
Iron Age	period from 700 BC to Roman invasion of AD 43
LBA	Late Bronze Age <i>c</i> 1,000-800 BC
LIA	Late Iron Age, c 150 BC-AD 43
layer	distinct or distinguishable deposit of soil
lithics	actually 'stones', but here means 'flints'
make-up	material dumped to raise ground-level
MHB	Meeanee and Hyderabad Barracks
medieval	period from AD 1066 to c 1500
Mesolithic	after melting of ice sheets, circa 10000-4500 BC
messuage	a dwelling house and adjacent buildings, including the land used by the household
МВА	Middle Bronze Age, <i>c</i> 2,000-1,000 BC
modern	period from the 19th century onwards to the present
natural	geological deposit undisturbed by human activity
Neolithic	period from <i>circa</i> 4,500 to 2,500 BC
NGR	National Grid Reference
Norman	relating to the period from AD 1066 to c AD 1154
	200

opus signinum pantile peg-tile post-medieval <i>PPS</i> prehistory	Roman 'concrete' with pink appearance due to the addition of brick/tile fragments tile most commonly associated with roofs of out-buildings or lean-tos from C17th rectangular roof tile of medieval or later date period from c 1500 to c 1850 <i>Proceedings of the Prehistoric Society</i> the years BC
REME	Royal Electrical and Mechanical Engineers
residual robber trench	something out of its original period context (eg a Roman coin in a modern pit) a trench left after the robbing of building materials from a foundation; eg Roman foundations were often robbed in the medieval period
Roman	the period from AD 43 to c AD 410
RRCSAL septaria tegula	Report of the Research Committee of the Society of Antiquaries of London calcareous, clay concretions found on the Essex and Suffolk coast (plural <i>tegulae</i>) flat Roman roof tile with edge flanges, which were covered by <i>imbrices</i>
tessellated <i>tessera</i> U/S WSI	(pavement) a floor, the surface of which was made of tesserae small plain red ceramic cube (plural, tesserae) unstratified, ie without a well-defined context written scheme of investigation

21 Archive deposition

The full finds, paper and digital archive is at CAT HQ at Roman Circus House, Roman Circus Walk, Colchester, CO2 7GZ, but will be deposited with Colchester Museums under accession 2006.127

Appendix 1 : Catalogue of bulk finds by Stephen Benfield

Site	ctxt no.	finds	ctxt type	finds	period	finds spot
		no				dating summary
	L002	284		pot Rom: 3@11g GX; p-Rom: 1@7g (Fabric 20)	med	L12-14C
Α	F003 sx1	007		CBM Rom: 1@160g RBT	Rom	Rom
A	F003 sx3	009		bone 1@9g	nom	TIOIT
A	F003 sx4	005		CBM p-Rom: 1@45g PT	med/p-med-	med/p-med-
				animal bone 1@1g	mod	mod
Α	F004	001		stone 1@5g sep		
A	F009	142		pot Rom 1@7g Fabric GX abr CBM ?Rom: 3@25g abr frags	Rom	Rom
A	F020	051	grave	pot Rom 1@5 Fabric DJ CBM Rom: 2@53g RBT; ?p-Rom 1@14 PT	med/p-med- mod	?med/p-med- mod
Α	F021	053	grave	CBM Rom 1@60g RBT	Rom	Rom
Α	F022	013	pyre?	pot Rom 1@196g Fabric AJ	Rom	M1-2/E3C
Α	F022	015	pyre?	glass Rom?1@<1g pale green	Rom?	Rom?
A	F022	021	pyre?	pot Rom 1@73g Fabric GX Cam 266	Rom	M1-E2C
A	F022	046	pyre?	pot Rom 5@107g Fabrics AJ, DJ, GX (brt pot base); p-Rom 1@17g Fabric 40 (brt)	p-med	17-18C
A	F022	047	pyre?	pot Rom 13@290g Fabrics AJ, GX (brt pot base);	Rom	Rom M1?- 2/3C
A	F022	048	pyre?	pot Rom 3@86g Fabrics AJ GX (burnt) bone 1@2g brt crazed brt stone 1@18g flinr	M1-2/E3C	
Α	F022	049	pyre?	glass Rom 6@16g pale blue-green (melted pieces)	Rom	
Α	F024	180	grave	Fe 1@1g concretion poss fe frag but prob natural		
Α	F029	030	grave	animal bone 2@12g		
Α	F030	078		pot preh 1@6g flint-temp	preh	preh
A	F030	171		pot Rom 1@5g, Fabric GX Cam 243-244/46 CBM Rom 2@73g RI RBT	Rom	1-E/M2C
Α	F030 sx1	061		pot Rom 1@3g Fabric DJ	Rom	Rom 1-2/3C
A	F030 sx1	062		pot Rom 1@6g Fabric GX,	Rom	Rom
A	F030 sx2	072		pot Rom 1@6g Fabric GX, CBM Rom: 3@35g RBT	Rom	Rom
A	F033	127	grave	pot preh 1@1g HMF; Rom 62@468g Fabric AF GX DJ Cam 156 (fragmented, abraded, burnt/scorched) brt stone 2@14g (flinr, sandst/quartzite)	Rom	M1-E2C
A	F035	164		bone 2@1g	5	D 4 0/500
A	F038	070	grave	pot Rom 1@65g Fabric AJ, CBM Rom: 3@49 RBT abr, unident	Rom	Rom 1-2/E3C
A	F038	097	grave fort ditch	stone discarded	n na ad	17.100
A	F055	071	fort ditch	pot p-Rom 4@91g Fabric 40 CBM p-Rom 23@634g GT (cream surface), PT animal bone 2@14g clay pipe 1@3g shell 5@30g Oy	p-med	17-18C
A	F057	179	grave	pot Rom 1@5 Fabric GX; ?p-Rom Fabric ?20	Rom/med?	Rom, pos med
А	F065	098	grave	pot Rom 1@5g Fabric GX, abr	Rom	Rom

Site	ctxt no.	finds no	ctxt type	finds	period	finds spot dating summary
A	F066	099		pot Rom 5@107g Fabrics AA, DJ, GX lid, TZ BM Rom: 3@161, T(F) (?1-2C), RBT	Rom	Rom ?1-2C
A	F068	101		pot p-Rom 1@16g Fabric 40 CBM p-Rom 3@73g PT	p-med	17-18C
A	F073	106	pyre	pot Rom 10@43g Fabrics GX roller stamped	Rom	3C
A	F073	107	pyre	glass Rom 10@3g frags, pale green	Rom	Rom
A	F074	103		pot Rom 6@61g Fabrics BXSG Dr 29, GX; p-Rom 1@4g Fabric 40B; IA (prob) or A-SAX 1@9g CBM p-Rom: 7@96g PT brt stone 1@37g flint	p-med	17-18C
A	F080	052	pyre	glass Rom 5@22g blue-green, melted pieces, unguent bottle?	Rom	Rom
Α	F080	114	pyre	CBM 1@14g RBT cream	Rom	Rom
Α	F080	116	pyre	charcoal 8@7g		
A	F080	118	pyre	glass Rom 6@99g blue-green, melted pieces	Rom	Rom
A	F080	126	pyre	charcoal 2@1g		
A	F080	132	pyre	glass Rom 1@2g blue-green, part melted, unguent bottle neck?	Rom	Rom
A	F080	138	pyre	charcoal 2@25g		
A	F080	148	pyre	pot Rom 6@70g Fabrics GX; p- Rom 1@2g fabric 48D glass Rom 2@9g blue-green, melted	Mod	mod with residual Rom
A	F080	149	pyre	pot Rom 9@49g Fabrics AA, GX, DZ (some brt/scorched) charcoal 2@1g brt stone 1@19g flint slag 1@8g light slag	Rom	1-E2C?
A	F080	152	pyre	pot Rom 4@52g Fabrics GX Cam 243-244/246	Rom	Rom 1-M2C
Α	F092	157	grave	pot Rom 1@8g, Fabric GX, abr	Rom	Rom
A	F097	181	grave	pot preh: 1@8g HMF; Rom: 1@1g GX	Rom	Rom
Α	F097	181	grave	CBM: Rom RBT 4@32g		
Α	F098	184		CBM:; PROM GL BR 1@9g	_	
A	F100	193	pyre	pot Rom: 2@2g GP (Cam 122- 123)	Rom	L1/E2-2C
A	F104	185		pot Rom: 1@7g GX; CBM PT 1@8g	med-p- med/mod	med-p- med/mod
A	F104	185		stone SE 1@36g	5	
A	F108	186	grave	CBM: Rom RBT 1@4g	Rom	
A	F110	187	grave	CBM:; PROM (?) 1@6g	p-Rom	
A	F116	189	grave	CBM: Rom RBT 3@13g	Rom	
A	F117	190	siege ditch	pot p-Rom: 1@3g 40B	p-med	L16/17-18C L16/17-18C
A A	F117 F117	190 190	siege ditch siege ditch	pot p-Rom: 3@24g 40 40B 45 CBM: Rom IM 1@74g; PROM PT	p-med	
			U U	40@1250g, BR 2@122g	p-med-mod	
A	F117	190	siege ditch	shell 3@36g		
A	F117	191	siege ditch	CBM: Rom RBT(abr) 8@440g; PROM PT 20@409g, BR 2@35g;	p-med-mod	
A	F117	191	siege ditch	A Bone 2@40g		
A A	F117 F117	191 243	siege ditch siege ditch	C pipe 1@2g pot p-Rom: 15@211g 21A 40 40B	p-med	L16/17-18C
A	F117	243	siege ditch	42 45 46 CBM: Rom RT 1@229g, RBT 4@219g; PROM PT 16@561g,		

Site	ctxt no.	finds	ctxt type	finds	period	finds spot
		no				dating summary
				GLTile (black/olive glaze) 1@71g		,
Α	F117	243	siege ditch	A Bone 9@54g		
Α	F117	243	siege ditch	shell 4@33g oyster		
A	F117	243	siege ditch	c pipe 2@10g, bowl Type 4 <i>c</i> 1640-1660	p-med	
Α	F117	243	siege ditch	coal 4@3g	p-med-mod	
A	F117	243	siege ditch	slag 2@119		
A	F117	255	siege ditch	pot Rom: 2@5g GX; p-Rom: 4@34g 40 40B	p-med	L16/17-18C
A	F117	255	siege ditch	stone: sep 2@617		
A	F117	255	siege ditch	CBM: Rom RBT (abr) 3@111g; PROM PT 15@614g	med-mod	
A	F117	255	siege ditch	A bone 3@24g		
Α	F117	255	siege ditch	c pipe 1@4g		
A	F117	268	siege ditch	CBM: Rom RB 20@6000g 3 corners (MSL 110mm) (28-30 mm), (rest 25-28mm) some in sandy sparse stone fabric, RFT(C) 1@87g		
A	F122	195	grave	pot Rom: 1@2g GX (abraded)	Rom	Rom
A	F122	195	grave	CBM: Rom RBT 1@39g		
A	F125	195	giave	pot p-Rom: 2@15g 40 46	p-med	L16/17-18C
A	F125	196		CBM: PROM PT 4@129g		
A	F125	196		stone: GS(?) 2@177g (abr)		
A	F125	196		stone fine white limestone, worked		
	-			faces 1@199g		
Α	F128	200	grave	pot Rom: 1@2g GX	Rom	Rom
A	F128	200	grave	CBM: Rom RBT(?) 1@15g; PROM PT 1@2g		
Α	F130	261	crem	CBM: Rom RBT(?) 1@16g	Rom	
Α	F131	245		CBM: PROM PT 1@16g		
Α	F134	205	grave	pot Rom: 1@12g GX abraded	Rom	Rom
A	F134	205	grave	CBM: Rom RBT 4@96g; PROM PT(?) 1@22g		
Α	F139	211	grave	pot Rom: 1@4g GX (abraded)	Rom	Rom
A	F143	212		pot Rom: 1@5g; GX; p-Rom : 55@663g 20 21A (lid knob – new type?) 40 40A (cup rim similar to Dutch types note rare in MSW – write about??) 40B 42 43 45 46	p-med	L16/17-18C
A	F143	212		CBM: Rom IM 1@66g, RBT(abr) 15@462g PROM PT 180@5000g, BR 11@1100g		
Α	F143	212		stone SE 4@650g		
A	F143	212		mort WL 2@156g		
Α	F143	212		A bone 26@330g		
Α	F143	212		shell 2@20g oyster		
Α	F143	212		c pipe 7@20g		
Α	F143	212		flint 1@14g		
Α	F143	212		glass 2@2g window glass	med/p-med	
A	F143	220		pot Rom: 2@23g GX; p-Rom: 32@458g 20 40 40B 42 45 46 (inc sherd from drinking jug, purple spotted glaze)	p-med	L16/17-18C
A	F143	220		CBM: Rom FT 1@44g, RBT 19@980g, Tess 1@12g; PROM PT 100@3000g, BR (includes glazed brick) 13@1349g		
Α	F143	220		mort WL 1@40g		
A	F143	220		A bone 8@165g		
A	F143	220		c pipe 9@39g 3 bowls 2 are Type 3 c 1610-40 1 is Type 4 c 1640- 1660	p-med	

Site	ctxt no.	finds no	ctxt type	finds	period	finds spot dating summary
A	F143	235		pot p-Rom: 9@149g 40 43 glass 1@7g, probably from a tall bottle	p-med	L17-18C (?)
A	F143	235		CBM: Rom RBT(abr) 8@398g PROM PT 42@1420g, BR 1@41g, Floor tile 1@171g		
Α	F143	235		stone CH 1@48g		
Α	F143	235		stone GS 1@89g		
Α	F143	235		glass 1@8g base	p-med	
A	F143	235		A bone 5@50g		
Α	F143	235		shell 1@20g oyster		
A	F143	235		coal 1@11g	p-med-mod	
A	F143	235		c pipe 5@20g, bowl Type 4 <i>c</i> 1640-1660		
A	F143	292		stone SE 2@333g		
A	F143	296		pot Rom: 1@5g; GX; p-Rom 43@530g: 1 20 21A 40 40B 42 45	p-med	L16-18C
A	F143	296		CBM: Rom RT 1@93 (Warry type B6); RI 1@58g, RBT 7@189g; PROM PT 9@1116g, BR 2'38g, GLBR 1@12g		
A	F143	296		A bone 22@150g		
A	F143	296		shell 21@150g, 20 oyster 1 whelk		
A	F143	296		c pipe 6@20g bowl Type 3 <i>c</i> 1610- 1640	p-med	
Α	F143	296		coal 2@15g	p-med-mod	
Α	F143	296		slag 1@92g		
A	F144	222	pyre	pot Rom: 1@13g GX; (burnt?)	Rom	Rom
A	F144	228	pyre	charcoal 5@5g		
A	F144	240	pyre	glass 1@1g pale green	-	
A	F144	241	pyre	pot Rom: 23@225g BASG (LG & Mon?) GX (Cam 268, much of pot, burnt)	Rom	M2-3C
Α	F150	234	grave	CBM: Rom RBT 1@9g		
A	F155	251	fort ditch	CBM: Rom RI 1@195g, RBT (abr) 2@71g; PROM PT 26@1494g, comp end 160mm wide 2 round holes 12mm dia		
Α	F155	251	fort ditch	stone SE 1@38g		
А	F155	251	fort ditch	Shell 4@25g		
A	F155	252	fort ditch	CBM: Rom RBT 1@19g; PROM PT 3@45g		
A	F155 (176)	302	fort ditch	CBM: Rom RBT 1@8g (abr)		
A	F155 sx1	251	fort ditch	pot p-Rom 12@168g: 21A 40 40B 45 46	p-med	L16/17-18C
Α	F155 sx1	251	fort ditch	A bone 2@22g		
Α	F156	252		stone slate 1@15g		
Α	F157	248	pyre	pot Rom: 1@2g GX	Rom	Rom
A	F158	265	robber trench	pot Rom: 19@943g AJ fabric dated 2C+ (mortar on surface & break) AA BXCG (Dr 37) DJ GX KX CBM RBT 1@210g cream slag 1@753g	Rom	R pot - E/M2- E3C
A	F158	272	robber trench	pot Rom: 5@ g398, AJ, AA(Gallic? mortar on surface and break) DJ GX (Cam 268)	Rom	M2-3C
A	F158	272	robber trench	A bone 1@8g		
A	F158	272	robber trench	shell 3@5g oyster		
Α	F158	273	robber	CBM: Rom RI (1 in fabric with		

Site	ctxt no.	finds no	ctxt type	finds	period	finds spot dating summary
			trench	some stones) 2@345g, RFT(C) 1@201g, RBT(cream, signature) 1@314g, RB 22@3000g 2 corners (MSL 155mm) (25 & 35 mm); PROM (?) smooth dark, high fired CBM 1@131g (mod?)		
A	F158	273	robber trench	CBM: Rom RI 2@394g, RFT(C) 1@73g RT 2@497 (16mm HAF 40 mm) RB 7@2515g (35-40mm) signature on one and poss hobnail prints, RBT 17@1133g		
A	F158	274	robber trench	mort: WL 2@2800, gravel stones on base (35-40mm)		
A	F158	274	robber trench	mort WL 1@437g (18-30mm) undulating surfaces; WL 1@676g (20-30mm) undulating surfaces, gravel on base; WL 1@7000g (40- 100mm) indentations from stone settings(?)		
A	F158	275	robber trench	stone: greensand 4@6500	Rom(?)	
A	F158	275	robber trench	stone: greensand 5@7000	Rom(?)	
A	F158	287	robber trench	CBM: Rom FT(comb) 1@756g, IM 2@124g, RBT 3@577g		
A	F158	287	robber trench	CBM: Rom FT(comb, reused) 2@112g, RBT 9@553g PROM PT 35@1166g, BR 2@108g		
A	F158	287	robber trench	shell 1@8g oyster		
A	F158	287	robber trench	slag 1@846g		
Α	F159	254	grave	pot Rom: 2@5g GX	Rom	Rom
Α	F159	254	grave	glass 1@10g – blue green	Rom(?)	
Α	F159	254	grave	flint 1@1g		
A	F163	257		pot Rom: 1@13g BACG (unusual form, patter with shallow wall and double low footrings, one almost on edge of vessel, poss a stand?)	Rom	E/M-L2C
Α	F165	259		pot p-Rom: 1@12g 40	p-med	L16/17-18C
Α	F165	259		CBM:;PROM PT 3@47g		
Α	F165	259		coal 2@1g	p-med-mod	
Α	F165	259		glass 1@1g	p-med-mod	
A	F166	189	grave	pot Rom: 1@2g GX (abraded), one bowl rim poss med? 1@7g	Rom?	Rom?
A	F167	281		CBM: Rom IM 1@114g RB 3@520g RBT 8@718g (1 pale orange) RT 2@291g (16mm) 1@97g (20 mm, HAF 40mm)	Rom	
Α	F168	266	grave	slag 1@52g		
Α	F169	267		pot p-Rom: 1@12g 40	p-med	L16/17-18C
A	F169	267		CBM: Rom RBT 2@16g; PROM PT 1@3g		
Α	F169	267		coal 1@1g	p-med-mod	
A	F171	no no.		CBM: Rom RB 10@6000g 4 corners (MSL 265mm) (25-28 mm) mort on breaks, RBT 1@390 (18mm ?teg)	Rom	
Α	F171	268		pot Rom: 2@57g AA, GX	Rom	1-2C
Α	F171	268		pot preh: 1@6g HMF/S Neo	prehistoric	later Neolithic
A	F171	268		stone: greensand 1@283; sep 2@140		
Α	F171	268		stone: greensand 1@170; sep		

Site	ctxt no.	finds no	ctxt type	finds	period	finds spot dating summary
				34@2544		
A	F171	268		stone: greensand 7@380; sep 3@1246		
Α	F171	268		stone: sep 30@3000		
Α	F171	268		stone: sep 50@2400		
Α	F171	268		stone: sep 5@1004		
Α	F171	268		mort: OS 30@19704	Rom	
Α	F171	268		stone: CH 2@198		
Α	F171	268		stone GS 1@204g, SE 50@8000g		
A	F171	268		CBM: Rom RB 16@3000g 2 corners (MSL 120mm), mort over breaks, 28-35mm, RFT(C) 5@602g	Rom	
A	F171	268		CBM: Rom RB 19@3000g 2 corners (MSL 155mm) (26 mm), (rest 26-30mm) mortar over some breaks, RFT 3@225g	Rom	
A	F171	268		CBM: Rom RFT(C) 1@799g, RB 58@7000g 6 corners (MSL 105mm) (25-28 mm), RT 3@432 some mortar over breaks (14 18 & 22mm thick); PROM PT(?) 3@92g, BR 1@140g	p-med-mod	
Α	F171	268		CBM: Rom RB 29@3500g	Rom	
Α	F171	268		mort: OS 17@377g		
Α	F171	268		mort: OS 7@201g		
A	F171	268		CBM: Rom RFT(C) 2@157g (one with circular cut-out), RB 21@6500g, 4 corners (MSL 155mm) (25-26mm)	Rom	
A	F171	268		CBM: Rom RFT 1@95 (circular cut-out), RB 37@3500g 2 corners (MSL 85mm) (25-30 mm)	Rom	
A	F171	268		CBM small squarish tile frags, prob not tess	Rom	
Α	F171	268		stone: SE 2@542g		
Α	F171	268		stone: chalk 2@77g		
Α	F171	286		mort OS 27@2275g (35/40-50mm)		
A	F171	292		pot Rom: 8@159g GX HZ other: tarmac 1@39g	mod	mod
Α	F171	292		pot Rom: 1@9g GX;	Rom	Rom
A	F171	292		stone: greensand 4@1191; sep 27@5000		
Α	F171	292		stone: sep 16@8500		
A	F171	292		stone: sep 52@4500; quartzite? erratic? 1@133; Quartzite nat erratic 1@783		
Α	F171	292		stone: sep 9@1900		
Α	F171	292		stone: sep 22@3000		
Α	F171	292		mort: OS 7@1890	Rom	
Α	F171	292		mort: op sig 1@242g	Rom	
A	F171	292		CBM: Rom RFT(C) 4@1009g, RB 12@4000g 3 corners (MSL 150mm) (28-30 mm) mortar over some breaks	Rom	
Α	F171	292		mort: OS 8@1172g, (up to 45 mm)	Rom	
Α	F171	292		mort: OS 9@931g	Rom	
Α	F171	292		stone chalk 2@356g		
A	F171	292		CBM: Rom RB 1@1454, width 270mm MSL 170mm (30mm) mortar on breaks, RB 18@4500g 3 corners (MSL 160mm) (25-30mm) WL motar	Rom	

Site	ctxt no.	finds no	ctxt type	finds	period	finds spot dating summary
Α	F171	292		mort OS 2@65g	Rom	
A	F171	292		CBM: Rom RT(?) 1@449 (22mm), RB 8@3000g 4 corners (one with OS mort) (MSL 155mm) (28-30 mm)	Rom	
A	F171	292		mort OS 2@379g (27mm)	Rom	
A	F171	292		CBM: Rom RB 32@5000g 3 corners (MSL 195mm) (25-30 mm)	Rom	
A	F171	292		CBM: Rom RB 2@1085g (OS mort)	Rom	
Α	F171	292		mort OS 1@86g	Rom	
Α	F171	292		CBM: Rom RB 6@690g (26mm)	Rom	
A	F171	292		A bone 2@12g		
Α	F171	292		shell 3@32g oyster		
Α	F171	298		stone 1@500g septaria		
A	F171	298		stone: sep 1@489		
Α	F176	283		A bone 2@2g		
Α	F176	285		pot Rom: 1@2g GX (abraded)	Rom	Rom
Α	F178	278	grave	A bone 50@105g		
Α	F179	300		CBM: PROM PT(?) 1@2g	med-mod	
A	F180	286	grave	CBM: Rom RBT 1@1g	Rom	
Α	F183	290	pyre	mort: WL 18@629		
Α	F186	301		CBM: Rom RBT 1@13g	Rom	
Α	F188	299	grave	pot Rom: 5@31g GX GX(BSW)	Rom	M1-2C?
A	F188	299	grave	CBM: Rom RBT 2@28g; PROM PT(?) 1@19g	med-mod	
A	F188	299	grave	A bone 1@5g		
A	F189 (F176 sx 3)	302	grave	pot Rom: 12@76g BASG DJ GX	Rom	Rom
Α	F199	307		stone: SE 10@1800		
Α	F199	307		mort: OS & WL 20@1204		
Α	F199	307		stone: chalk 1@278g		
Α	F199	321		stone: SE 1@678		
A	F199	321		CBM: Rom RB 13@4500g 2 corners (MSL 190mm) (26 mm), mortar over breaks	Rom	
Α	F199	321		mort: OS 2@357g,(35-40 mm)	Rom	
A	F199	321		mort: WL 5@474, one with gravel stones on base		
A	F199	321		CBM: Rom RB 1@2439g, (width 265mm MSL 200mm) (25mm), RB 2@2165g4 1 corner (MSL 180mm) (28mm)	Rom	
A	F199	321		CBM: Rom RB 2@2554g (join) (width 280mm) (MSL 195mm) (27 mm) mort on break; RB 5@2873g (join) (width 280mm) (MSL 220mm) (30 mm) hobnail print; RB 4@3616g (join) (width 280mm) (MSL 250mm) (28 mm); RFT(C) 2@73g (OS mort)	Rom	
Α	F199	321		mort OS 1@152g	Rom	
A	F199	321		CBM: Rom RB 1@5000g (width(?) 270mm) (MSL 255mm) (25-30 mm) (WL mort)	Rom	
Α	F199	328		pot Rom: 3@75g GX	Rom	Rom
A	F210	304		F clay 17@242g part of a vessel(?) smooth part oxidised exterior, rough reduced interior		
Α	F211	329	pyre	pot Rom: 3@7g GX	Rom	Rom
Α	F213 sx1	314		pot Rom: 2@11g GX (abraded)	Rom	Rom

Site	ctxt no.	finds no	ctxt type	finds	period	finds spot dating summary
Α	F213 sx1	314		CBM: Rom RBT 1@20g		
A	US	221		pot Rom: 5@8g GX ; p-Rom: 1@10g 20?	med?	12-14C?
Α	US	221		CBM: Rom RBT 3@35g	Rom	
В	F001	009		animal bone 1@1g (burnt)		
В	F003	001		pot p-Rom 1@4g Fabric 40 Fabric 42 CBM Rom 1@115g RFT (combed); p-Rom 7@ 561g, B PT, MB animal bone 1@7g glass 1@23g flaking	mod	pot 17-18C brick prob 19-20C
B	F004	011		pot Rom 2@5 Fabric GX	Rom	Rom
В	F006	002		CBM ?Rom: 2@11g frags	Rom?	
В	L005	007		pot preh 1@12g, thick HMF; Rom 10@175g Fabrics BASG Cur 11, GX Cam 266, Cam 268, TZ; ?p- Rom 1@9 Fabric 21? CBM Rom: 90@6214g, B T(F) IM abr; p-Rom 13@422 B PT stone 13@1320g sep animal bone 6@25g	med/p-med- mod	(residual abr Rom) med/p-mod- mod
В	L006	800		pot Rom 1@18g Fabric GX CBM Rom 2@398g RB, RBT	Rom	Rom
С	F002	014		pot p-Rom 1@51 Fabric 21 thumbed base edge CBM Rom: 1@100g; p-Rom 2@47 PT	med/p- med/mod	med/p-med / mod (pot 15-16C)
С	F003	005		CBM Rom: 2@752g RBT stone 3@37g sep	Rom	
С	F004	001		pot p-Rom 3@151 Fabric 40, 45D/E Bartman jug animal bone 1@15g CBM Rom 3@239g RBT; p-Rom 12@ 1185g, B PT clay pipe 1@3g stem	p-med/mod	17-18C ?mod brick
С	F004 sx1	003		pot LIA/Rom 1@ 6g; p-Rom 5@59g Fabric 20, 21, 40, 45G animal bone 2@48g CBM Rom 2@210g RI, RBT; p- Rom 25@ 1341g, B PT clay pipe 1@2g stem	mod	L17-19C
С	F004 sx2	006		animal bone 2@10g		
С	F009	008		CBM ?p-Rom: 1@3g frag ?PT	med-p- med/mod	med-p- med/mod
C	F010	004		clay pipe 2@4g stems CBM p-Rom: 2@18g B	p-med/mod	p-med/mod
C	F020	007		flint 1@9 (broken/smashed piece)	nat	
С	F021	009		pot Rom 1@2 Fabric GX	Rom	Rom
С	F022	010		pot Rom 1@3g Fabric GX; A bone 4@45g	Rom	Rom
С	F022	011		pot LIA, Rom 5@19 Fabrics RCW, DJ GX	Rom	Rom
С	F022	012		w flint 1@2g flake	preh?	preh?
F	F150	044		pot preh 1@3g HMF	preh	Neo-EIA
D	F002	001		CBM 1@19g RBT	Rom	Rom
D	F002	004		CBM Rom: 3@584g IM, TE(F) stone 1@3100g greensand	Rom	Rom prob E-M 2C+
D	F002	006		CBM Rom: 1@18g RBT	Rom	Rom
D	F004	002		pot p-Rom 1@4g Fabric 40 (thin sherd)	p-med	17-?18C
D	F006	003		CBM p-Rom: 1@11g PT	Rom	Rom
E	F007	001		CBM Rom 1@56g RBT; p-Rom 3@33g PT	med/p-med- mod	med/p-med- mod

Site	ctxt no.	finds no	ctxt type	finds	period	finds spot dating summary
Е	F008	003		fired clay 6@23g grey, orange-red		,
E	F008	004		CBM Rom 5@836g RBT RT(F); p- Rom 1@17 PT	med/p-med- mod	med/p-med- mod
E	F008	011		pot p-Rom 1@17g Fabric 20 CBM Rom 1@349g RBT abr	med	12-13/14C
E	F013	009		pot preh 34@208g HMF (five rims) w flint 4@13g (inc 2 blades) burnt flint 1@3g	preh	flint E neo pot prob Neolithic
Ш	F016	005		pot Rom 3@17 Fabric GX; p-Rom 1@5 Fabric 48D CBM p-Rom: 13@377g PT w flint 1@8g flake mortar 10@69g stone 29@2054g sep slate 1@16g	mod	mod with residual Rom
E	F016	006		Pot p-Rom 1@8g Fabric 40 CBM Rom 1@30g RBT; p-Rom 11@20-g PT clay pipe 1@3g stem animal bone 1@2g stone 3@320g sep + 2 unident poss. nat erratics	p-med/mod	17-18C
E	F018	007		slag 1@79 heavy slag not magnetic		
Ш	F023	010		pot preh 1@3g HMF; Rom 7@57g Fabric GX, MQ; p-Rom 3@21g Fabric 40, 48D CBM Rom 10@436g RBT; p-Rom 13@ 287g, B PT clay pipe 3@15g stems shell 5@36g Oy stone 12@454g sep	mod	18-19C
E	US	008		w flint 1@8g flake	preh	
F	F001	001		pot p-Rom 2@33g Fabric 40 stone 1@851g sep CBM Rom: 2@520g RB, IM; p- Rom 2@546 B (unfrogged), PT	p-med/mod	17-18/19C
F	F001	016		pot Rom 2@9g Fabric GX; p-Rom 2@78g Fabric 40 CBM Rom 11@713g RBT; p-Rom 7@415g, B, PT clay pipe 6@33g bowl crummy - Type 9 1700-40	p-med	17-18C
F	F001 sx3	014		CBM Rom 2@349g RBT	Rom	Rom
F	F001 sx5	037		pot p-Rom 1@ 63g Fabric 21 handle base CBM Rom 2@58g RBT RI; p-Rom 2@10g PT animal bone 12@ 31g flint nat flake 1@37g	med/p-med	14-15C+
F	F004	004		pot Rom 1@7 Fabric GX	Rom	Rom
F	F006	005		animal bone 2@33g	Dan	Dam
F	F006 sx2	057		pot Rom 1@7 Fabric GX abr CBM Rom: 1@175g RBT animal bone 2@15g	Rom	Rom
F	F006/7	005		pot Rom 1@2 Fabric GX CBM Rom: 27@5200g RBT, IM, RB (corners) stone 2@3514g Greensand; A calacareouis sandstone (ident. Dr	Rom	Rom
F	F007	011		keith Oak) CBM Rom: 11@938g RBT, TE(F),	Rom	Rom

Site	ctxt no.	finds no	ctxt type	finds	period	finds spot dating summary
				stone 9@4183g sep greensand		
F	F007	052		stone 1@458g poorly cemented shelly limestone similar to Purbeck, either from purbeck, Skye or		
				Normandy (ident. Dr keith oak)		
F	F008	006		pot Rom 1@5g, Fabric DJ abr, crazed stone 1@289g sep	Rom	M1-2/3C
				CBM Rom 2@305g RBT		
F	F008	012		pot Rom 10@3125 Fabric GX; Fabric DJ sandy ?prob Rom CBM p-Rom: 1@106g B	p-med	p-med with residual Rom
F	F008	013		CBM Rom: 16@5222g RBT, B (corner), TE(F), FT (combed) stone 3@980g greensand, sep	Rom	L1C+
F	F008 sx1	032		Pot p-Rom 1@8g Fabric 40A CBM p-Rom 5@529g MB, PT	mod	17/18C+
F	F009	008		pot preh 1@ 7g HMF fired clay 1@3g	preh	neo-IA?
F	F012	009		pot LIA 1@1g Fabric GTW abr	LIA	LIA
F	F017	010		flint, 1@ 3g small broken piece		
F	F021	019		CBM p-Rom 4@76-g B PT	p-med/mod	p-med/mod
F	F022	017		glass 1@5g blue-green	p-med/mod	?p-med/mod
F	F022	018		CBM Rom: 1@17g RBT; p-Rom 2@28g PT	med-p- med/mod	med-p- med/mod
F	F023	020		Pot p-Rom 1@5g fabric 48D CBM p-Rom 7@774g MB	mod	19-20C
F	F037	015		pot Rom 1@2g Fabric GX abr; p- Rom Fabric 45 CBM p-Rom: 8@119g B PT	p-med/mod	p-med? - mod
F	F043	033		pot p-Rom 3@49 Fabric 21?, 40B CBM Rom 6@1058 RBT; p-Rom: 12@912g B (unfrogged), PT, PT(?) 1@8g animal bone 1@275g stone 4@1396g sep & white limestone (sparse galucanite?)	p-med/mod	p-med/mod (pot 17- 18/19C)
F	F045	034		pot Rom 5@52g Fabric GX; p-Rom 1@7g Fabric 40 CBM p-Rom 6@134g OB PT clay pipe 2@8g stems animal bone 2@4g stone 10@385 sep	p-med/mod	17-18C
F	F050	023		pot Rom/p-Rom 1@6 red sandy DJ or poss Fabric 40?	Rom/p-med	Rom or poss 17-18C
F	F052	024		pot Rom 1@3g Fabric ?AJ abr CBM Rom 1@4g stone 1@77g sep	Rom	Rom 1-2/E3C
F	F056	025		pot LIA 1@ 3g Fabric GT	LIA	LIA
F	F062	027		pot preh? 1@ 3g grog-temp	preh/IA	preh or LIA
F	F064	029		pot Rom 1@2g Fabric GX fired clay 1@6g orange-red frag abr	Rom	Rom
F	F066	030		CBM p-Rom? 1@4g stone 1@68, granite?chip	p- med/mod?	p-med/mod?
F	F071	035		pot p-Rom 5@43g Fabric 40 48D – printed date prob (18)73 CBM Rom 7@369g RBT; p-Rom 39@791g B PT glass 1@36 g small vase? base mod Stope 2@149g sep greensand	mod	19C+
F	F072	036		Stone 2@149g sep greensand fired clay 1@13g orange-brown	}	+

Site	ctxt no.	finds no	ctxt type	finds	period	finds spot dating summary
				cream surface frag abr		
F	F080	041		pot preh 2@4g HMF (flint-temp) w flint 1@2g flake	preh	preh Neo-EIA
F	F080	046		pot Rom 1@2g Fabric GX abr	Rom	Rom
F	F080	047		pot preh 1@2g HMF; Rom 1@1g, Fabric GX abr	Rom	Rom
F	F080	049		flint nat discarded		
F	F109	042		CBM Rom 1@5g RBT frag?	Rom	Rom
F	F149	043		pot Rom 1@3g, Fabric GX (poss Fabric 20?)	Rom	prob Rom, poss med?
F	F167	045		pot Rom 1@4g Fabric GX	Rom	Rom
F	F185	048		pot Rom 1@2g, Fabric RCW/GX abr, crazed, laminating	Rom	M1-E2C?
F	F298	054		CBM Rom: 1@12g abr (prob Rom)	Rom	Rom
F	F306	055		nat heavily patinated flint frag discarded	preh	
F	F307	026		flint, 1@ 5g small broken piece		
F	L003	051		pot Rom 1@8g Fabric GX + 20@113g lava	Rom	Rom
F	L003	056		dirt/sand frags in bag discarded		
G	F001	001		pot Rom 1@96 Fabric AJ abr; Rom/p-Rom? 1@15g rounded bowl rim Fabric 21 stone 1@295g white limestone poss greensand CBM Rom: 2@154g RBT abr;	med	13-14C?
				unident Rom/p-Rom poss PT 1@56		
G	F001	002		stone 1@65g sep CBM undated frag 1@9g		
G	F003	003		pot Rom 1@4g Fabric GX	Rom	Rom
G	F004	004		stone 1@ 1272g shelly limestone, probably Purbeck (ident. Dr Keith oak)		
G	F008	006		CBM Rom 3@256 p-Rom: 2@126g B, PT fired clay 4@7 brown frags ?coal 2@19g slate 1@2g 1 nat flint discarded	p-med/mod	p-med/mod
G	F010	005		CBM p-Rom: 1@370g B (F also contained fe wire and nails of mod date - discarded)	p-med/mod	p-med/mod
Н		008		pot Rom 1@28g Fabric HZ LIA/E Rom	LIA/Rom	
Н	F001	003	grave	pot Rom 3@6 Fabric DJ, GX, abr	Rom	Rom
Н	F006	010	grave	pot Rom 1@63 Fabric DJ	Rom	1-2/3C
Н	F008	011	mod p-T	CBM p-Rom 6@242g MB stone 2@224g greensand	mod	mod
Η	F010	012	grave	pot Rom 1@3 Fabric RCW/GX abr CBM Rom: 1@296g RBT	Rom	Rom ?E Rom
Н	F012	022	ditch	CBM Rom 2@113g FT (combed) RBT	Rom	L1c+
Η	F012	051	ditch	pot preh 1@6g HMF; LIA/Rom 4@56g Fabric GTW/HZ, GX; p- Rom 3@22g Fabric 20, 40, 48D CBM Rom: 13@1452g RBT, FT frag; p-Rom 1@25g PT stone 4@1007g sep, greensand	mod	pot mod 19- 20C
Η	F012 sx1	022	ditch	stone 1@195g white limestone with black specs		
Η	F012 sx2	021	ditch	pot LIA/Rom 1@31 Fabric DJ CBM Rom: 1@39g RBT	Rom	Rom ?1-2/3C
Н	F013	018	ditch	pot Rom 1@24 Fabric AJ	Rom	Rom 1-2/E3C

Site	ctxt no.	finds no	ctxt type	finds	period	finds spot dating summary
				CBM Rom: 1@167g RBT		
Н	F013 sx2	019	ditch	stone 1@1356g greensand CBM Rom 8@1109 RT(F), RBT, RB	Rom	Rom
Н	F019	025	ditch	pot Rom 1@5g; ?p-Rom 1@8g Fabric 20 stone 2@151g sep, white limestone, poss greensand	Rom	Rom (?p-Rom)
Н	F019	026	ditch	CBM 3@82g Rom; unident 1@25 (Rom) poss PT	med+?	med or later?
Н	F021	026	grave	fired clay 1@27g		
Н	F023	028	grave	pot p-Rom 1@13g Fabric 13 rim	med?	11/12-13C
Н	F024	037		CBM Rom 1@420g RT(F) abr	Rom	Rom
Н	F027	040	grave	pot Rom 2@5g Fabric BASG abr, RCW/GX w flint 1@3g flake	Rom	Rom 1C
Н	F029	043	grave	pot preh 2@13g HMF	preh	
Н	F030	048		slag 1@22g light slag not magnetic		
Н	F030	048		pot Rom 1@3g RCW/GX	Rom	Rom prob E Rom
н	F033	049	grave	pot preh 1@7g HMF; Rom 1@3g, Fabric GX w flint 1@2g flake CBM Rom 1@371g RBT abr	Rom	Rom
H	F034	046	grave	nat flint discarded		
Н	F038	050	grave	pot Rom 1@3 Fabric GX CBM p-Rom: 1@65g PT animal bone 4@2g	med/p-med- mod	med/p-med- mod
J	F002	006		brt stone 4@62 flint		
J	F002	040		pot Rom 4@67 Fabric GX; P-Rom 16@286 Fabric 20, 40 45 48D c pipe 5@23g stems animal bone 2@4g CBM Rom 1@26g Tess; p-Rom: 7@215g PT stone 6@140g sep glass 4@48g p-med-mod	mod	mod
J	F002	010		pot p-Rom 17@308g Fabric 20 21, 40 40A 45D, 96 (soft buff) animal bone 9@135 CBM Rom 30@5700g RBT RI RB RT(F) mamata tile with scar from mamata setting p-Rom 4@220g OB PT clay pipe 1@3g stem stone 19@1464g greensand sep brt stone 1@52g flint glass p-med 2@16 slag 1@256g part of smithing hearth base? stone 1@220, prob mod paving & small ?mica-schist piece (discarded)	p-med/mod	17-18C
J	F002	013		pot Rom 15 sherds from coin hoard pot 1 & pot 2 (see JL5 145 & 15) prob part of rim from pot 1 suggests was intact & sherds from pot 2 may not be directly associated (placed) with pot 1 animal bone 1@4g	Rom	
J	F002	025		pot LIA-Rom 6@183g Fabric GTW, GX TN (Cam 2) stone 2@198g sep	Rom	Rom with residual LIA

Site	ctxt no.	finds no	ctxt type	finds	period	finds spot dating summary
J	F002	030		slag 1@352g medium slag, faintly magnetic, smithing hearth base?		
J	F002	039		clay pipe 1@1g stem CBM Rom 4@255g RBT stone 7@974g sep	p-med/mod	p-med/mod
J	F002	040		animal bone 1@65g CBM Rom 9@573g RBT TE; p- Rom 5@219g PT stone 12@1450g sep	med-p- med/mod	med-p- med/mod
J	F002/L14	049		pot LIA/Rom 2@105 Fabric AJ, GTW	Rom	Rom, E Rom?
J	F002/L15	050		pot preh 1@ 6g; LIA/Rom 2@16 Fabric GTW, RCW/GX	Rom	Rom?, E Rom?
J	F002/L5	017		fired clay 1@72g perforation at one end		
J	F003	011		pot preh?1@ 18g prob degraded LIA/Roman; pot LIA 2@16g Fabric GTW, TR4 bone 2@7g fired clay 1@111g briq 1@6g	LIA?	LIA/?E Rom
J	F003/L5	012		pot 8@88g LIA-Rom 4@67 Fabric GTW, RCW, ?TR4 bone 6@10g fired clay 1@5g briq 9@125g	LIA?/Rom	LIA?/E Rom
J	F005	037		pot preh 1@7g HMF; Rom 4@48g Fabric GTW? RCW/GX CBM p-Rom: 3@27g B, PT stone 3@173g sandstone prob mod paving mortar 1@5g	mod? (Rom)	stone prob mod, tile prob p-Rom with residual ?E ROM
J	F008	038		CBM p-Rom: 1@9g PT	med-p- med/mod	med-p- med/mod
J	F009	036		pot preh 1@6 HMF	preh	neo-EIA
J	L004	007	Ditch fill sp 4.3	pot LIA Rom 16@262 Fabric BACG (frag), AA D 2-4 handle , Gallo-Belgic TR4 (local) TN, GTW/RCW, GX CBM Rom: 1@126g FT (combed) animal bone 3@14g briq 1@11g w flint 1@4g fired clay 1@13 red/cream	Rom	samian 2C, tile L1C+ (residual LIA-E Rom)
J	L004	008	Ditch fill sp 4.2	pot preh 1@5g Neo groove ware (?); LIA Rom 18@146g Fabrics AA D 2-4 (Italian fabric?), BAEG, GTW, RCW, GX TR4 CBM Rom: 8@137g FT? Fired clay 3@30 w flint 1@ 8 brt stone 2@89g flint animal bone 3@7 briquetage 2@39g shell 1@1 Oy	Rom	M2C-M3C
J	L004	009	Ditch fill sp 4.1	pot LIA Rom 25@260g Fabrics Gallo-Belgic TR Cam 5A, GTW/RCW Cam 266, GX; p-Rom Fabric 45?? CBM Rom: 46@4100g RBT animal bone 9@45g stone 39@2894g sep, white limestone (poss greensand),	Rom with intrusive? p- med/mod	p-med/mod (intrusive(?)) with LIA/Rom

Site	ctxt no.	finds no	ctxt type	finds	period	finds spot dating summary
				fossilferous limestone fired clay 1@3 red/cream brt stone 2@32g flint briq 1@5g		
J	L004	010	Ditch fill sp 4.S	pot LIA Fabric GTW 1@11 g; post- Roman 17@340 g Fabric 13, 20, 40, 40A, 45D, 98	Post-med- mod	p-med/mod
J	L004	019	Ditch fill	pot LIA Rom 50@229g Fabric NGW AA GTW RCW DZ CBM Rom 14@1826g RB RBT Fe nail brt stone 2@231g flint (one not heavily heated) briq 10@164g stone 3@246g sep	Rom?	E/M-L1C
J	L004	022	Ditch fill sp 4.2	pot LIA Rom 30@303g Fabric TN Cam 2, Cam 56, AJ, AA, GTW Cam 266? RCW GX, DZ DJ animal bone 1@2g stone 1@302 sandst/quartzite not modified (discarded)	Rom?	E/M-L1C
J	L005	006	Ditch fill sp 5.2	pot preh 1@4g HMF; LIA Rom 80@816g Fabrics AJ D 20 rim Flav-E2/2C? (poss earlier) Gallo- Belgic, GTW/RCW, inc small rim from thick walled bowl? animal bone 2@2g briq 28@672g fired clay 9@43g part of brick edge charcoal frags	LIA/Rom	E-M1C AD ?1 sherd poss Flav-2C
J	L005	012	Ditch fill	pot LIA Rom 8@86g	Rom	E-M1C AD
J	L005	014	Pit fill	pot LIA Rom Fabric GX, pot with coins (pot 1) Cam 281(<i>capacity</i> <i>approx 1.05 litres</i>) & sherds from pot 2 (see JL5(15), JF2(13)) considered by excavators to be associated with pot 1	Rom	M/L2-3/4C coins M-L3C
J	L005	015	Ditch fill	pot Rom Fabric GX, pot 2 Cam 281 (see JL5(14), JF2(13))	Rom	M/L2-3/4C
J	L005	016	Ditch fill	pot LIA Rom 23@399g Fabrics Gallo-Belgic TNUR Cam 56, GTW/RCW Cam 266, FJ unguent jar; GX CBM Rom: 2@206g TE(F), RBT stone 2@268g sep A bone 7@22g	Rom	Rom with LIA M-L1C ?pre-Flav
J	L005	018	Ditch fill	pot LIA Rom 63@879g Fabrics Gallo-Belgic, GTW/RCW, GX lid seated form (note 1 piece of waster of oven/kiln furniture?) animal bone 19@148g CBM Rom: 16@2328g RBT, FT (combed) (no mortar) stone 16@1385g greensand, sep burnt flint 2@33g fired clay 2@45 red, brown/cream briq 15@382g	Rom	pot - E-M1C AD 1 large sherd Rom c AD 50+ CBM – combed flue tile late1C+ stone greensand e-M2C+
J	L005	021	Ditch fill	pot LIA/Rom 90@1174g Fabrics AJ, Gallo-Belgic Cam 56 Cam 113, GTW/RCW, HZ animal bone 6@75g fired clay 2@37 vesicular cream brt stone 4@74g flint briq 13@321g	LIA/Rom	c E- M1CAD/pre- Flav

Site	ctxt no.	finds no	ctxt type	finds	period	finds spot dating summary
J	L005	027	Ditch fill sp 5.3	pot LIA/Rom 120@3500g Fabrics AA Dressel 1 rim 1C BC, GTW/RCW Cam 218, Cam 266, local Gallo-belgic, HD (ESH) Cam 254 animal bone 30@82g	LIA/Rom	LIA/E Rom
				fired clay 4@100g red, brown/cream (rounded internal surface)* brt stone 5@144g flint briq 24@802g		
J	L005	032		pot LIA/Rom 106@2654g Fabrics DJ, GTW Cam 218; Cam 229 Cam 229D, HD(1) Cam 254, HZ Cam 270B, MQ animal bone 29@682g fired clay 5@143 red, brown/cream carbonised material 8@26g (SF114) briq 11@481g	LIA?	(?sheepen) LIA (imp MQ/ DJ?) no G-B
J	L006	031	Ditch fill	pot LIA 8@87g GTW Cam 229, Cam 264 Cam 264/266 animal bone 16@45g stone 1@150g greensand brt stone 3@1380g flint & large quartzite/sandstone cobble fired clay 5@43 brown/cream	Rom	stone greensand prob E-m 2C+ with /residual LIA pot
J	L008	035	Ditch fill	pot LIA 50@1677g AA D1 spike, GTW Cam 229, Cam 266 GTW/RCW animal bone 100 (+ -)@1911g brt stone 4@201 flint fired clay 2@6 red/cream stone 1@288g white sandy limestone, poss erratic cobble briq 1@45g	LIA/Rom	LIA-?E Rom
J	L009	034	Ditch fill	pot LIA/Rom 3@35g Fabrics GTW/RCW animal bone 4@54g w flint 1@4g flake briq 7@42g	LIA/Rom	LIA-?E Rom
J	L014	040	Ditch fill sp 14.S			
J	L014	045	Ditch fill sp 14.1	pot preh 1@7g HMF; Rom 7@61g Fabric GX animal bone 11@130g CBM Rom 44@3695g RB, RBT RI TE RT? stone 21@1163g sep	Rom	Rom
J	L014	046	Ditch fill sp 14.1	pot LIA 1@625g Fabric GTW CBM Rom 6@1096g FT?, RT(F), RB, RBT animal bone 3@54g bt stone 1@25g flint	Rom	E Rom/?L1C+
J	L014	049	Dich fill sp 14.2-3	pot LIA 2@105g Fabrics AJ, GTW	Rom	
J	L015	047	Ditch fill sp 15.2	pot preh 1@8g; LIA/Rom 1@6g Fabrics GTW	LIA	LIA
J	L015	048	Ditch fill sp 15.2	pot LIA 9@94g Fabric GTW	LIA	LIA
J	L015	050	Ditch fill sp 15.1	pot LIA/Rom 8@87g GTW/RCW Cam 218	Rom	E-M1C

Site	ctxt no.	finds no	ctxt type	finds	period	finds spot dating summary
J	L015	053		CBM Rom: 1@448g RBT abr.	Rom	Rom
J	L015	054		pot LIA/(?)E Rom 11@208g	LIA/E	
Ū	_0.0			Fabrics GTW/RCW	Rom(?)	
J	L016	51 (053)		pot LIA/Rom 38@701g Fabrics GTW, RCW HD(1), TN/UR Cam 12	LIA?/Rom	sheepen ?Rom pre-Flav
J	L016	051	Ditch fill	stone 3@4200g greensand,	Rom	É2C+
J	L016	052	Ditch fill	pot preh 2@7g HMF; LIA/Rom 12@269g Fabrics GTW Cam 255, RCW HD(1) animal bone 10@115g w flint 1@ 2g blade (prob Meso/E neo) fired clay 1@9g stone small piece of nat weathered sandstone, discarded	LIA/?E Rom	E/M1C
J	L016 (15)	051	Ditch fill	pot LIA/Rom 11@220g GTW/RCW	LIA/?E Rom	E/M1C
J	L016 (15)	051	Ditch fill	pot LIA/Rom 37@705g TN Cam 12, GTW/RCW	LIA/?E Rom (inc TN)	
J	L017	053	Ditch fill	pot preh 1@7g HMF; LIA 38@724g Fabric GTW briq 1@73g bone 1@21 tooth stone 1@254g sep	LIA	LIA ?Sheepen (stone prob date??)
J	L019	055	Ditch fill	pot LIA 1@18g Fabrics GTW, (sparse grog)	LIA	LIA
J	L019 (16)	055	Ditch fill	pot prob (dirty) LIA 3@160g Fabrics GTW?	LIA	LIA ?Sheepen
J	US	001		pot Rom 7@82g GX EA coal 1@12g	p-med/mod	pot M/L3-4C
J	US	043	(dyke)	CBM Rom 3@553g RBT RT(F) UCA; p-Rom 1@148g MB; A bone 1@15g	mod	prob mod
J	US	044	(dyke)	CBM Rom 7@1156g RBT RI; p- Rom 1@73g B	p-med/mod	p-med/mod with Rom
K	F002	002		pot Rom: 1@1g GX	Rom	M1-2C
K	F002	008		B stone 1@8g		
K	F002 sx3	017		CBM: Rom RBT 3@114g		
K	F003	003		pot Rom: 1@19g TZ flint 1@1g	Rom	M1-2C
K	F004	004		pot Rom: 3@44g GX HZ	Rom	Rom
K	F004	004		pot Rom: 1@19g GX	Rom	Rom
K	F004	004		CBM: Rom RBT 2@30g	Rom	
K	F005	010		A bone 1@3g		
K	F006	006		pot Rom: 1@8g GX rim, abraded;	Rom	Rom
K K	F007 F008 sx1	009 011		slag slag, fe (magnetic) pot Preh: 1@2g HMF rim; Rom	Rom	M1-2C
К	F009	020		1@52 AJ (BAT AM1?) (handle) pot Rom: 7@119g GX (Cam 299) CBM RBT 1@53g cream	Rom	M2-4C
К	F009 sx1	015		pot Rom: 4@83g GX HZ	Rom	Rom
K	F009 sx1	015		CBM: Rom RBT 1@101g	Rom	
K	F015	012		stone: SE 1@19g		
K	F016	016		pot Rom: 5@15g BASG GX	Rom	M1-2C
K	F016	016		CBM: Rom IM 1@460g	Rom	
K	F016	016		stone geensand 1@665g		
K	F017	018		pot Rom: 2@7g GX (1 abraded)	Rom	Rom
K	F017	018		CBM: Rom RBT 1@46g	Rom	
К	F017 sx2	019		pot Preh: 1@5g HMF rim; Rom: 4@ 363g, GX HZ(Cam 273)	Rom	Rom
K	F017 sx5?	019		CBM: Rom RBT 2@273g	Rom	

Site	ctxt no.	finds no	ctxt type	finds	period	finds spot dating summary
K	F017	019		flint 1@4g		
K	F024	021		CBM: Rom RBT(?) 2@18g	Rom	
K	L002	007		CBM: Rom RBT(abr) 1@178g, RFT(C) 1@136g	Rom	
T001	F198		pit	pot 2@6g CBM 15@463g stone 3@295 bone 5@21g clay pipe 3 stem frags @ 8g w flint piece with flake removed 1 @ 15g mortar 3 @ 21g	post- med/mod	post-med/mod (clay pipe)
T001	F199		pit?	CBM 1@23g	Rom	Rom
T001	F200		ditch	СВМ 3@90g	med/p- med/mod	med/p- med/mod (p-tile)
T001	F201		pit	pot 1@3g CBM 3@29g	p-med	p-med, pottery dated 17-18C
T001	F202		grave	CBM 1@10g	Rom	Rom
T002	F204		burial	pot 1@2205g burial urn, near complete, upper part broken into sherds, part of rim, narrow mouth jar with band of rouletting on shoulder cremated bone 31@16g (plus bag 135?) Fe nail & frags 4 @ 67g	Rom	Rom, pottery dated 2/3-4C
T002	F204	124		pot 1@13g GTW CBM Rom 14@6000g RB RBT RI FT (combed) Stone 3@331g sep	Rom	L1C+
T002	F206		linear	pot 1@6g	med	med, pottery dated L12-13C
T002	F207		linear	CBM 10@1055g	p-med/mod	p-med/mod, (brick)
T002	F209		ditch	pot 10@150g CBM 81@3308g stone 2@674 bone 5@129g clay pipe stem frag 2 @ 12g coal 2 @ 3g Fe nails 2 @ 32g mortar 1@ 34g	p-med/mod	p-med/mod, pottery dated 17-18C
T002	F210		gully	pot 1@4g CBM 2@59g w flint flake 1 @ 8g	Rom/med	Rom/med, pottery dated L12-13C or poss Rom
T002	F211		ditch	pot 2@15g	p-med/mod	p-med/mod, pottery dated 17-18C
T003	F172		pit/grave	pot 4@50g glass, window frag ?med/post-med 1 @ 2g Fe obj, SF 3; obj(s), SF 4	p- med/mod?	?med/post- med, pottery dated Rom ?1-2C
T003	F178		grave	pot 1@1g	Rom	Rom
T003	F181		grave?	pot 1@1g burnt flint 1 @ 63g	Rom	Rom
T003	F187		pit	CBM 5@138g	Rom	Rom
T004	L005		accum /fill	pot 3@11g	Rom/med?	Rom? (1 sherd

Site	ctxt no.	finds no	ctxt type	finds	period	finds spot dating summary
				CBM 24@2065g stone 4@780 burnt flint 1 @ 42g Fe nail 1 @ 6g		poss med L12-13C)
T005	F101		pit?	pot 7@197g	p-med/mod	p-med/mod, pottery dated 17-18C
T005	F151		ditch	CBM 8@859g stone 2@63g w flint struck flake 1 @ 8g	Rom	Rom
T005	F152		pit	pot 1@8g	preh	preh, pottery dated ?LBA/EIA
T005	F153		gully	CBM 2@35g	med/p- med/mod	med/p- med/mod (p-tile)
T005	F154			w flint 1@14g (?core piece)	preh	preh
T009	F102		linear	CBM 1@188g	Rom	Rom
T011	F216	ļ	pit	CBM 1@13g	Rom	Rom
T012	F213		ditch	CBM 1@5g	Rom	Rom
T013	F166		p-hole	CBM 1@5g	Rom	Rom
T021	F119		ditch	CBM1@118g	Rom	Rom
T021	F120		pit	pot 1@1g	mod	mod, pottery dated 19-20C
T021	F122		pit	CBM 2@149g	Rom	Rom
T022	L003		sub-soil	pot 1@49g CBM 1@91g	Rom	Rom
T023	F029		pit	metal military badge SF 5	mod	mod
T023	F030		pit	pot 1@3g	Rom	Rom
T023	F031	024	ditch	pot 28@150g (1 rim) HMF w flint, 4@13g (blade, bladelet, snapped blade pieces) burnt flint 1 @ 17g	preh	flint Neo; preh, pottery dated ?Neo
T024	F003		ditch	w flint 1 @ 2g	preh	preh
T024	F007		ditch	CBM 10@719g coal 2 @ 4g	p- med/mod?	p-med/mod? (coal), Rom tile dated L1C+
T024	F010		p-hole	pot 1@2g CBM 1@118g Fe obj. SF 7, mod	mod	mod, pottery dated 19-20C
T024	F011/12		p-hole	CBM 1@16g	med/p- med/mod	med/p- med/mod (p-tile)
T024	F013		p-hole	CBM 1@15g	med/p- med/mod	med/p- med/mod (p-tile)
T024	F014		ditch	pot 1@6g	mod	mod, pottery dated 19-20C
T024	F016		p-hole	metal Ae button SF 1 fe nail (bent) 1@ 16 g	p- med?/mod	p-med?/mod
T024	F018		pit/p-hole	CBM 3@23g stone 1@17g	Rom	Rom
T024	F019		pit	pot 3@26g CBM 9@152g	p-med/mod	p-med/mod, pottery dated 17-18C
T025	F107/111		ditch	CBM 3@421g stone 1@140g	med/p- med/mod	med/p- med/mod (p- tile)
T025	F110		ditch	pot 2@17g CBM 4@441g	med	med, pottery dated

Site	ctxt no.	finds no	ctxt type	finds	period	finds spot dating summary
				stone 2@2879g		L12-13C
T025	F112		pit	pot 2@7g clay pipe stem frag 1 @ 10g	p-med/mod	post-med/mod (clay pipe)
T026	F137		pit	pot 1@8g	med	med, pottery dated L12-13C
T026	F138		linear	CBM 1 @ 186 g clay pipe bowls 2 @ 17g Fe nails mod 2 @ 31g	mod	mod (quarry floor tile)
T027	F139		pit/nat.	pot 1@2g CBM 1@1g	Rom	Rom
T030	F128		ditch	pot 1@24g CBM 21@622g bone 10@126g	med	med, pottery dated L12-13C
T030	F132		pit	CBM 1@35g	Rom	Rom
T030	L003		sub-soil	CBM 1@74g	Rom	Rom, tile dated L1C+
T032	F140		linear	pot 11@395g	mod	mod, one pot dated 1939
T032	F142		p-hole	CBM 3@833g	Rom	Rom
T032	F143		linear	pot 2@23g stone 1@44g	Rom	Rom (note: 1 sherd poss med L12- 13C)
T032	F147		ditch	pot 1@7g stone 2@445g greensand, burnt? Fe obj SF 6 ?post-med; nail 1@3g	?post- med/?Rom	?post-med (pottery Roman, dated 1-2/3C)
T032	F149		trench	pot 2@4g glass, mod green 1 @ 25g	mod	mod (mod glass)
T034	F038		pit	pot 2@6g CBM 2@76g stone 1@19g clay pipe stem frags 4 @ 13g; slate 2 @ 123g coal 3 @ 34g w flint 1 @ 12g burnt flint 1 @ 16g, SF 14 fe obj	p- med?/mod	p-med?/mod, pottery dated 17-18C
T034	F040		ditch?	CBM 1@4g	Rom	Rom
T034	F042		tree bowl?	CBM 1@28g w flint 1 @ 1g	Rom	Rom
T034	F043		linear	CBM 5@962g stone 5@1536g lava quern 18@276g (SF12)	Rom	Rom
T034	F044		linear	pot 2@67g CBM 3@36g stone 2@246g	p- med?/mod	p-med/mod, pottery dated 17-18C
T034	F045		linear	pot 4@11g	med	med, pottery dated L12-13C (1 sherd early- mid Saxon)
T034	F046		pit	pot 2@8g CBM 2@59g clay pipe stem frag 1 @ 4g	mod	mod, pottery dated 19-20C
T034	F062		pit/p-hole	CBM 1@4g	med/p- med/mod	med/p- med/mod (?p-tile)
T035	F035		ditch	pot 1@6g CBM 6@652g stone 1@760g	mod	mod (glass), pottery dated 17-18C

Site	ctxt no.	finds no	ctxt type	finds	period	finds spot dating summary
				glass, mod 1 @ 2g		
T035	F037		ditch	CBM 9@1247g stone 1@207g	Rom	Rom
T036	L002/3		top/sub- soil	pot 1@4g	post- med/mod	post-med/mod with residual prehistoric pottery
T037	F020		ditch	pot 4@229g CBM 6@1749g stone 2@794g	Rom/p- Rom?	Rom/p-Rom? one sherd poss early Saxon dated 5-6/7C?
T037	F022		ditch	pot 2@9g	Rom	Rom, one sherd dated 1- 2/3C
T037	F025		ditch	CBM 7@1152g stone 8@155g bone 2@85g	Rom	Rom, (note: tile includes one piece poss early flue tile dated M-L1C)
T037	F025/26		ditch	CBM 7@1782g bone 1@114g		
T037	F026		ditch	stone 5@784g shale/(?coal) piece 1 @ 63g)	Rom	Rom
T037	F027		ditch	CBM 2@438g stone 2@3838g	Rom	Rom
T039	F101		pit?	CBM 11@475g bone 3@5g clay pipe stem frags 3 @ 15g, Fe nail 1 @ 32g	post- med/mod	post-med/mod (clay pipe)
T039	F103		ditch	pot 1@3g CBM 3@44g	post- med/mod	p-med/mod, pottery dated 17-18C
T039	F104		ditch	pot 2@12g stone 1@35g	med	med, pottery dated L12-13C
T039	F105		linear	CBM 1@35g	med/p- med/mod	med/p- med/mod (p- tile)
T040	F063		pit	pot 2@12g CBM 2@60g bone 1@6g glass, mod vehicle light? 1 @ 2g clay pipes 2 stem frags, 1 bowl, 2 bowl frags @ 26g slate frag @ 2g, pencil(s) 2 @ 2g	mod	mod (mod glass)
T041	F033		ditch	pot 1@3g CBM 1@126g stone 1@26g	med	med, pottery dated L12-13C
T047	F113		ditch	pot 3@7g CBM 1@4g	Rom	Rom, pottery dated 2-3C
T047	F118		pit	CBM 1@54g	Rom	Rom
T050	F066		linear	pot 2@9g CBM 1@58g bone 6@6g metal Ae pin (?Rom) SF 2	med	med, pottery dated L12-13C, (one sherd dated ?9-12C)
T052	F067		foundation	CBM 1@1724g	mod	mod (brick)
T054	F073		pit	pot 2@15g CBM 1@38g clay pipe stem frags 2 @ 12g	mod	mod, pottery dated 19-20C

Site	ctxt no.	finds no	ctxt type	finds	period	finds spot dating summary
T056	F093		pit	pot 2@22g CBM 3@420g	mod	mod, pottery dated 19-20C
T060	F087		linear	CBM 4@132g bone 2@3g	med	med, 13th C+ (p-tile), pottery dated L11-12C
T061	F081		tree bowl	pot 2@10g w flint blade 1 @ 10g	med	med, pottery dated L12-13C
T061	F091		p-hole	CBM 1@92g stone 1@65g glass, post-med bottle impressed with lettered seal 1 @ 17g,	p-med/mod	p-med/mod (brick, glass)
T061	F097		pit	pot 11@61g stone 18@1368g CBM 27@3166g bone 7@23g mortar 1 @ 8g lava quern 1@352g (SF11)	med	med, pottery dated L12-13C
T061	L003		sub-soil	pot 8@61g clay pipe 3 stems, 2 foot frags @ 26g	p-med/mod	p-med/mod, pottery dated 17-18C
T062	F092		ditch?	pot 8@125g	Rom	Rom, pottery dated M1-E2C
T062	F096		linear	CBM 1@13g	med/p- med/mod	med/p- med/mod (p-tile)
T063	F080		pit	pot 1@18g CBM 5@437g clay pipe stem frag 1 @ 4g	p-med/mod	p-med/mod, pottery dated 17-18C
T065	F115		pit/nat.	pot 1@88g	Rom	Rom, pottery dated 1-2/3C
T065	F182		linear	pot 2@9g stone 1@644g bone 1@48g	Rom	Rom, pottery dated M1-2/3C

Appendix 2: catalogue of pottery from LIA dyke ditch JF2

by Stephen Benfield

Ctxt	finds no.	Fabric	no	wt(g)	Eve	abr	form	notes	Spot date
L004	007	AA	1	92			D 2-4	handle	E- L1/E2C
L004	007	BACG	1	1		*			2C
L004	007	DZ(TR4)	1	9				Butt Beaker? TR4?	L1C BC- M1C AD
L004	007	GAB TN1	1	10			Cam 2	Prob same as L4(25)	L1C BC- M1C AD
L004	007	GTW	11	62				misc	L1C BC- M1C AD
L004	007	GX	1	3					Rom
L004	007	HZ(GT)	1	79					L1C BC- M1C AD
L004	008	AA	1	48			D 1?		1C BC?
L004	008	BACG	1	5		*			2C
L004	800	DZ(TR4)	1	7	0			Butt Beaker? TR4?	L1C BC- M1C AD
L004	008	GTW	1	14	7	*	Cam 229	rim	L1C BC-

Ctxt	finds	Fabric	no	wt(g)	Eve	abr	form	notes	Spot date
	no.								M1C AD
L004	008	GTW	1	11	5		Cam 256		L1C BC-
L004	000		•		5		Call 250		M1C AD
L004	008	GTW	10	61	0			Misc.	L1C BC-
				•	•				M1C AD
L004	008	GTW	1	9	7			Jar/bowl rim	L1C BC-
									M1C AD
L004	008	GX	1	5					Rom
L004	800	HZ(GT)	2	27					L1C BC-
1.00.4	000	DOW		-					M1C AD
L004	008	RCW GAB TR1	1	3 41	10	*	Cam 5A	Rim	E/M1C L1C BC-
L004	009	GADINI	1	41	10		Call 5A		E/M1C
									AD
L004	009	GTW	1	31	10		Cam 266		L1C BC-
		0.111	•	0.			00		M1C AD
L004	009	GTW	11	80	0			misc	L1C BC-
									M1C AD
L004	009	GTW	1	19	0		Cam 229		L1C BC-
									M1C AD
L004	009	GX	4	28					Rom
L004	009	HD	1	7	2		Cam 254		E-M1C
L004 L004	009	RCW 45D	6	22				Fabric 45, prob. Frechen	E-M1C 16-17C
L004 L004	009 010	GTW	1	12 11	0			Fabric 45, prob. Frechen	L1C BC-
L004	010	GIW	1		0				M1C AD
L004	010	20	1	128	12		Cooking	Rim oxidised	L12-
LUUT	010	20		120	12		pot		13/14C
L004	010	20	1	23	5		Cooking	rim	L12-
							pot		13/14C
L004	010	20	1	12	6		Cooking	rim	L12-
							pot		13/14C
L004	010	20	2	29				Base + other sherd	L12-
1 00 4	010	00		4.4				Thumbed bendle	13/14C
L004	010	20	1	44				Thumbed handle	L12- 13/14C
L004	010	20	4	29				Sandy grey body sherds	L12-
2004	010	20	-	25				Calley grey body shelds	13/14C
L004	010	40	1	28	7		pancheon	rim	16/17-
		-					1		18C
L004	010	40	1	9	10		Cup/ mug	rim	16/17-
									18C
L004	010	40	2	18					16/17-
1 00 1	010	10.4		10					18C
L004	010	40A	1	10				Fabric 45 much Fuerbar	17-18C
L004	010	45D	1	6				Fabric 45, prob. Frechen	16-17C
L004 L004	010 019	98 AA	1	4 25		*	D 1?	Soft, powdery Thick orange sherd from	17C+ 1C BC
L004	019	~~	1	25			DT	lower body	IC BC
L004	019	DJ	1	2				lower body	Rom
L004	019	GTW	2	32	0				L1C BC-
	-				-				M1C AD
L004	019	GTW	27	166	0	Γ		Misc body sherds	L1C BC-
									M1C AD
L004	019	GTW	3	38	0			Misc cordoned shoulder	L1C BC-
	010						0 0000	sherds	M1C AD
L004	019	GTW	1	14	0		Cam 266?	Jar shoulder	L1C BC-
L004	019	GTW		3	0		Cam 218	Thin walled	M1C AD E/M1C
L004 L004	019	GTW	1	3	9		Ua111 2 1 0	Simple jar rim	L1C BC-
2004	013			0	3				M1C AD
L004	019	HZ(GT)	2	84	-				L1C BC-
	-	(= ·)							M1C AD

Ctxt	finds no.	Fabric	no	wt(g)	Eve	abr	form	notes	Spot date
L004	019	HZ(GT)	1	81				LSJ	L1C BC- M1C AD
L004	019	RCW	4	16				Misc sherds	E/M1C
L004	019	RCW	1	9	7		Cam 116	Rim, large beaker	E/M1C
L004	019	TZ	2	21		*			M1-2C
L004	019	NOG WH 2	1	13					L1C BC- M1C AD
L004	022	AA	1	19		*		Unident.	M1-2C
L004	022	AJ	1	8		*		Sherd flake	M1C-2C
L004	022	GAB TN1	1	38	10		Cam 2	Different to L4(25), underside heated/burnt	L1C BC- M1C AD
L004	022	GAB TN1	1	5	10		Cam 56	Same as L5(21)	L1C BC- M1C AD
L004	022	GTW	19	173	0	*		Some abraded	L1C BC- M1C AD
L004	022	GTW	1	30	8		Cam 266	Slight groove for lid seating inside rim, pitted surface from burnt-out temper	E-M1C AD
L004	022	GTW	1	8	8			Jar rim	L1C BC- M1C AD
L004	022	GTW	1	11	5		Cam 253?	Thick, flattened, rim, angled in	L1C BC- M1C AD
L004	022	RCW	1	5					M1C
L004	025	GAB TN1	1	11	7		Cam 2	Different to L4(22)	L1CBC- M1CAD
L004	025	GTW	1	8	7			rim	L1C BC- M1C AD
L004	025	GX	2	110				Base and body sherd	Rom
L004	025	RCW	1	11	8			rim	L1C BC- M1C AD
L005	006	AJ	1	96	16		D 20	rim, rim types 15 17 (P&W fig 66)	M1-E2C
L005	006	DZ	1	10	10		Cam 115- 116	red fabric white/cream slip, some sparse grog, slightly cupped rim	E-M1C AD
L005	006	DZ(TR4)	1	20	0		Cam 115	Butt Beaker rim, everted rim with small cordon below (closely similar to imported TR form Cam 116)	L1C BC- M1CAD
L005	006	GTW	1	6	7		Cam 249	oxidised polished red ware (DZ)	LIA
L005	006	GTW	1	33	0		Cam 210	tazza	E- M1CAD
L005	006	GTW	58	432	0			misc	L1C BC- M1C AD
L005	006	GTW	1	9	0		Cam 218?	cordons	L1C BC- M1C AD
L005	006	GTW	3	14	0			misc jar rims	L1C BC- M1C AD
L005	006	GTW	2	12	4		Cam 210/ 211	tazza	E- M1CAD
L005	006	GTW	2	13	0			sherds from 2 Butt beakers	L1C BC- M1C AD
L005	006	GX	1	5	6			poss. part of bowl crucible rim, hard grey sandy fabric	
L005	006	HZ(GT)	6	152				grog-temp	E- M1CAD
L005	006	NOG WH	1	4	6		Cam 114	rim, white fabric pale orange-brown matt slip	E1C AD
L005	006	NOG WH3	2	8			Cam 113	Part of pot P34(?)	L1C BC- M1C AD

Ctxt	finds no.	Fabric	no	wt(g)	Eve	abr	form	notes	Spot date
L005	006	NOG	1	5			Cam 113	Part of pot P34	L1C BC-
L005	012	WH3 GTW	1	29	8		Cam 117	F003?	M1C AD L1C BC-
			I						M1C AD
L005	012	GTW	1	7	4		Cam 266	F003?	L1C BC- M1C AD
L005	012	GTW	4	36	0			misc	L1C BC-
L005	012	GTW	1	4	0			Butt? Beaker	M1C AD L1C BC-
									M1C AD
L005	012	GTW	1	10	4		Cam 211?		L1C BC- M1C AD
L005	016	FJ	1	82				Large sherd from a thick	M1-
								walled <i>unguentarium</i> , see CAR 10 fig 6.3 108	E/M2C
L005	016	GTW	15	151	0			Misc sherds	L1C BC-
L005	016	GTW	1	45	22		Cam 221	Small cordon on	M1C AD L1C BC-
								shoulder	M1C AD
L005	016	GTW	2	29	24		Cam 231- 232	SV join (poss. RCW)	L1C BC- M1C AD
L005	016	GTW	1	26	13		Cam 231-		L1C BC-
L005	016	GX	1	16			232	Sandy grey with some	M1C AD M-L1C
								sparse grog	
L005 L005	016 016	HZ(GT) UR	1	41 8	7		Cam 56	Local copy	E/M1C L1C BC-
			-				ouiii oo		M1C AD
L005	018	DJ	1	7	16			Very sandy fabric, similar to Verulamium (Fabric	M-L1C?
								FJ) but with common	
								surface gold mica, flagon or narrow necked jar rim	
L005	018	DZ	1	9				Base with protruding	L1C BC-
								foot, oxidised, thin grog- tempered ware	M1C AD
L005	018	DZ(TR4)	3	23				Butt beaker, base & body	L1C BC-
L005	018	DZ(TR4)	1	21	20		Cam 116	sherds rim	M1C AD L1C BC-
									M1C AD
L005	018	GAB TR3	1	2				beaker	L1C BC- M1C AD
L005	018	GTW	44	509	0			Misc sherds	L1C BC-
L005	018	GTW	1	3	0			Some shell (HD) voids	M1C AD E-M1C
L005	018	GTW	1	15	15			Jar rim	E-M1C
L005	018	GTW	1	3	4			Jar/bowl rim	L1C BC- M1C AD
L005	018	GX	1	35	14			Lid seated jar	Rom
L005	018	GX	1	8	3			Poss. mortarium? Flange	
								edge, burnt, edge cracked and vitrified,	
								fabric grey with common voids similar to HZ	
L005	018	HD	1	4					E-M1C
L005	018	HZ(GT)	1	78					L1C BC- M1C AD
L005	018	HZ(GT)	1	123				Grey fabric	E?-M1C
L005	018	NOG WH3	2	5					L1C BC- M1C AD
L005	018	RCW	2	14			Cam 231/	Cordoned neck sherds	E-M1C
L005	021		1	4		*	232?	Poss. Part of crucible??	
L005	021	AJ	2	12		*			M1C-2C

Ctxt	finds no.	Fabric	no	wt(g)	Eve	abr	form	notes	Spot date
L005	021	DJ	1	4		*		Flagon? very abraded, poss NOG WH4	E-M1C AD/Rom
L005	021	DZ(TR4)	7	48	6		Cam 116	SV? small rim sherd,	E/M1C
L005	021	GAB TN1	1	4	8	*	Cam 56	body & base sherds rim	AD L1C BC-
L005	021	GTW	3	37	20		260A	Oxidised, rilled body	M1C AD E/M1C
L005	021	GTW	1	32	7		Cam 218	Cam 218 var.	AD E-M1C
L005	021	GTW	1	49	11	*	Cam 220		AD E-M1C
								0	AD
L005	021	GTW	1	11	7		Cam 117?	Cam 92?	E-M1C AD
L005	021	GTW	1	18	0		Cam 217/ 218	Small	E-M1C AD
L005	021	GTW	62	649	0			Misc sherds	L1C BC- M1C AD
L005	021	GTW	6	58	38			Misc rim sherds	L1C BC- M1C AD
L005	021	GX	1	2					Rom
L005	021	HD	2	6					1C AD
L005	021	HZ	1	38					Rom M1C-2C
L005	021	HZ(GTW)	1	128	16		Cam 270B	Poss Cam 271	E-M1C AD
L005	021	NOG WH3	1	8	14		Cam 113	Part of pot P34	L1C BC- M1C AD
L005	021	RCW	1	3					M1C- E2C
L005	027		2	5				2 small frags of orange, sandy, fired clay	L20
L005	027	AA	1	64	4		D 1?	rim	1C BC
L005	027	DZ	5	42				oxidised, grog-tempered	L1C BC- M1C AD
L005	027	GTW	75	1477	0			misc	L1C BC- M1C AD
L005	027	GTW	1	35	0		Cam 253?	shoulder	L1C BC- M1C AD
L005	027	GTW	6	114	38			misc rims	L1C BC- M1C AD
L005	027	GTW	1	10	4		Cam 210/	tazza	L1C BC-
L005	027	GTW	1	54	12		211 Cam 254		M1C AD E-M1C
L005	027	GTW	2	31	29		Cam 266	SV, sooted rim	AD M-L1C
L005	027	GTW	1	93	29		Cam 266	sooted rim	M-L1C
L005	027	GTW	2	50	10		Cam 271	SV small version, see	E-M1C
L005	027	GTW	2	127	11		Cam 218	CAR 10, GX Type 161 SV	AD E-M1C
L005	027	GTW	2	238	18		Cam 229	SV poss. LSJ, Cam 270A (?) but rippled shoulder and massive Cam 229	AD E-M1C AD
L005	027	GTW	1	35	15		Cam 249		E-M1C
L005	027	GTW	1	44	15		Cam 220		AD E-M1C
L005	027	GTW	1	86	14		Cam		AD E-M1C
L005	027	GX	3	243				sherds from large vessel with inset base/footring,	AD 1C AD
								sand-temper, some	

Ctxt	finds no.	Fabric	no	wt(g)	Eve	abr	form	notes	Spot date
	10.							grog?	Juic
L005	027	HD	2	86	30		Cam 254	shell-temp, poss 2 pots	E-M1C AD
L005	027	HZ(GT)	10	572				misc LSJ sherds	L1C BC- M1C AD
L005	027	RCW	1	9	8			rim	M1C AD
L005	027	RCW	2	104	50		Cam 266	SV, sooted exterior	M-L1C
L005	032	DJ	1	2		*		Flagon? very abraded, poss NOG WH4	E-M1C AD/Rom
L005	032	GTW	5	562	47		Cam 229	Part of pot 20	E-M1C AD
L005	032	GTW	5	138	4		Cam 218	SV very similar to pot 19 but not cordon at base of shoulder	E-M1C AD
L005	032	GTW	3	120	46		Cam 230	Fabric more romanising	E?-M1C AD
L005	032	GTW	1	16	14		Cam 211- 217 (?)		E-M1C AD
L005	032	GTW	6	471	0				L1C BC- M1C AD
L005	032	GTW	2	91	0			Cordoned shoulder	L1C BC- M1C AD
L005	032	GTW	1	36	20			Jar rim	L1C BC- M1C AD
L005	032	GTW	1	63	8		Cam 212- 217		E-M1C AD
L005	032	GTW	1	32	4		Cam 229		E-M1C AD
L005	032	GTW	1	48	20		Cam 218		E-M1C AD
L005	032	GTW	57	939	0			Misc sherds	L1C BC- M1C AD
L005	032	GTW	2	14	20			Rims from 2 pots	L1C BC- M1C AD
L005	032	HD	12	95	36		Cam 254	Appears different pot to pot 13	E-M1C AD
L005	032	HD	1	19				base	E-M1C AD
L005	032	HZ (GTW)?	1	110	6		Cam 271	LJ poss. Cam 271 type	E-M1C AD
L005	032	HZ(GT)	1	24				LSJ sherd, oxidised	L1C BC- M1C AD
L005	032	HZ(GT)	1	55	5	*		rim	L1C BC- M1C AD
L005	032	HZ(GT)	1	308					L1C BC- M1C AD
L005	032	HZ(GTW)	1	939	20		Cam 270B		E-M1C AD
L005	032	MQ	2	47				SV join, cream slip on wheel thrown sandy grey fabric oxidised surface margin	Rom 1- 2C(?)
L005	032	RCW	1	10				Heavily wiped surface, some organic temper voids, oxidised	E/M1C
L005 (F3)	011	DZ(TR4)	1	5	0			Butt? Beaker	L1C BC- M1C AD
L005 (F3)	011	GTW	2	22	0			One sherd crazed, burnt?	L1C BC- M1C AD
L006	031	GTW	1	82	17		Cam 266	jar with beaded rim and rough (horizontal wiped) body surface (Native version as per H& H 1947, 271)	L1C BC- M1C AD

Ctxt	finds no.	Fabric	no	wt(g)	Eve	abr	form	notes	Spot date
L006	031	GTW	1	77	20		Cam	jar with beaded rim and	L1C BC-
2000	001	u	•				220/229	shoulder cordons, small	M1C AD
								cordon on neck (T D2-4)	
								small pfh hole through	
								neck	
L006	031	GTW	7	74	0			sherd, including base	L1C BC-
								sherd	M1C AD
L006	031	GTW(s)	1	32	15			jar with simple rim small	L1C BC-
								cordon and rough body	M1C AD
								surface, fabric sandy with	
1000	000		4	501				grog	10.00
L008	033 035	AA GTW	1	561 117	20		D 1 Cam	Amphora spike SV (2 join) jar with	1C BC L1C BC-
L008	035	GIW	4	117	20		220?/229	beaded rim and shoulder	M1C AD
							220 !/229	cordons, (T D2-4) part of	MIC AD
								small pfh hole through	
								neck, 2nd rough pfh just	
								below rim	
L008	035	GTW	1	43	17		Cam 229/	everted rim with shoulder	L1C BC-
2000	000	GI II	•	10			218	cordons, one larger	M1C AD
							2.0	cordon poss. cam 218	
L008	035	GTW	1	41	6		Cam 259	rough surface	L1C BC-
			-		-				M1C AD
L008	035	GTW	3	22	18			3 small rim sherds	L1C BC-
			_		_				M1C AD
L008	035	GTW	26	622	0			misc GTW sherds	L1C BC-
									M1C AD
L008	035	GTW	1	19	6		Cam 221?	small jar with beaded,	L1C BC-
								slightly undercut rim and	M1C AD
								single cordon, LIA GTW	
								fabric (poss latest form	
								from layer)	
L008	035	GTW	2	140	6		Cam 229?	SV (join) large jar with	L1C BC-
								bead rim and ripple	M1C AD
1 0 0 0							0 071	shoulder (T D2-2?)	
L008	035	HZ(GTW)	1	52	4		Cam 271	rim LSJ	L1C BC-
1 0 0 0	004		0	10	0			la a du a la avela	M1C AD
L009	034	GTW	2	10	0			body sherds	L1C BC-
L009	034	GTW(s)	1	22	0			sand with some sparse	M1C AD L1C BC-
L009	034	GTVV(S)	1	22	0			grog	M1C AD
L014	040		1	37				Overfired, distorted clay	undated
L014	040			57				vessel? Grey. Very	unualeu
								sandy fabric	
L014	040	DZ	1	6				Very sandy fabric with	LIA/
				Ŭ				burnished orange	Rom?
								surface, some orange	
								grog	
L014	040	GX	4	51				Probably Roman	Rom
								greyware	
L014	040	RCW	1	22					M1C
L014	040	13/20	3	66				Base + other sherds	L12-
									13/14C
L014	040	21A	1	11				Glazed base	13-16C
L014	040	40	3	29					16/17-
							<u> </u>		18C
L014	040	40	1	30	7		pancheon	rim	16/17-
									18C
L014	040	40	1	39	9		Small jar	rim	16/17-
									18C
		40	1	15	4	*	Small jar	rim	16/17-
L014	040	70					,		
		-							18C
L014 L014	040	45D	1	12				Fabric 45, prob. Frechen(?)	18C 16-17C

Ctxt	finds	Fabric	no	wt(g)	Eve	abr	form	notes	Spot
	no.								date
L014	040	48D	1	26	6			White plate rim	19-20C
L014	045	GX	4	53					Rom
L014	046	GTW	1	22	0				L1C BC-
									M1C AD
L014	049	AJ	1	95			D 20		M1-2C
L014	049	HZ(GTW)	1	10	4			LSJ rim	L1C BC-
									M1C AD
L015	047	GTW	1	7	0	*		Heavily wiped, pitted	L1C BC-
								exterior surface	M1C AD
L015	048	GTW	7	61	0	*			L1C BC-
									M1C AD
L015	048	RCW	1	26		*	Cam 218	Shoulder	E/M1C
L015	050	GTW	1	15	8		Cam 256	Pitted surfaces similar to	E-M1C
								dissolved shell-temper	
L015	050	RCW	1	1					M1C?
L016	052	GTW	8	97	0	*		Some abrasion, includes	E/M1C
								sherd from small thin-	
								walled pot	
L016	052	GTW	1	64	11		Cam 255/	Fabric is as for 256	L1C BC-
							256		E/M1C
									AD

Appendix 3: Catalogue of pottery from the fort ditch and siege ditch
by Stephen Benfield

Ctxt	find	Fabric	form	no	wt(g)	Eve	abr	notes	Spot date
F117	190	40B		1	3			Glazed both sides, mug?	L16- L18C
F117	191	40		1	16				M16- 18C
F117	191	40B		1	4			Glazed both sides, mug?	L16- L18C
F117	191	45D		1	4			Mottled surface	16- 17/18C
F117	255	40		2	27			Misc sherds	M16- 18C
F117	255	40B		3	6			Glazed both sides, mug?	L16- L18C
F143	212	20		1	5				L12-14C
F143	212	21A		1	33	2		Rim from large vessel, prob. A cistern or storage jar, black surface with white paint (later fabric type) (CAR 7 108)	15-16C
F143	212	21A	cistern	1	24			Bung hole, black surface (prob.later fabric type) (CAR 7 108)	15-16C
F143	212	40		30	305			Misc sherds	M16- 18C
F143	212	40		1	11	7		Flat-topped expanded rim	M16- 18C
F143	212	40	lid	1	69			Simple rounded edge with round, flat-topped, slightly flaring knob, dia 140 mm	M16- 18C
F143	212	40A	Carinated bowl	1	4	6		Carinated bowl with white slip decoration, these appear only to have been recorded in Fabric 31A in Colchester (CAR 7, fig 183) but the fabric seems to be metropolitan slip ware (Fabric 40A) and is not orange with a bright glaze as in the North Holland examples	17-18C
F143	212	40B		1	29			Base, no internal glaze	L16- L18C
F143	212	40B	mug	6	15			Probably from a mug	L16- L18C
F143	212	42		5	110			Misc sherd 3 yellow 2 green coloured glaze	16-17C
F143	212	42	Chafing dish	1	10			Perforated suspended base sherd	16-17C
F143	212	43		1	4				16-17C
F143	212	45		1	7				15- 17/18C
F143	212	45C		1	3			Raren?	15- 17/18C
F143	212	45D		1	3			Mottled surface	16- 17/18C
F143	212	46		1	2			plate/dish or charger	16- 17/18C
F143	220	20	Cooking pot	1	8	6		rim	L12-14C
F143	220	21A		1	6				13-16C
F143	220	31A		1	3			Bright slip and reddish- orange fabric, probably Dutch	15-L17C
F143	220	40		17	202				M16-

Ctxt	find	Fabric	form	no	wt(g)	Eve	abr	notes	Spot date
									18C
F143	220	40		1	39	14		Bowl or storage jar	M16-
1 1 10		10			00			Dom of otorago jai	18C
F143	220	40		1	26	7		Bowl or storage jar	M16-
									18C
F143	220	40		1	17	6		Dish or pancheon	M16-
									18C
F143	220	40		1	17	5		bowl	M16-
									18C
F143	220	40		1	10	3		Rim frag	M16- 18C
F143	220	40	bowl?	1	45			Base with protruding foot,	M16-
1110	220	10	5000		10			only part internal glaze, bowl?	18C
F143	220	40B	mug	2	25			Includes base sherd	L16-
1110	220	100	mag	-	20				L18C
F143	220	40B	mug	1	12	6		rim	L16-
1 1 10		100	mag			Ũ			L18C
F143	220	43		1	5			Probably Martincamp	16-17C
F143	220	45A		1	5			Possibly Langerwehe (L14-	16-
1 1 10		10/1			Ũ			15C)	17/18C?
F143	220	45D		1	4			Mottled surface	16-
					•				17/18C
F143	220	45F	jug	1	24			Tankard or jug, blue line of decoration with cordon	17-18C
F143	220	46	Dishes (2)	1	14			From 2 plates/dishes or	16-
1145	220	40	Disiles (2)		14			chargers	17/18C
F143	220	46		1	5			From a drinking jug with a	17/18C
1145	220	40			5			purple spotted glaze	17/100
F143	235	23A		1	27			pulple spotted glaze	13-15C
F143	235	40		8	86			Misc sherds	M16-
1140	200	70		0	00				18C
F143	235	40	Pitkin?	1	36	24			M16-
1140	200	-10	T IUNIT:		00	27			18C
F143	235	40		1	36	21		Small bowl, pitkin or possibly chamber pot (internal glaze only)	M16- 18C
F143	235	40		7	86			Misc sherds	M16-
1140	200	70		'	00				18C
F143	243	13		2	16			Sandy with red-brown	L11-
1140	240	10		~	10			surfaces	E14C
F143	243	20		1	8				L12-14C
F143	243	21A		1	8			Sandy grey, but with white	15-16C
1 1 10	- 10				Ũ			surface paint so Fabric 21A	10 100
F143	243	40		3	92			Misc sherds	M16-
				-					18C
F143	243	40		1	8	15		Vessel with small rim dia.	M16-
-	-	-			-	-		poss a costrel or jug?	18C
F143	243	40	bowl	1	30	5		Handle at rim, internal glaze	M16-
								only, bowl, prob not a	18C
								chamber pot	
F143	243	40B	mug	4	10				L16-
				1					L18C
F143	243	42		1	20				16-17C
F143	243	45		1	6				16-
									17/18C?
F143	243	45D		1	6			Mottled surface	16-
				1					17/18C
F143	243	46		1	2			Internal blue stripes	16-
									17/18C
F143	296	21A		1	3			Black surface with white paint (later fabric type) (CAR 7 108)	15-16C

Ctxt	find	Fabric	form	no	wt(g)	Eve	abr	notes	Spot date
F143	296	21A		1	2				13-16C
F143	296	40		23	159				M16-
									18C
F143	296	40	dish	1	59	7		Rim suggests a dish rather	M16-
								than a pancheon	18C
F143	296	40	Mug?	2	73			Handled vessel (handle vertically set) with all-over	M16- 18C
								greenish brown glaze,	
								possibly part of a large mug/tyg	
F143	296	40	Pancheon?	1	37	7		Pancheon or storage jar	M16- 18C
F143	296	40	Small jar or chamber	1	11	5			M16- 18C
			pot						180
F143	296	40	Small jar	1	17	8			M16-
			or chamber pot?						18C
F143	296	40B	mug	4	23			Dark black glazed surfaces,	L16-
_		-	- 3		_			some rilling, probably sherds	L18C
								from a mug(s)	
F143	296	42		5	55			Misc sherds, base from a	16-17C
								small, deep bowl or similar	
								shaped vessel	
F143	296	42	Chafing	1	21			Handled sherd similar to CAR	16-17C
		10	dish		_			7 fig.156 no. 28	
F143	296	43	Flask?	1	7			Body sherd, thin, fine,	16-17C
								probably from a flask. Appears to be Hurst Fabric II	
F143	296	45	jug?	1	12			Rim probably from a jug,	16-
F143	290	45	jug:	1	12			possibly Frechen (Fabric	17/18C?
								45D)	17/1001
F143	296	45C		1	17	15		Raren?	15-
									17/18C
F143	296	45D		1	3			Mottled surface	16-
									17/18C
F143	71	40		3	65			Misc sherds	M16-
(F055)									18C

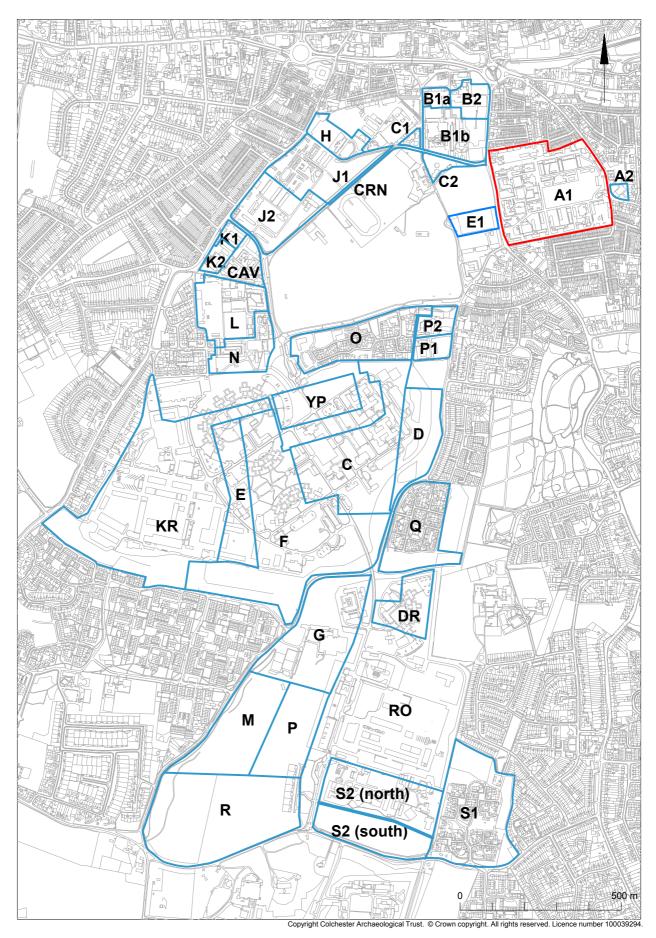


Fig 1 Colchester Garrison Alienated Land (Area A1 highlighted)

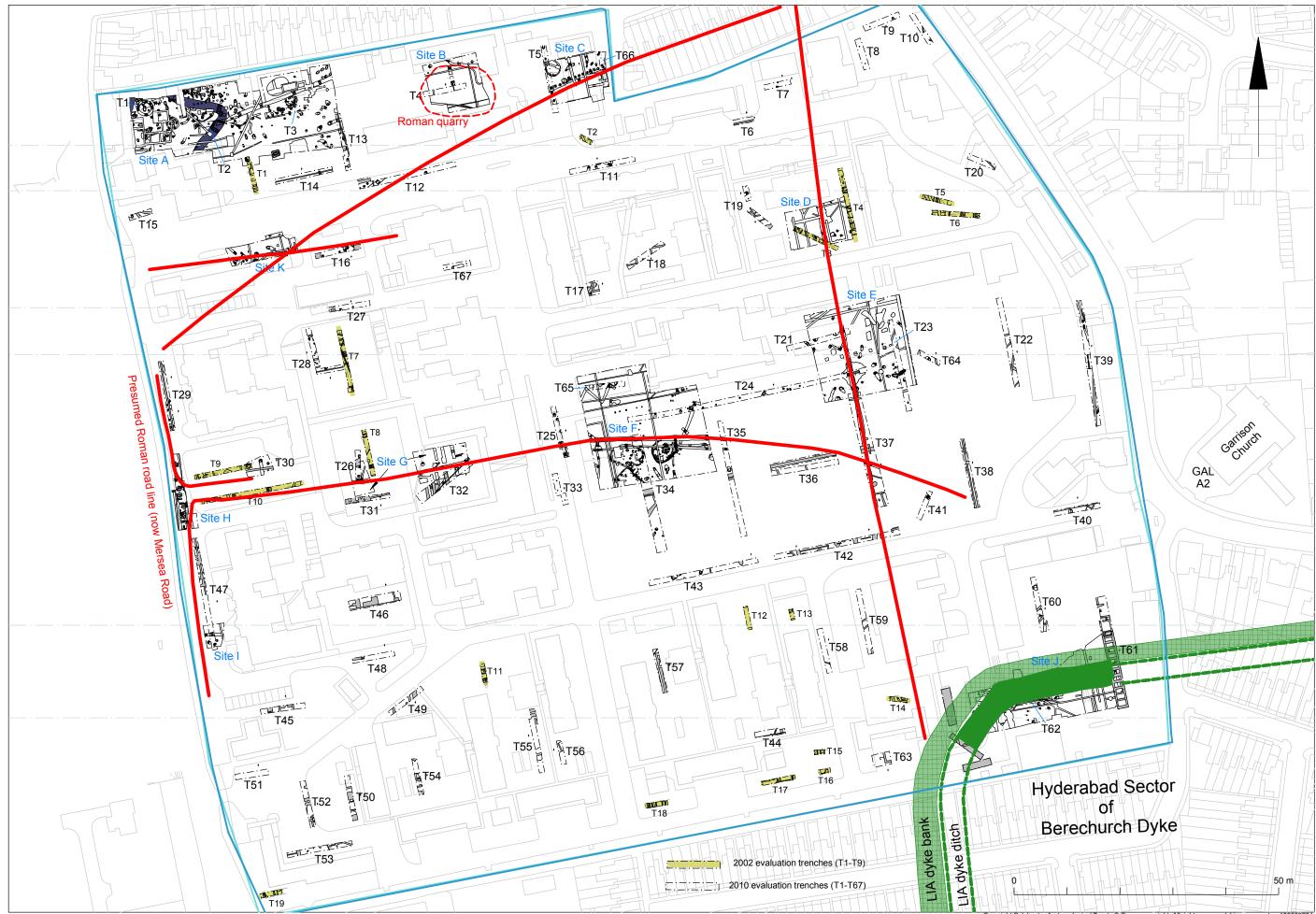


Fig 2 Garrison Alienated Land Area A1 2002 and 2010 evaluation trenches, and 2011 excavation Sites A-K. Also showing in green the newly-discovered LIA dyke, and in red the projected Roman landscape

opyright Colchester Archaeological Trust. © Crown copyright. All rights reserved. Licence number 100039294.

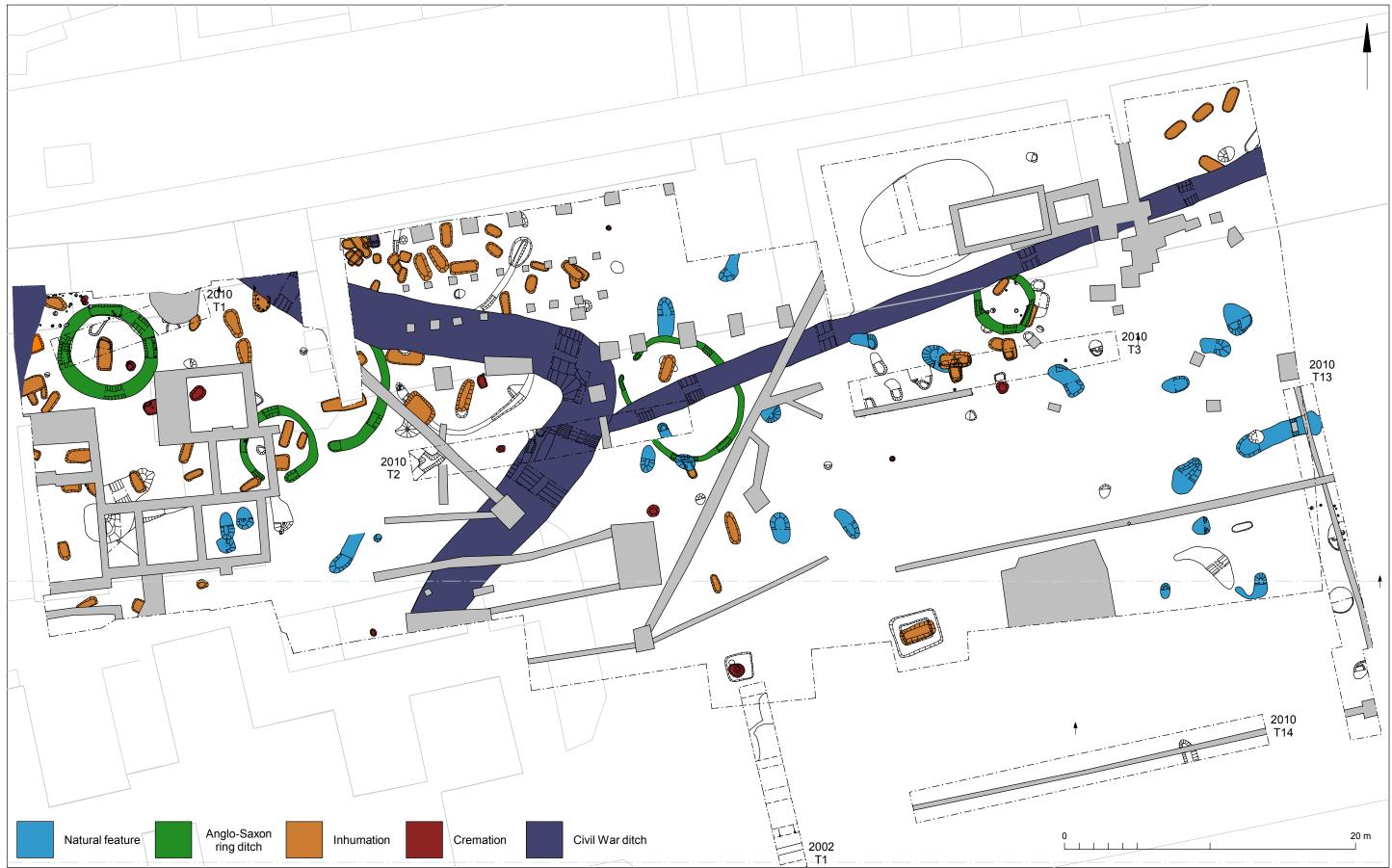
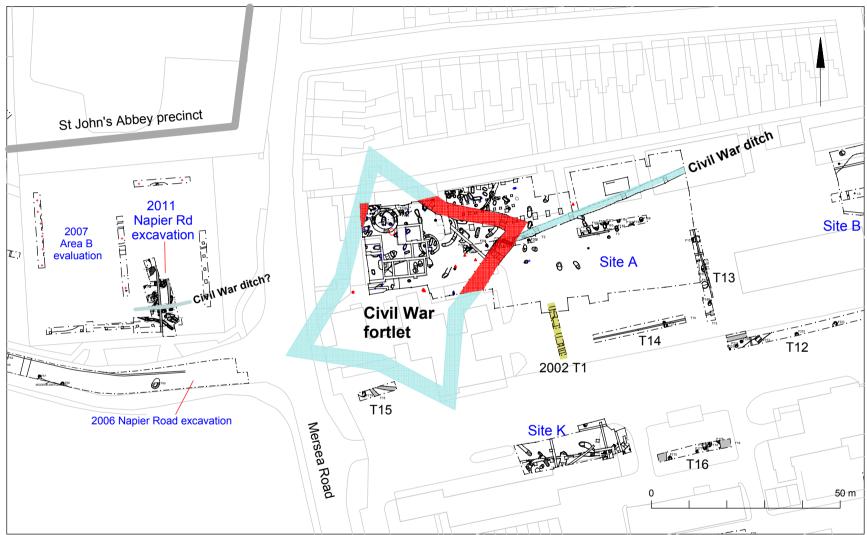


Fig 3 Garrison A1 Site A excavation site plan, showing position of 2002 and 2010 evaluation trenches. Civil War ditch, ring ditches, inhumations and cremations are highlighted.

Copyright Colchester Archaeological Trust. © Crown copyright. All rights reserved. Licence number 100039294.



Copyright Colchester Archaeological Trust. © Crown copyright. All rights reserved. Licence number 100039294.

Fig 3a Newly-discovered Civil War fortlet. Showing St John's Abbey precinct, Mersea Road, and local excavation/evaluation

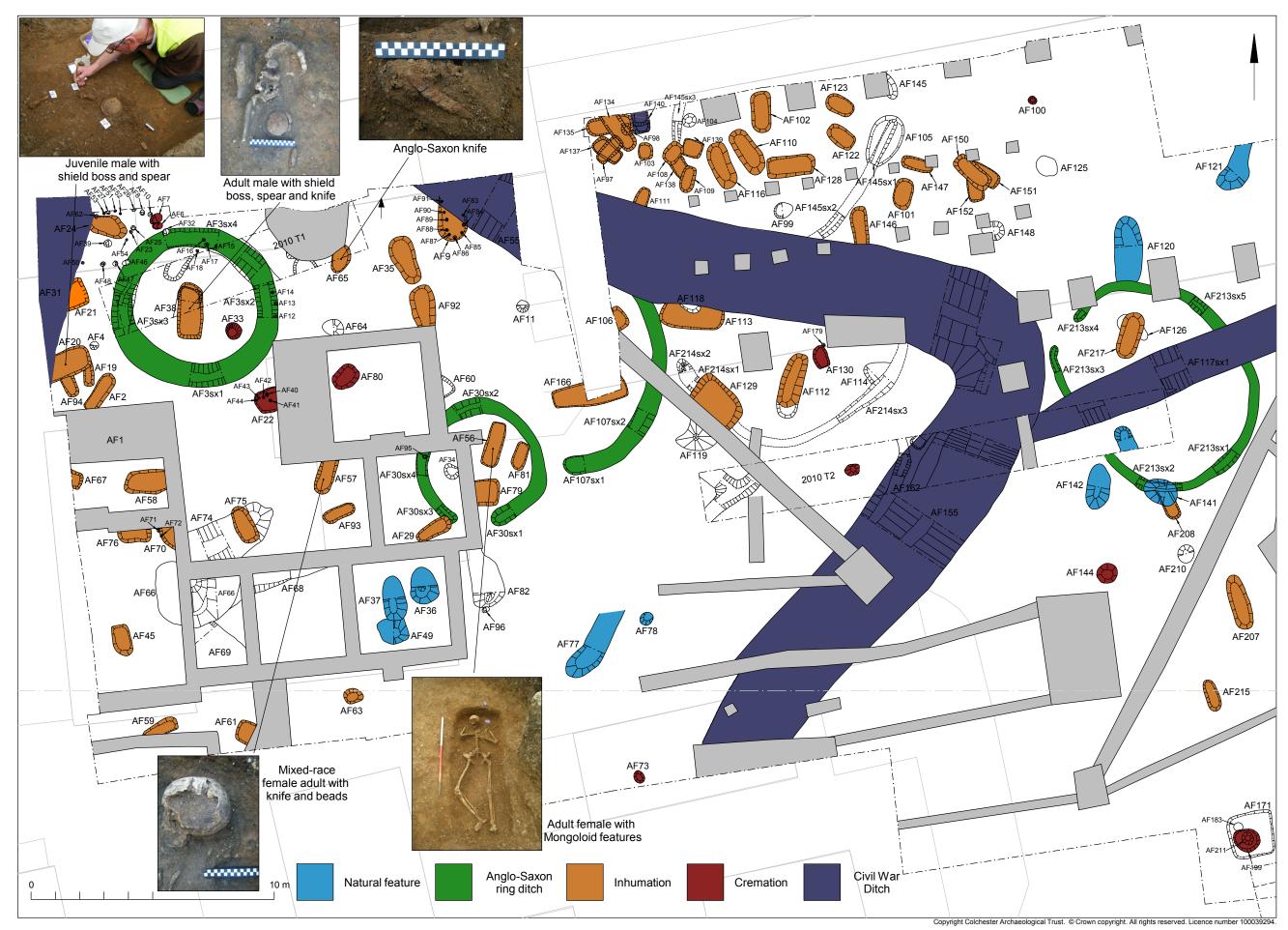


Fig 4 Garrison A1 Site A west site plan, showing position of 2002 and 2010 evaluation trenches. Ring ditches, inhumation burials and cremation burials are highlighted.



Fig 5 Garrison A1 Site A east site plan, showing position of 2010 trenches. Ring ditch, inhumations and cremations are highlighted.

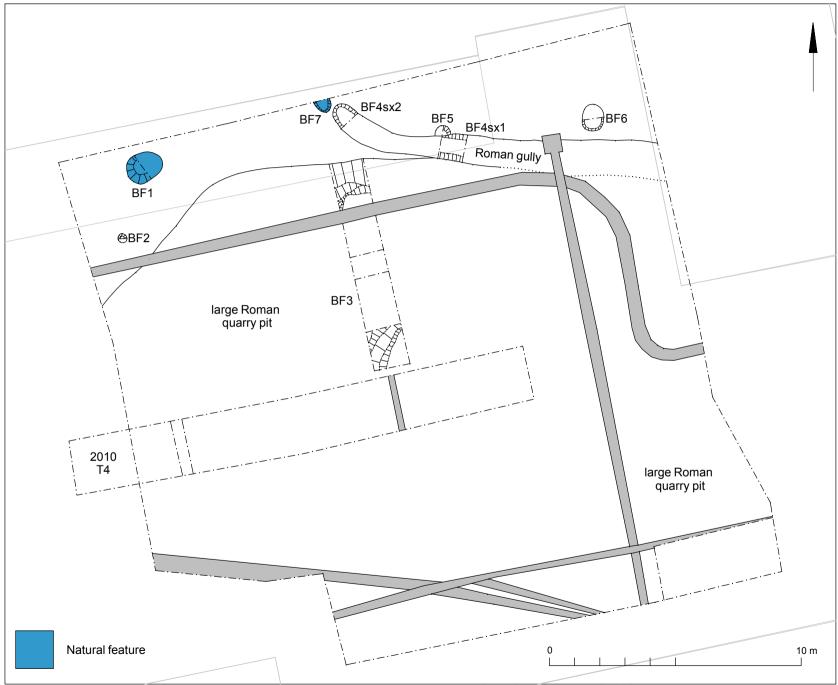


Fig 6 Garrison A1 Site B plan, showing 2010 evaluation trench position.

Copyright Colchester Archaeological Trust. © Crown copyright. All rights reserved. Licence number 100039294.

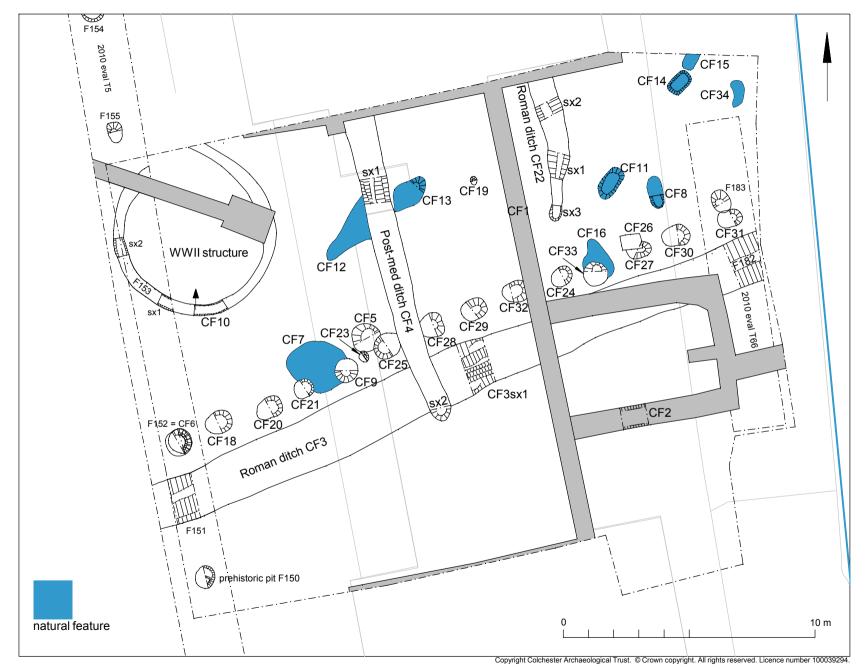


Fig 7 Garrison A1 Site C plan, showing 2010 evaluation T5 and T66

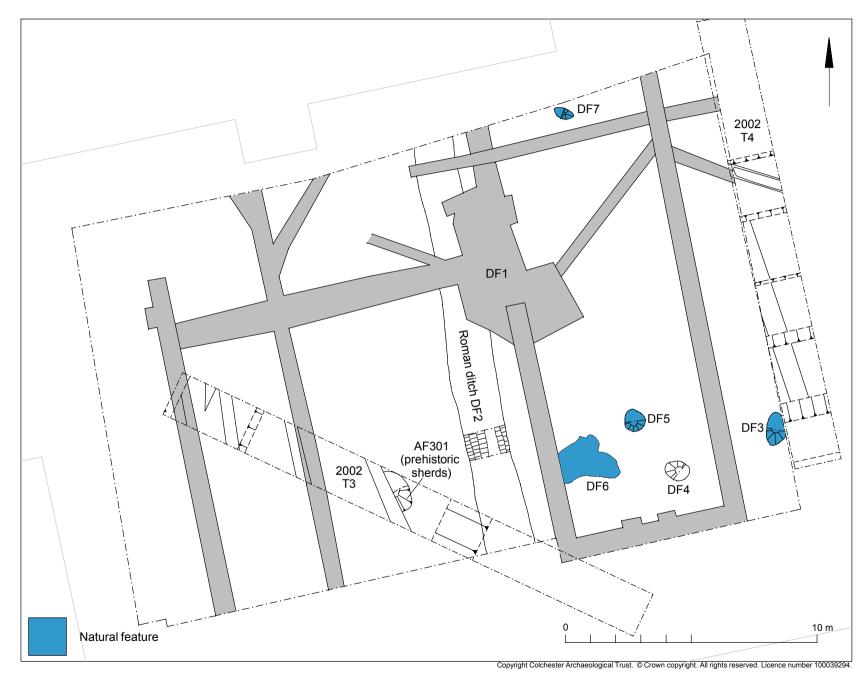


Fig 8 Garrison A1 Site D plan, showing 2002 evaluation trenches.

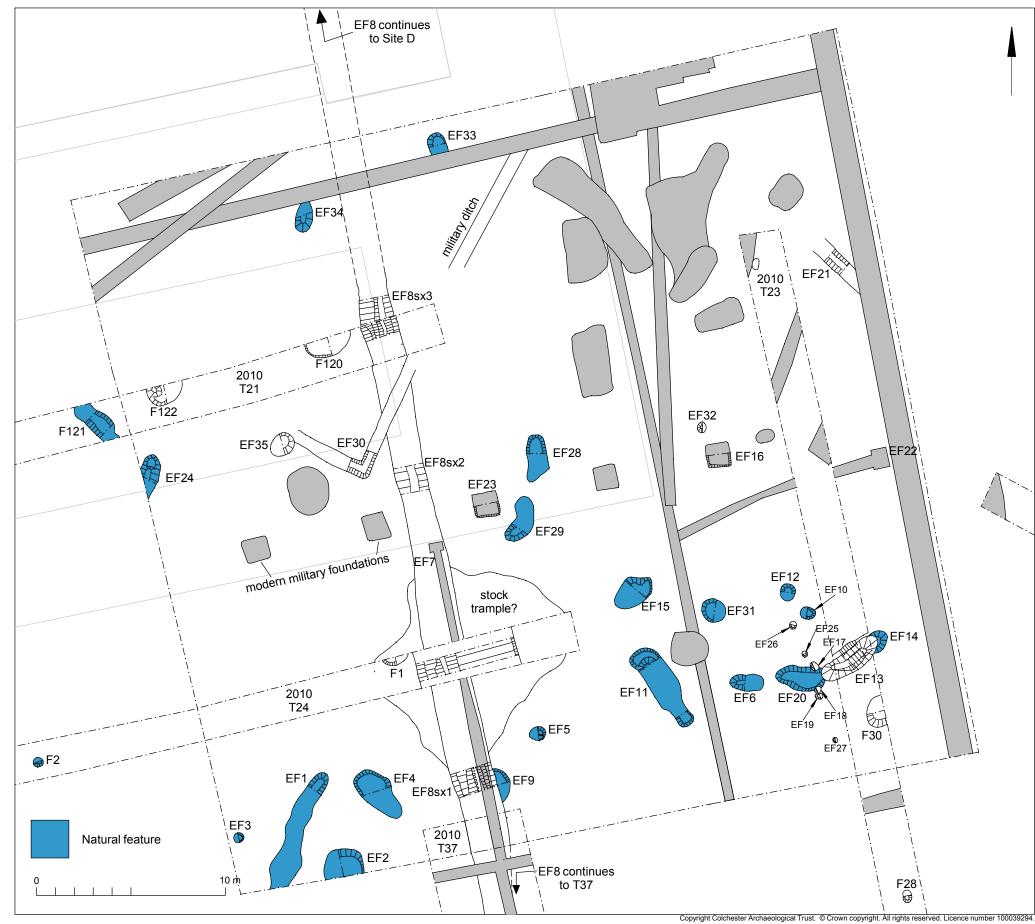
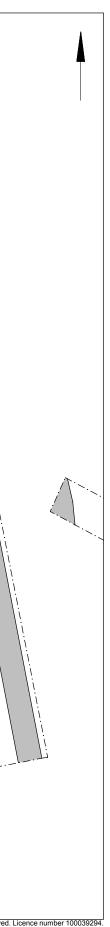


Fig 9 Garrison A1 Site E plan, showing 2010 evaluation trenches and features.



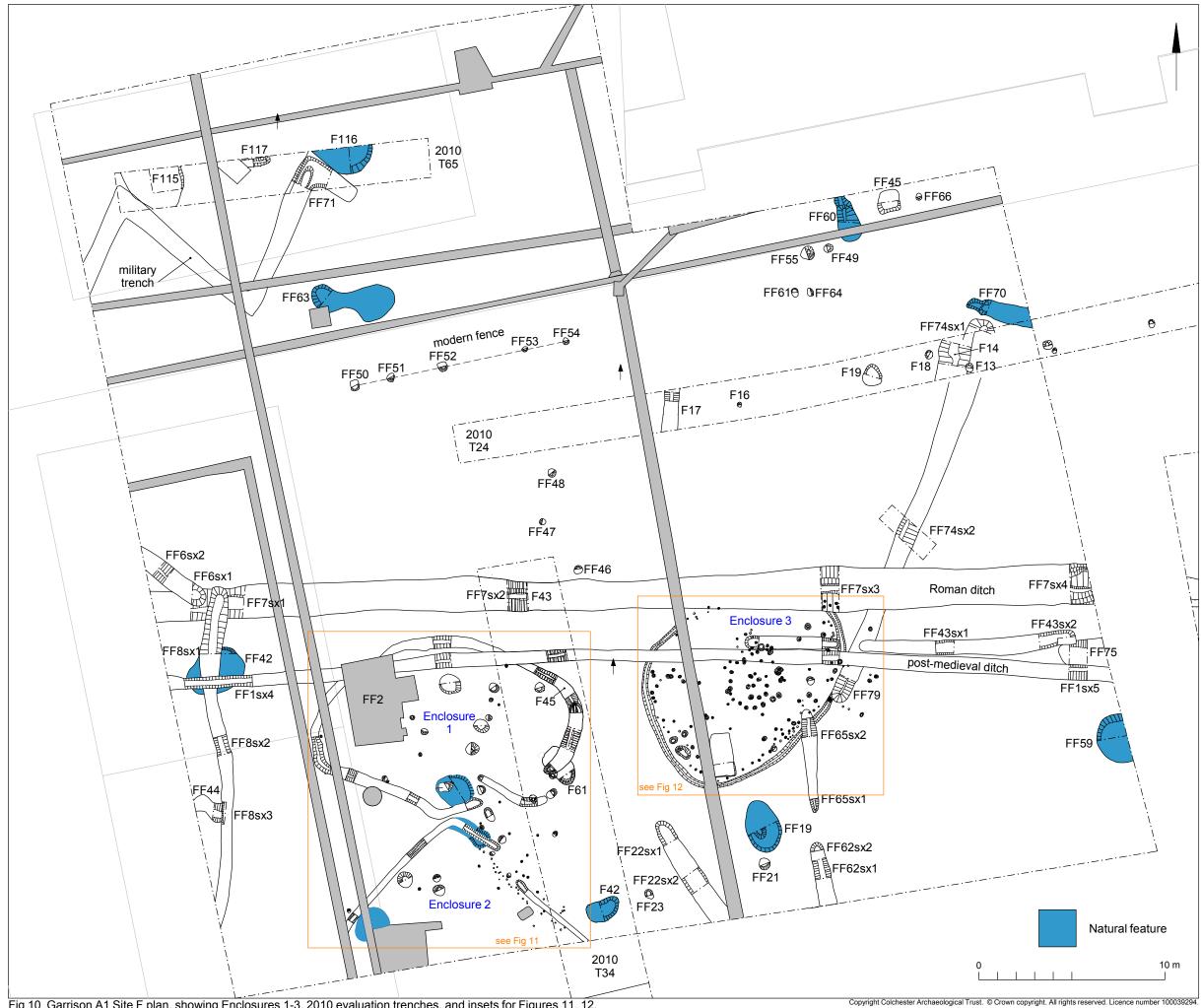


Fig 10 Garrison A1 Site F plan, showing Enclosures 1-3, 2010 evaluation trenches, and insets for Figures 11, 12.

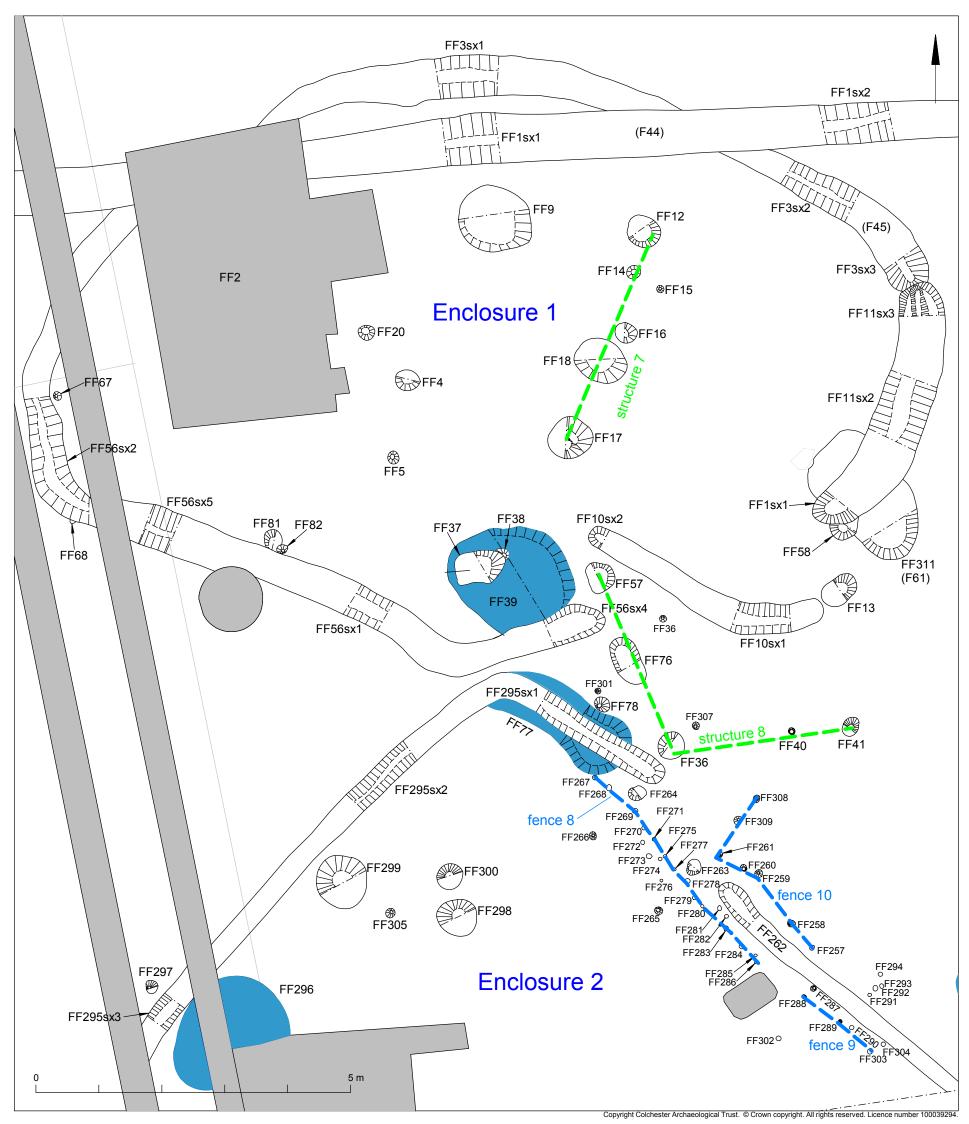


Fig 11 Garrison A1 Site F, detail of Enclosures 1 and 2, with interpretation of structures (green) and fences (blue). Figures in brackets are evaluation context numbers.

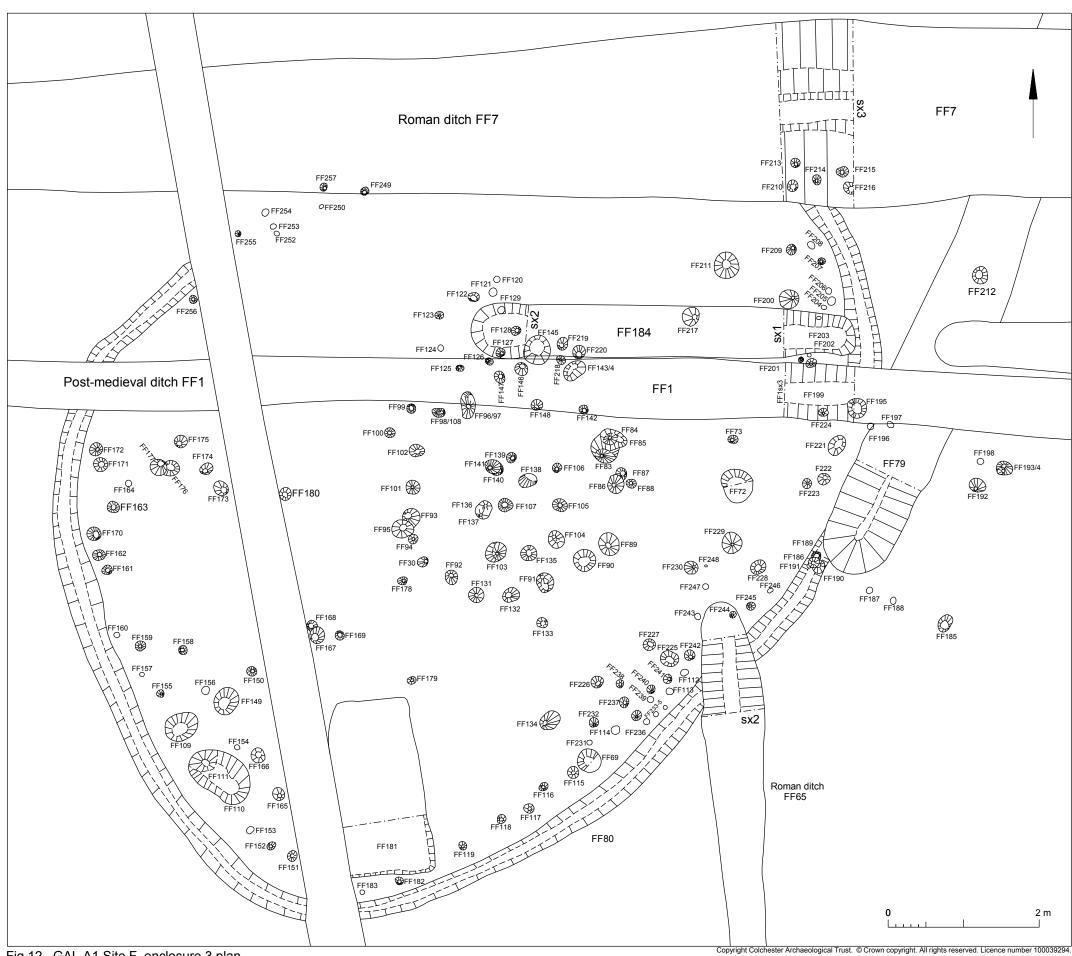


Fig 12 GAL A1 Site F, enclosure 3 plan

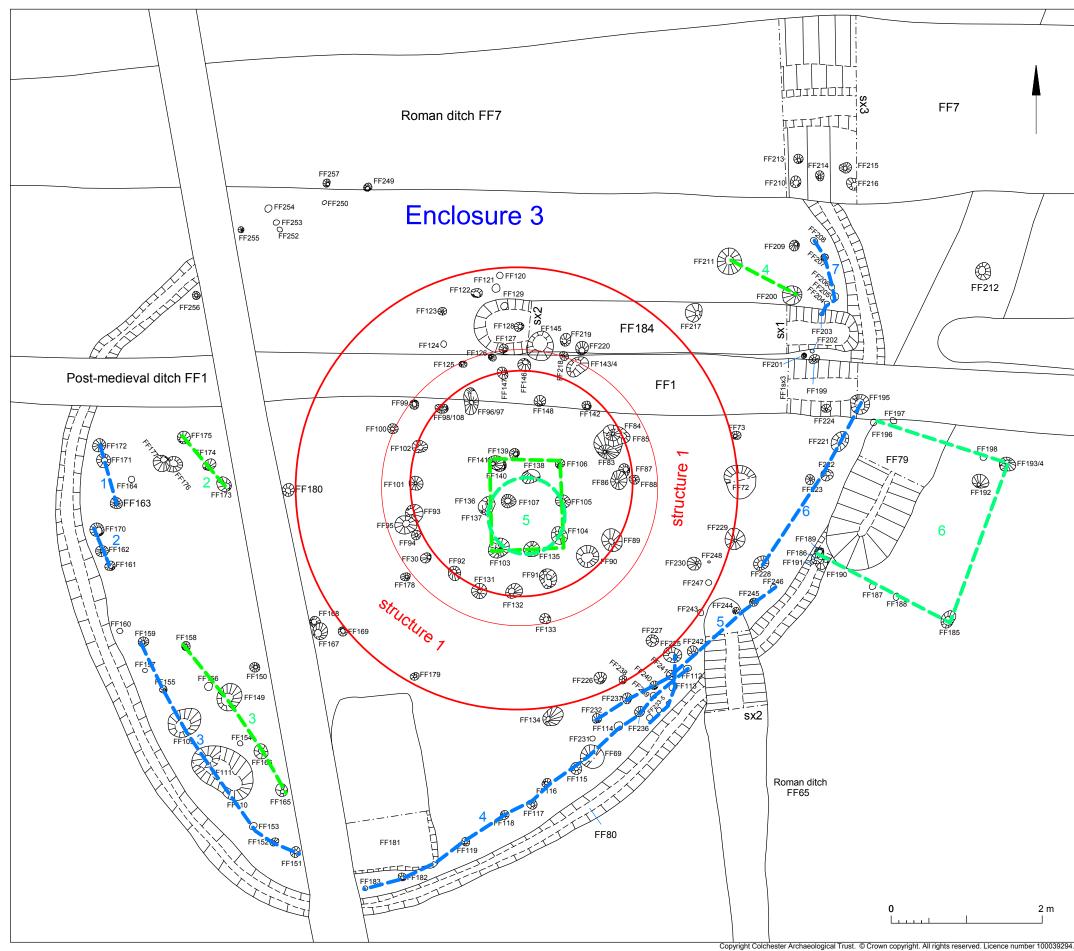
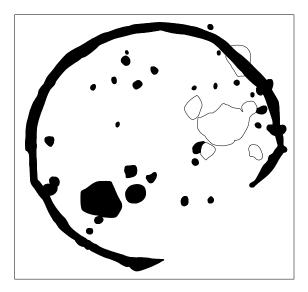


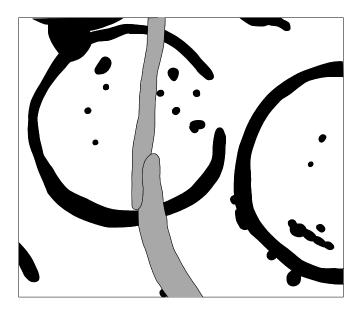
Fig 13 Enclosure 3 with interpretation of structures 1 (red circles), 2-6 (green) and fences 1-7 (blue). The inner and outer red circles show 3m and 6m diameters.



Stansted Airport: site ACS (Fig 70)



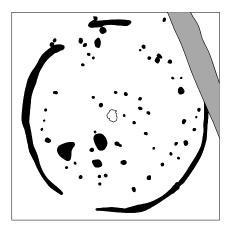
Stansted Airport: site ACS (Fig 71)



GAL A1 Site F

Little Waltham A7

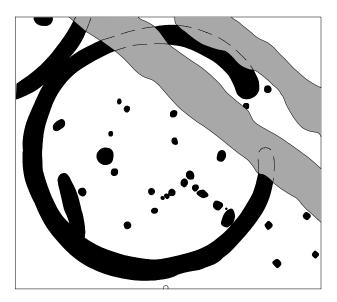
Fig 14 Comparison of prehistoric structures in Essex. GAL site F centre, with other excavated houses from Stansted Airport (Havis and Brooks 2004), Little Waltham (Drury 1978), Ardleigh (Erith & Holbert 1970), and GAL Area 2 (RPS/CAT Report 292).



GAL Area 2 (Ypres Road)



Fig 14 Erith & Holbert



Little Waltham A2



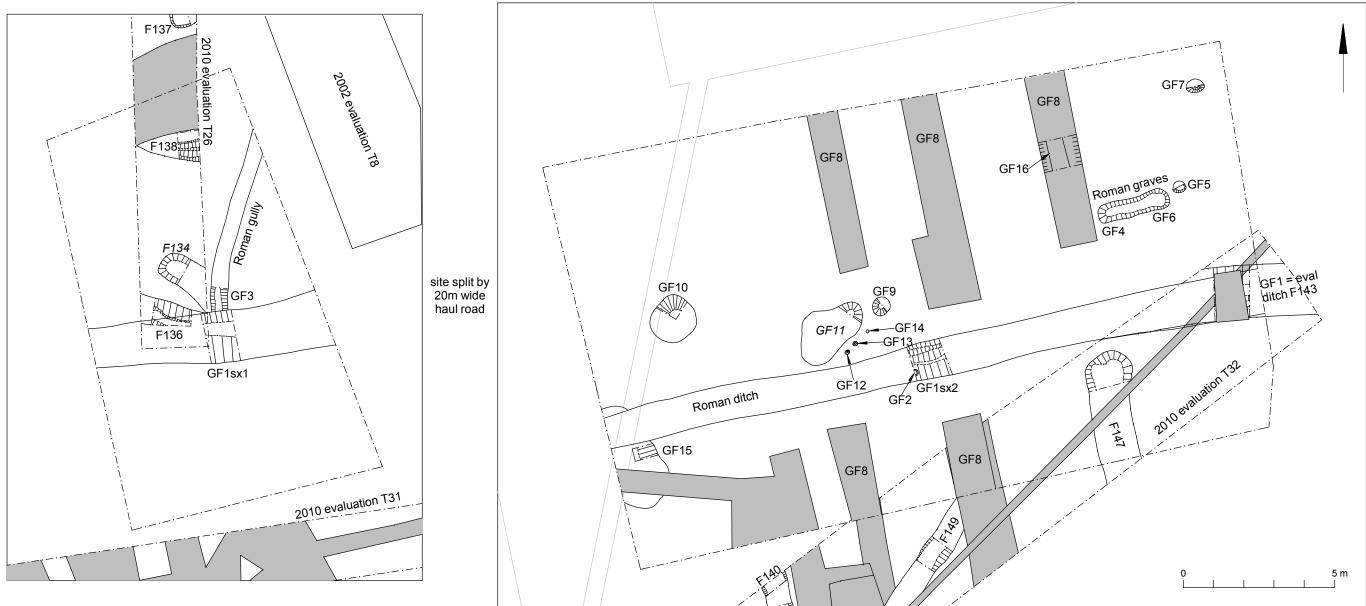
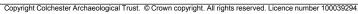
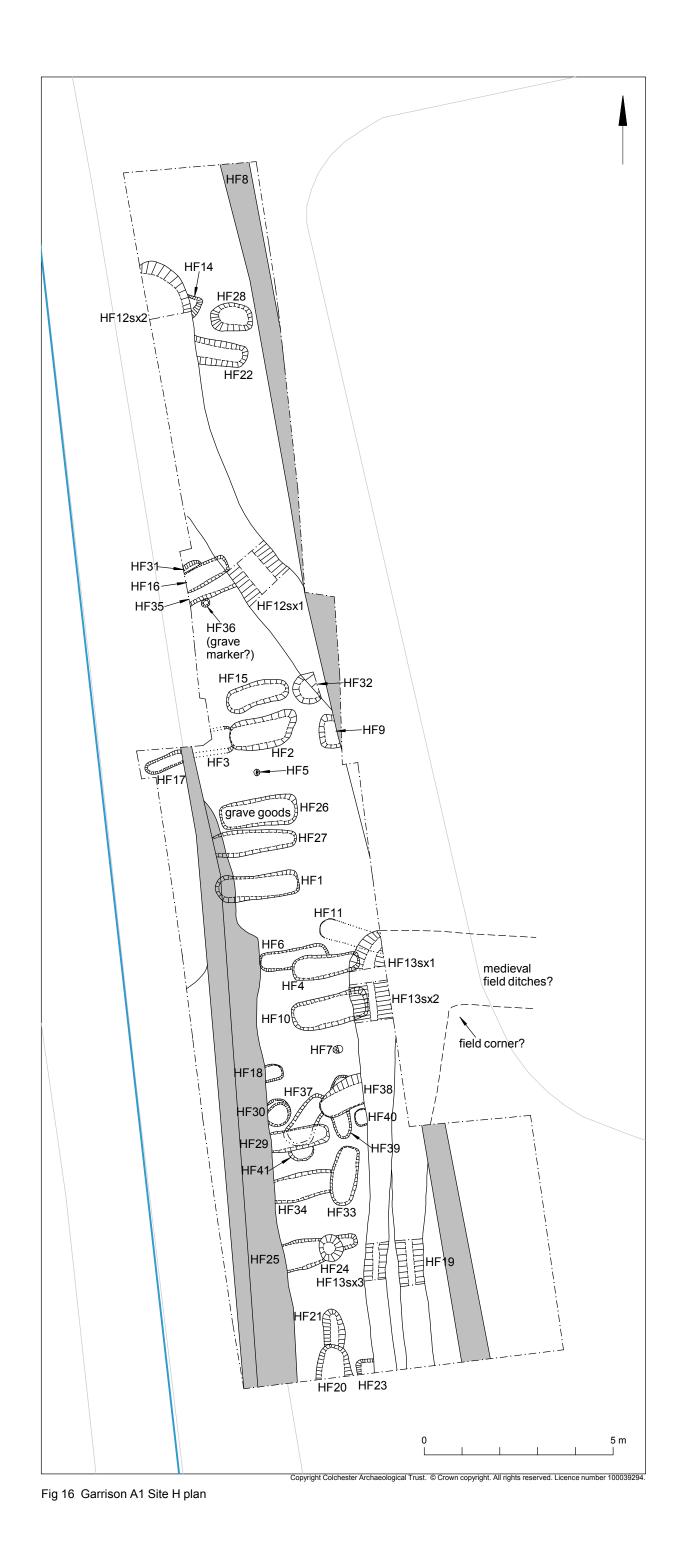


Fig 15 Garrison A1 Site G excavation plan, showing 2002 / 2010 evaluation trenches (feature numbers in italics are natural features).





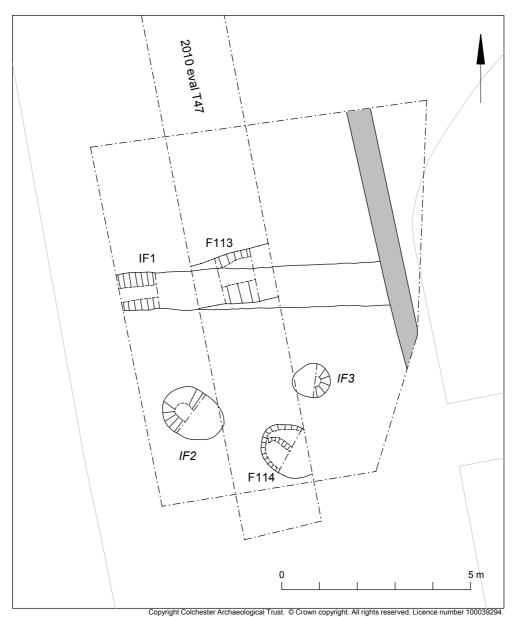


Fig 17 Garrison A1 Site I plan (contexts in italics are natural features or tree-throws)



Fig 18 Garrison A1: Site J plan. Newly-discovered Late Iron Age dyke (highlighted) is a continuation of Berechurch Dyke to the south

Copyright Colchester Archaeological Trust. © Crown copyright. All rights reserved. Licence number 100039294.

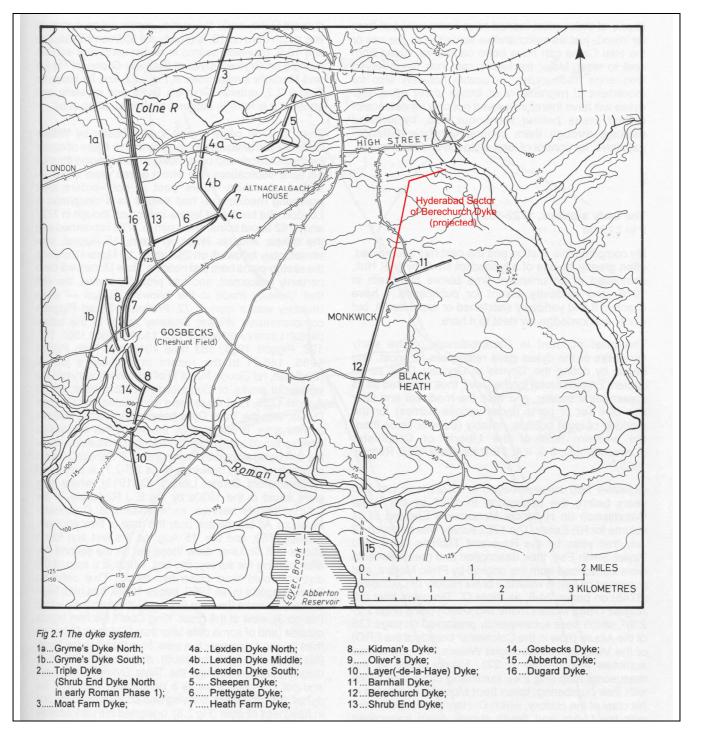


Fig 18a The Camulodunum Dykes, showing the newly-discovered Hyderabad Sector of the Berechurch Dyke

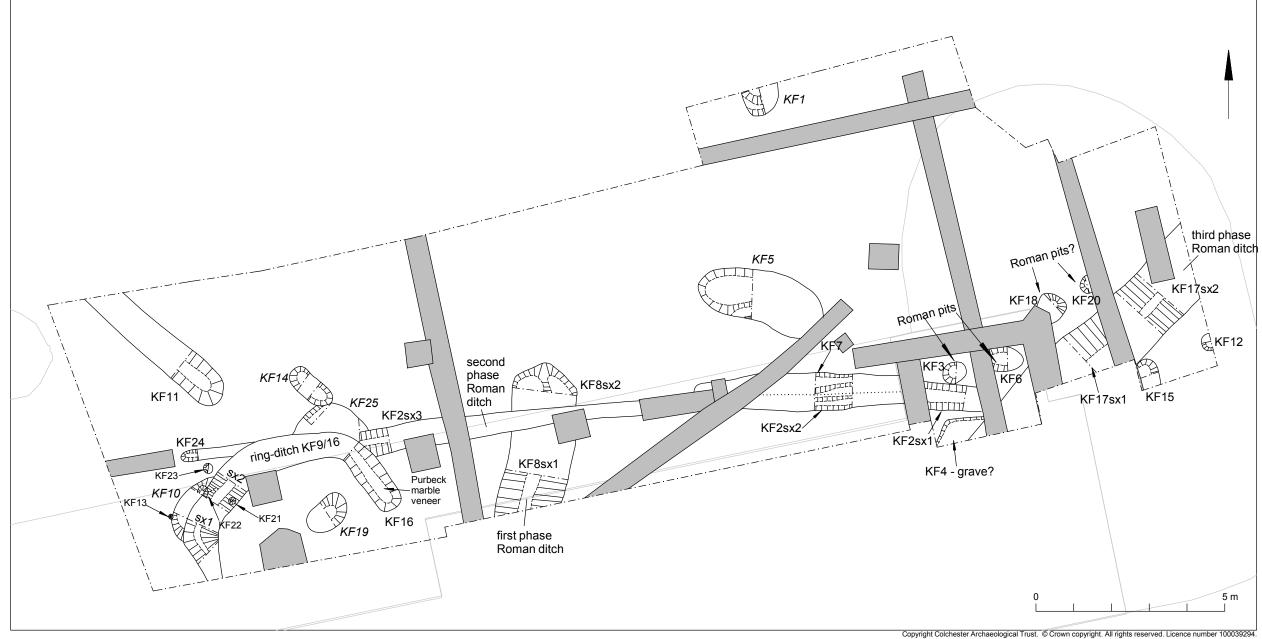


Fig 19 Garrison A1 Site K plan (italics indicates natural feature)

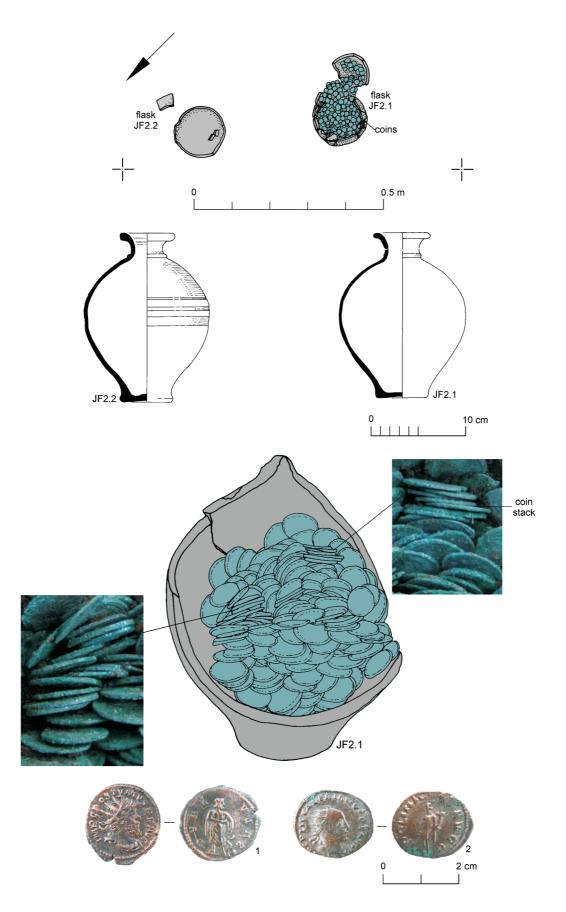


Fig 20 JF2 Sx1: plan of coin hoard (scale 1:10), hoard pottery (scale 1:4), plan 14 of the internal excavation of flask JF2.1 (scale 1:2) showing some close ups photos of the coin stacks (scale 1:1) and two examples of the coins (scale 1:1).

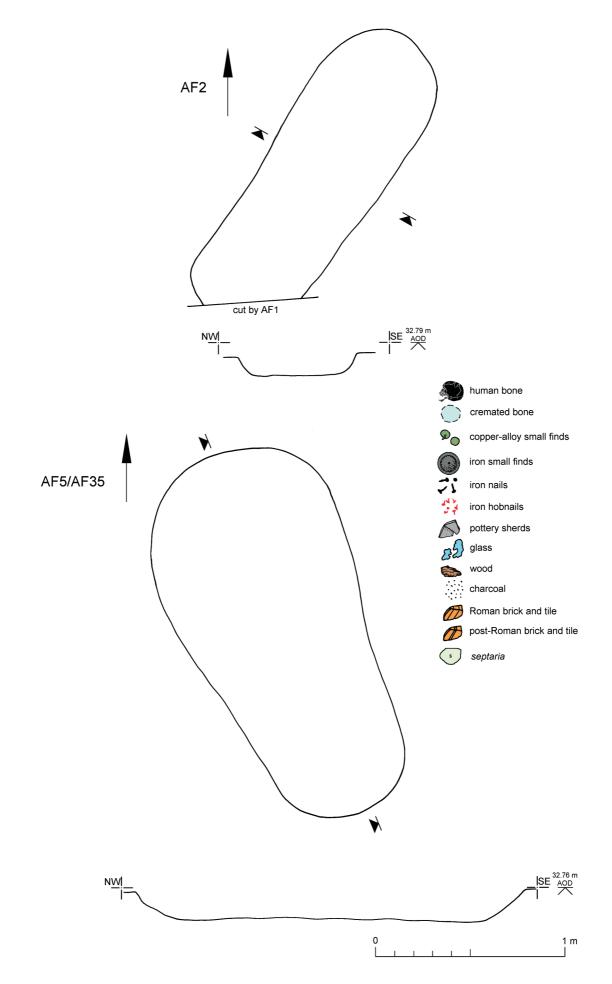


Fig 21 AF2 and AF5: burial plans, profiles and key for all burials.

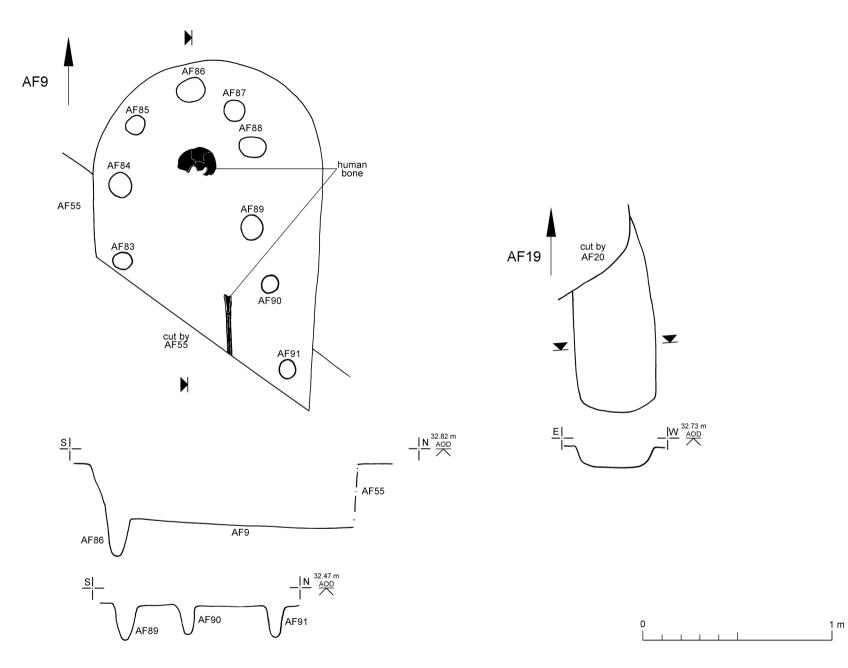


Fig 22 AF9 and AF19: burial plans and profiles.

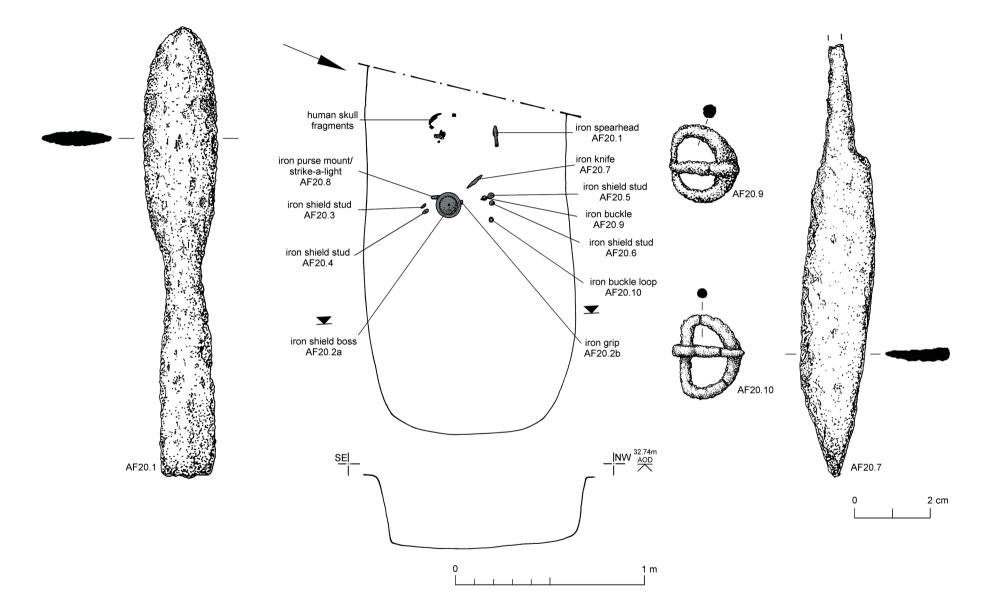


Fig 23 AF20: burial plan, profile and small finds.

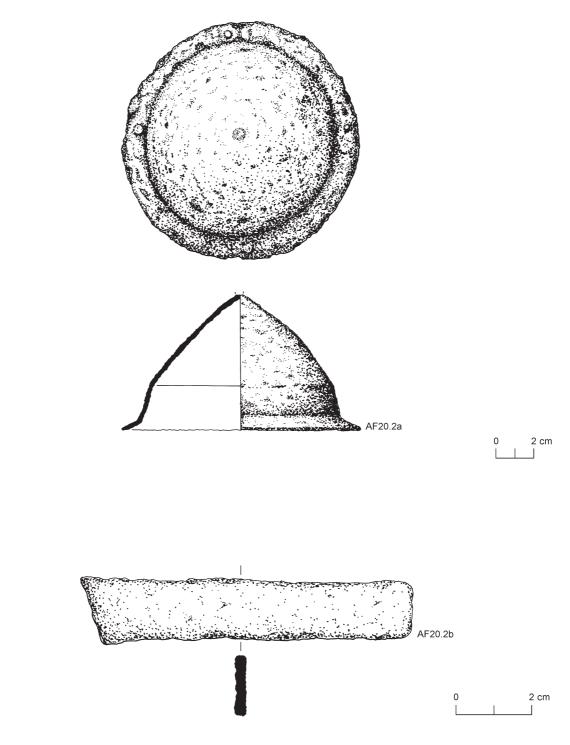


Fig 24 AF20: small finds.

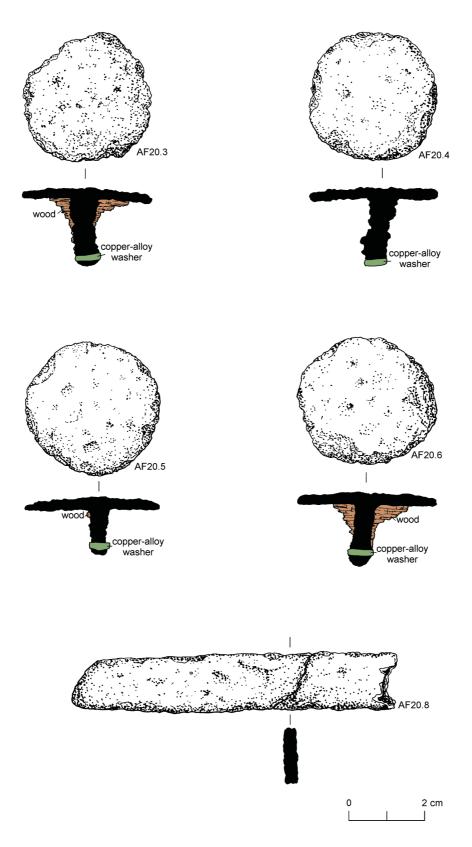


Fig 25 AF20: small finds.

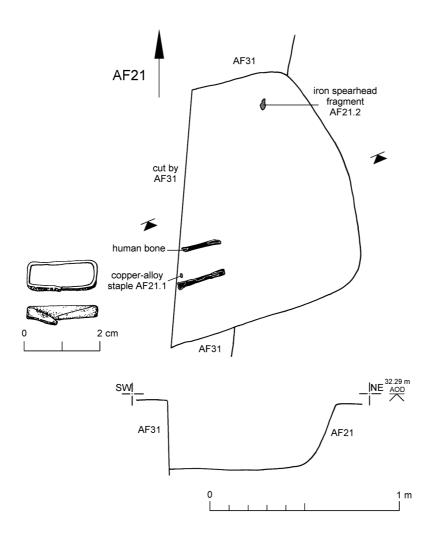


Fig 26 AF21: burial plan, profile and small find.

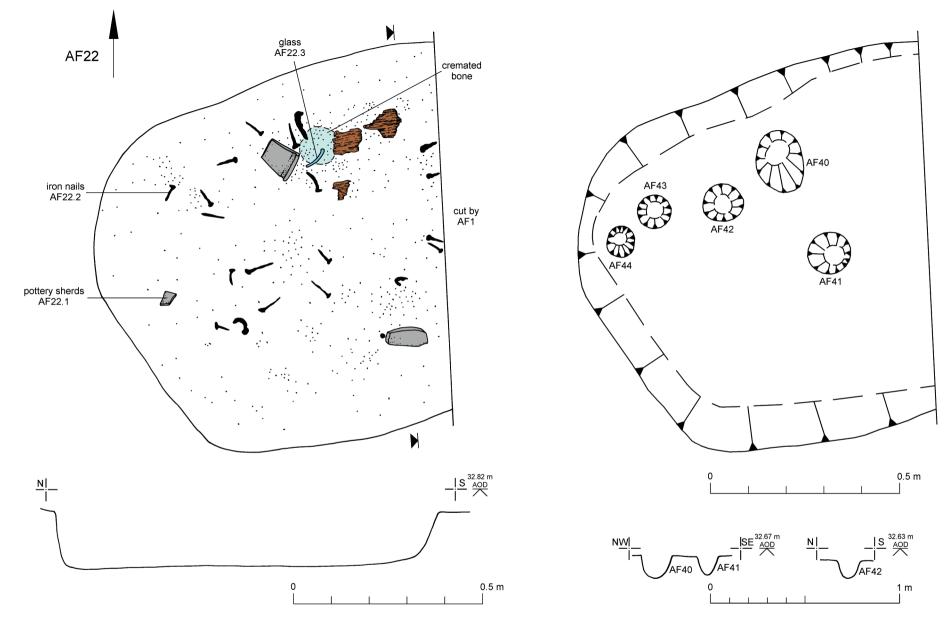
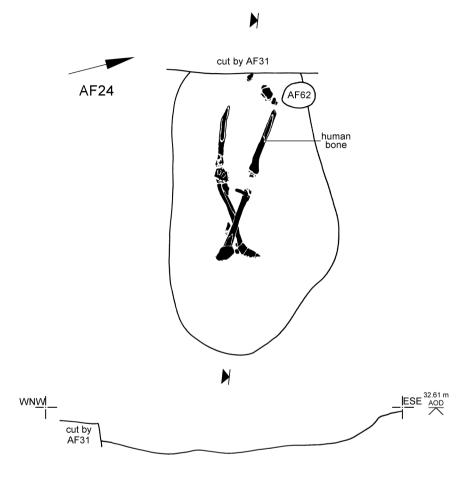


Fig 27 AF22: mid and post-excavation burial plans and profiles.



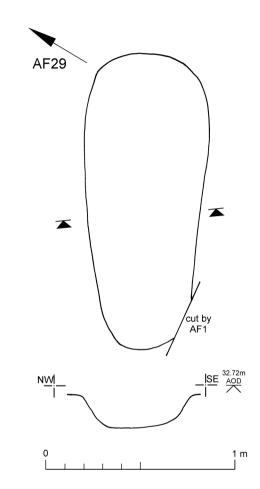


Fig 28 AF24 and AF29: burial plans and profiles.

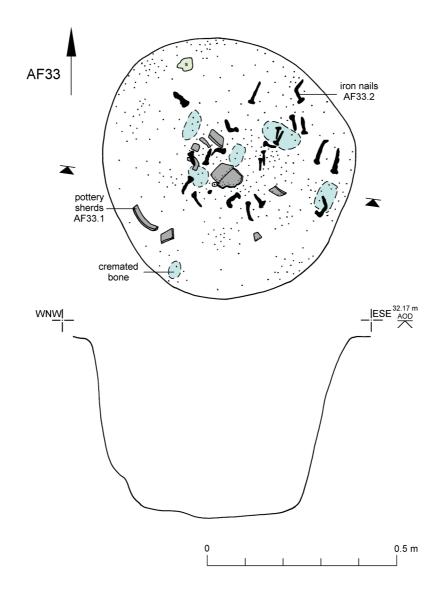
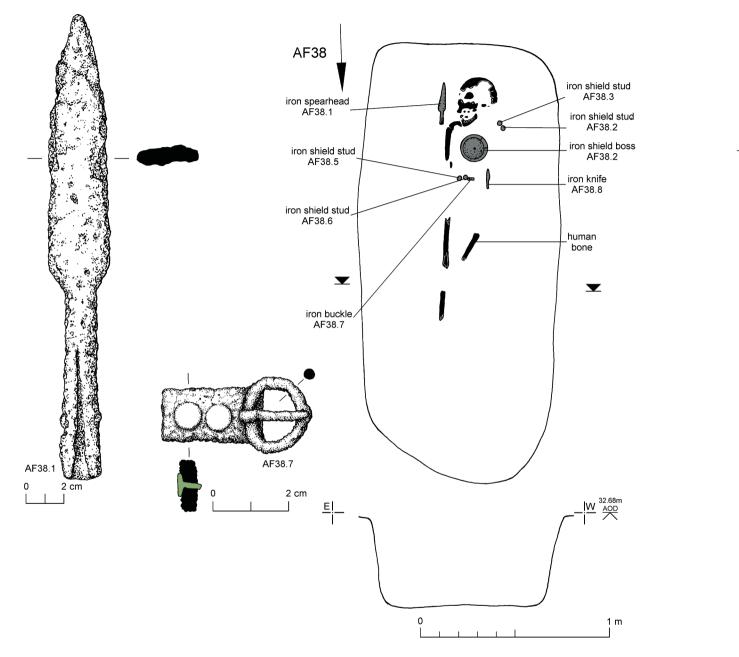


Fig 29 AF33: burial plan and profile.



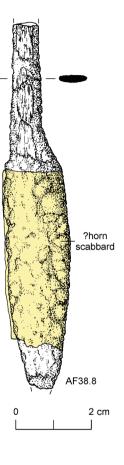


Fig 30 AF38: burial plan, profile (scale 1:10) and small finds (AF38.1 scale 1:2, AF38.7-8 scale 1.1).

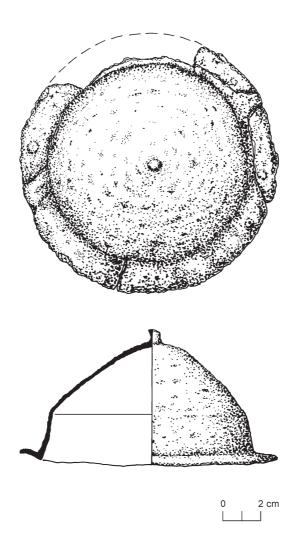


Fig 31 AF38: small finds.

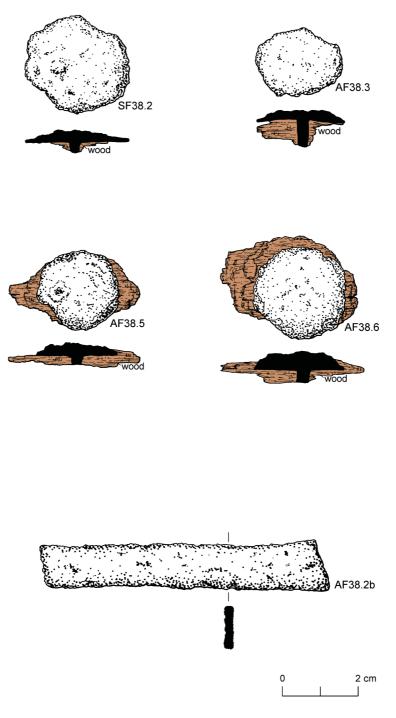
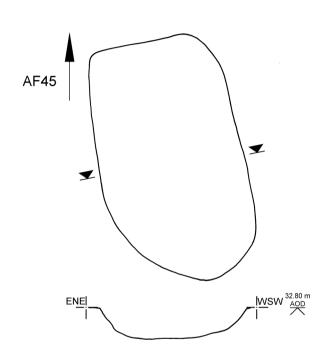


Fig 32 AF38: small finds.



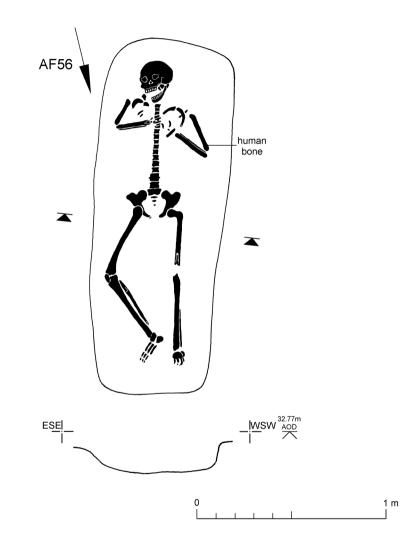


Fig 33 AF45 and AF56: burial plans and profiles.

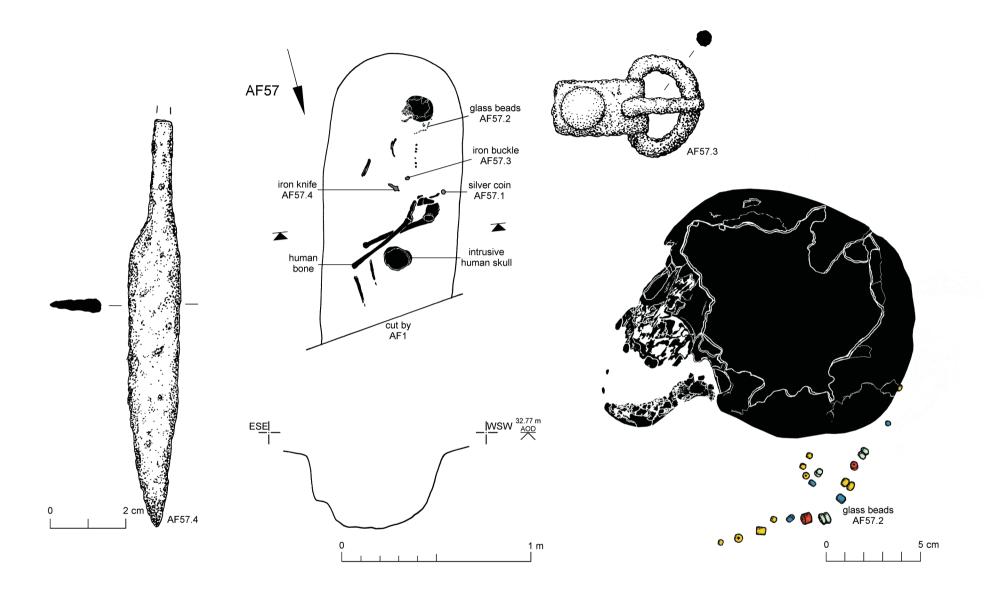


Fig 34 AF57: burial plan and profile (left, scale 1:20) with a close up of the skull and beads (right, scale 1:2) and small finds (scale 1:1).



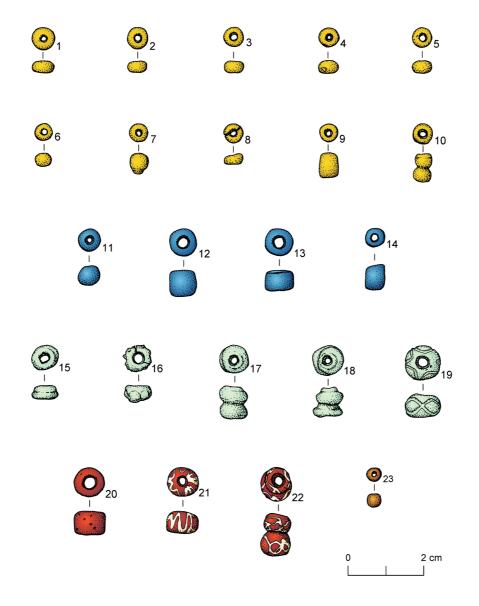


Fig 35 AF57: small finds (AF57.1 silver coin and AF57.2 glass beads numbered 1-23).

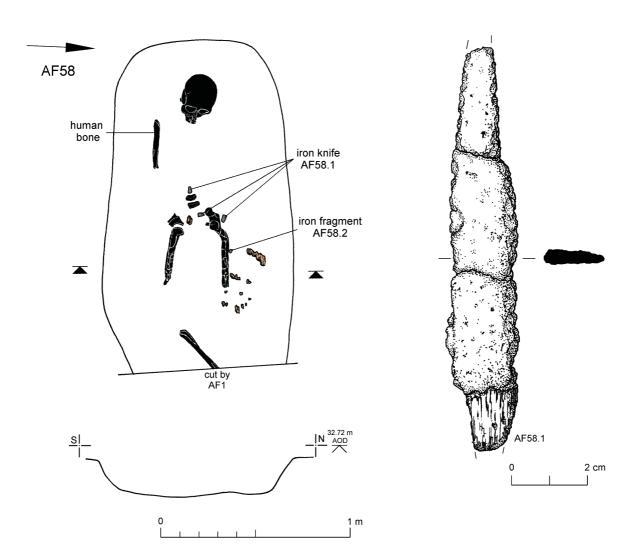


Fig 36 AF58: burial plan, profile and small find.

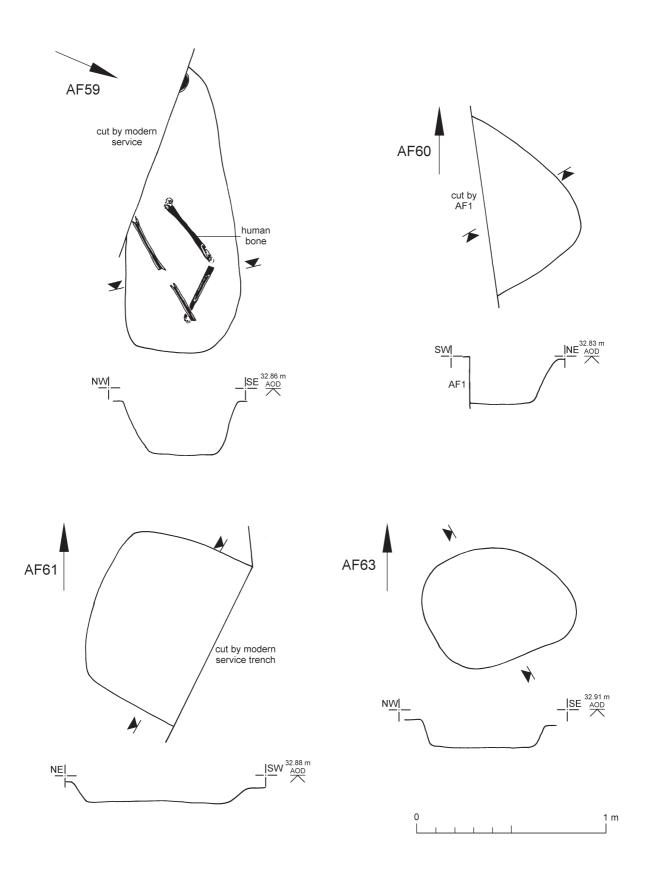


Fig 37 AF59-61 and AF62: burial plans and profiles.

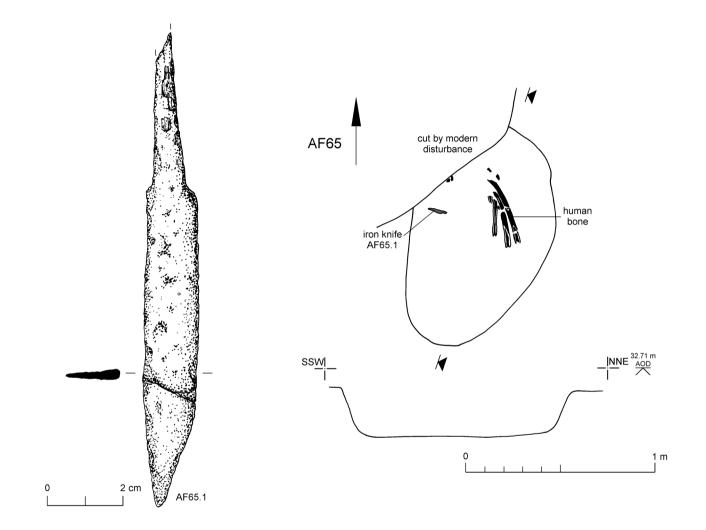


Fig 38 AF65: burial plan, profile and small find.

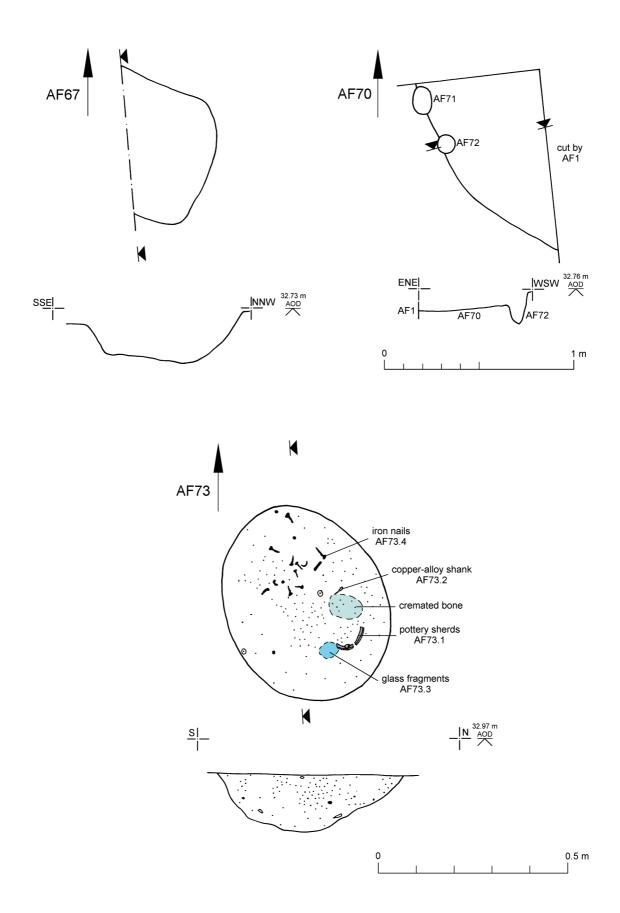


Fig 39 AF67, AF70 and AF73: burial plans, profiles and section.

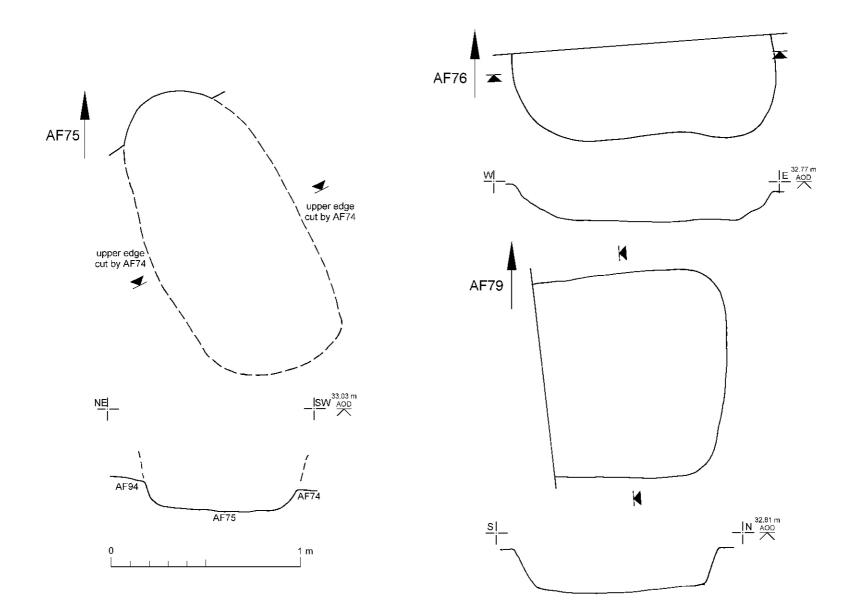


Fig 40 AF75-6 and AF79: burial plans and profiles.

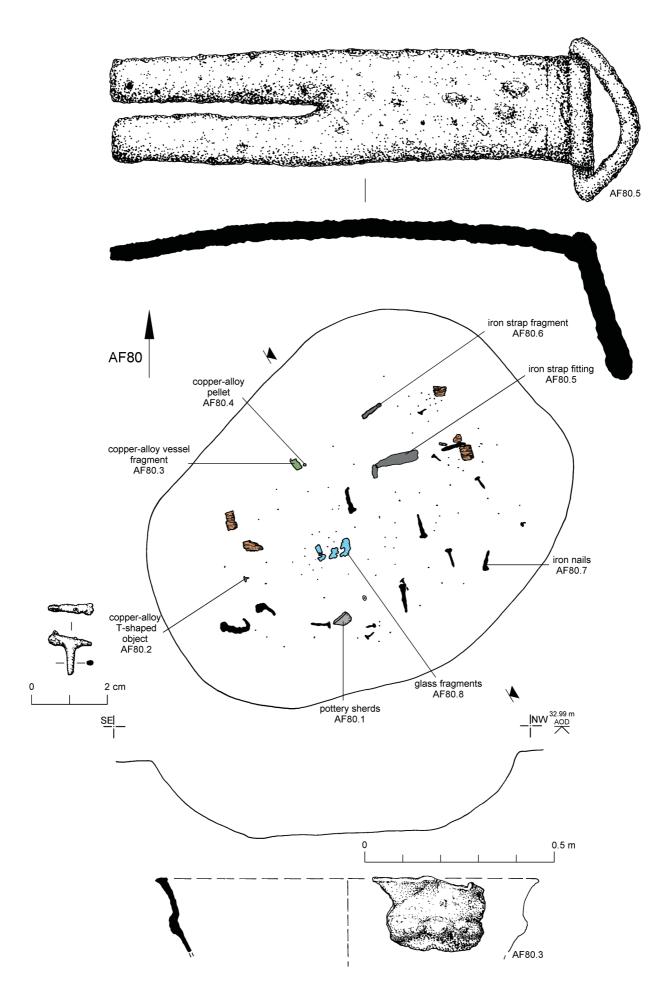


Fig 41 AF80: burial plan, profile (scale: 1:10) and small finds (scale: 1:1).

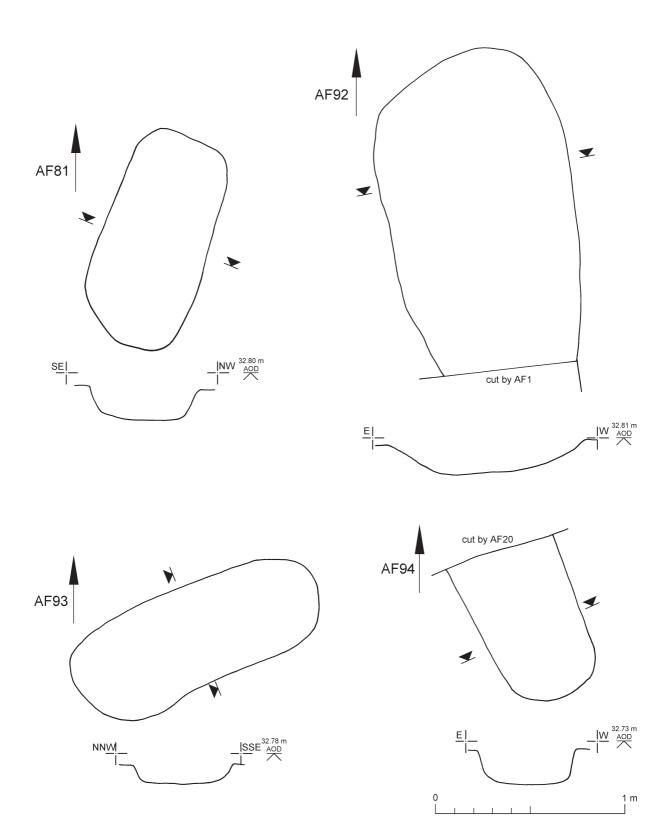


Fig 42 AF81 and AF92-4: burial plans and profiles.

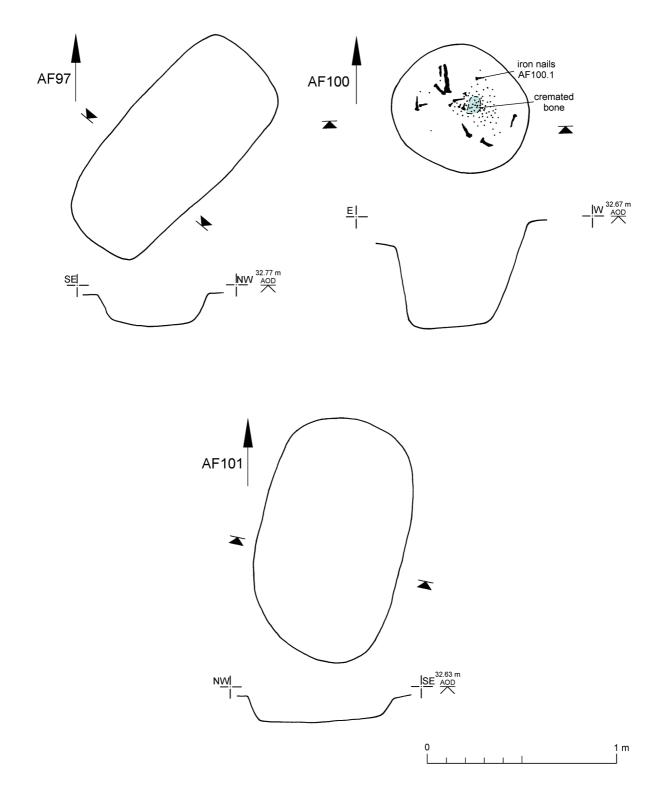


Fig 43 AF97 and AF100-1: burial plans and profiles.

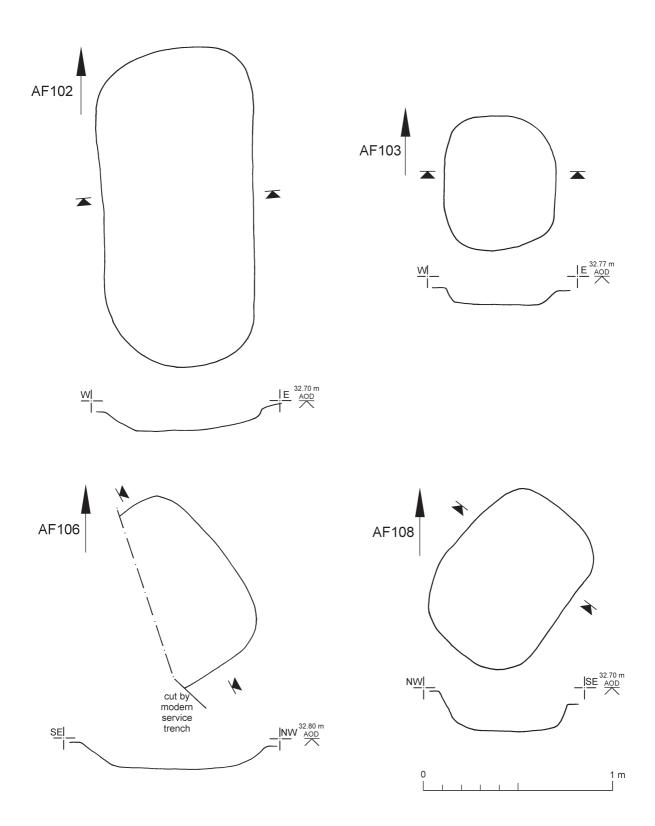


Fig 44 AF102-3, AF106 and AF108: burial plans and profiles.

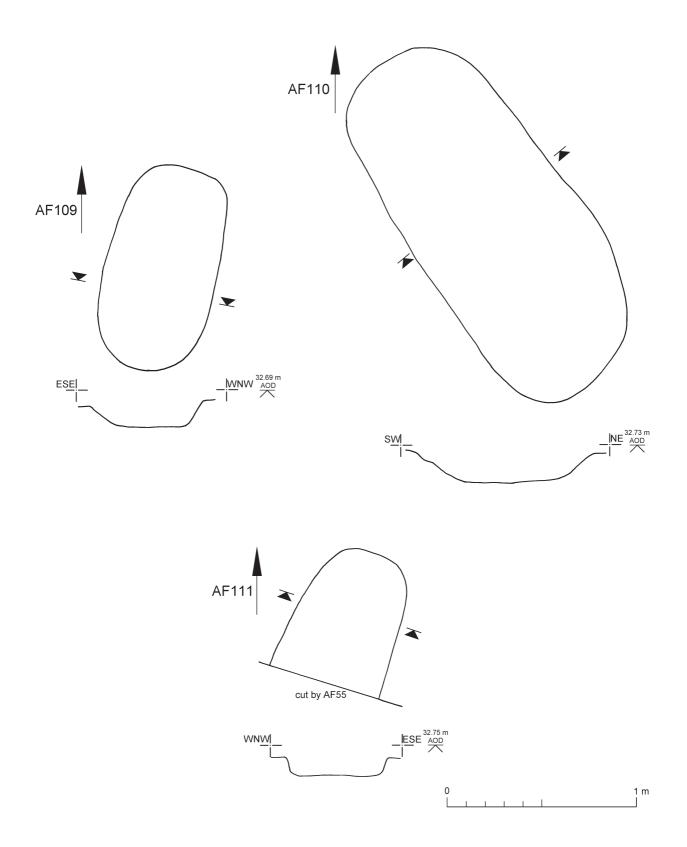
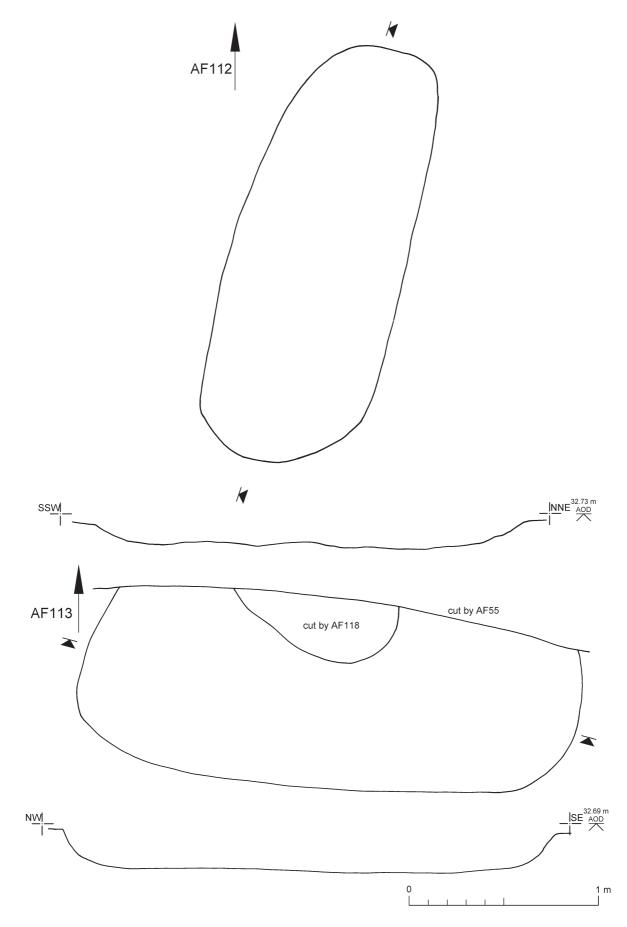
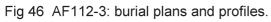


Fig 45 AF109-AF111: burial plans and profiles.





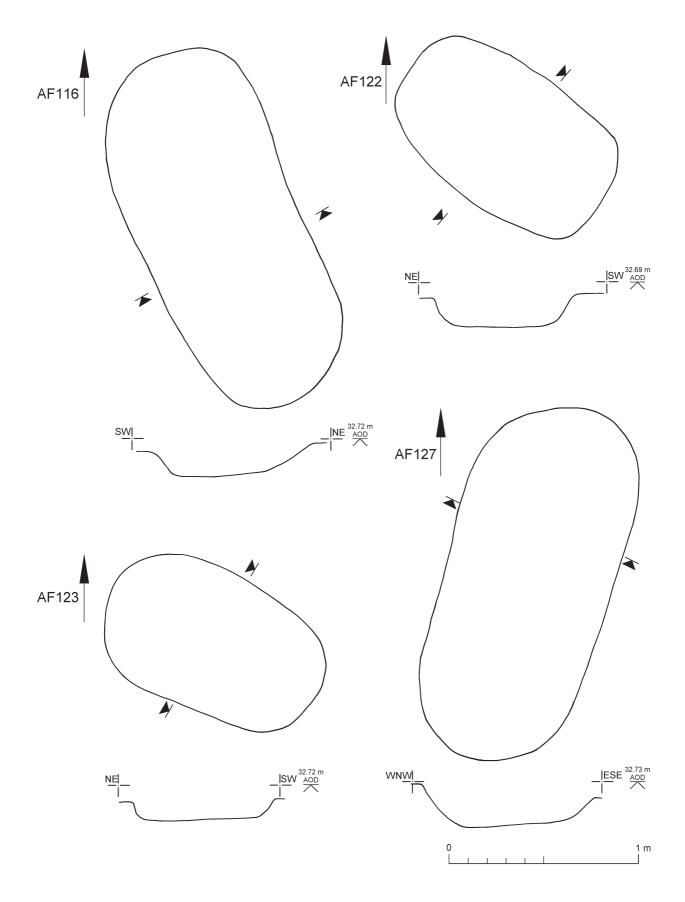


Fig 47 AF116, AF122-3 and AF127: burial plans and profiles.

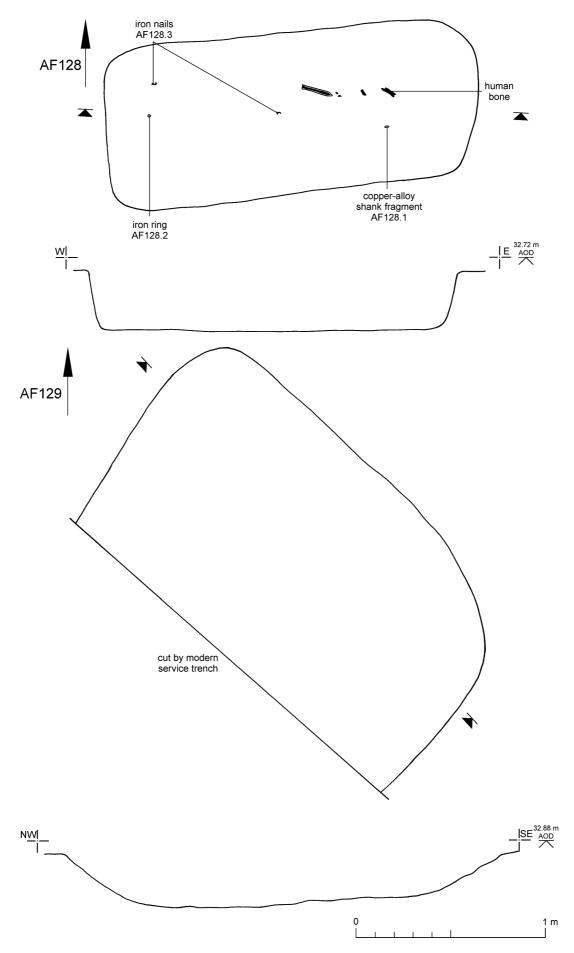


Fig 48 AF128-9: burial plans and profiles.

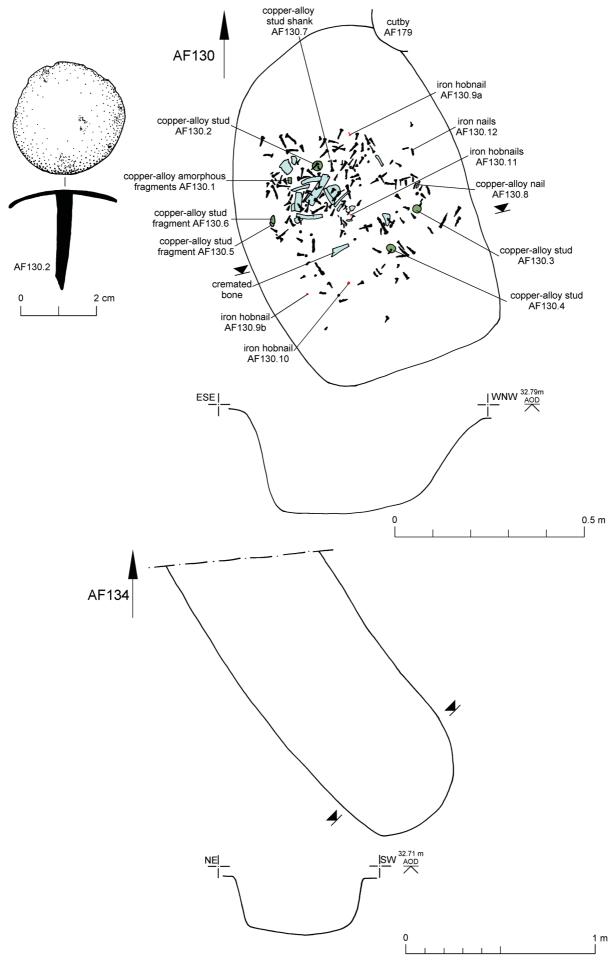
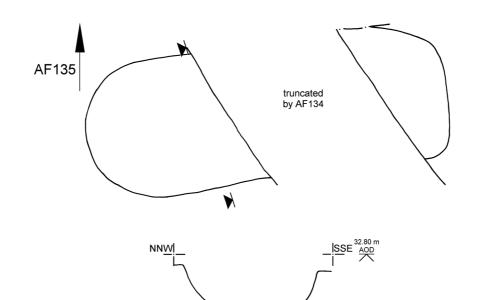


Fig 49 AF130 and AF134: burial plans, profiles and small find.



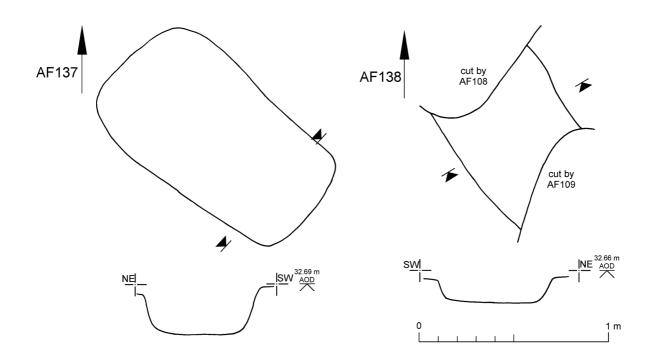


Fig 50 AF135, AF137-8: burial plans and profiles.

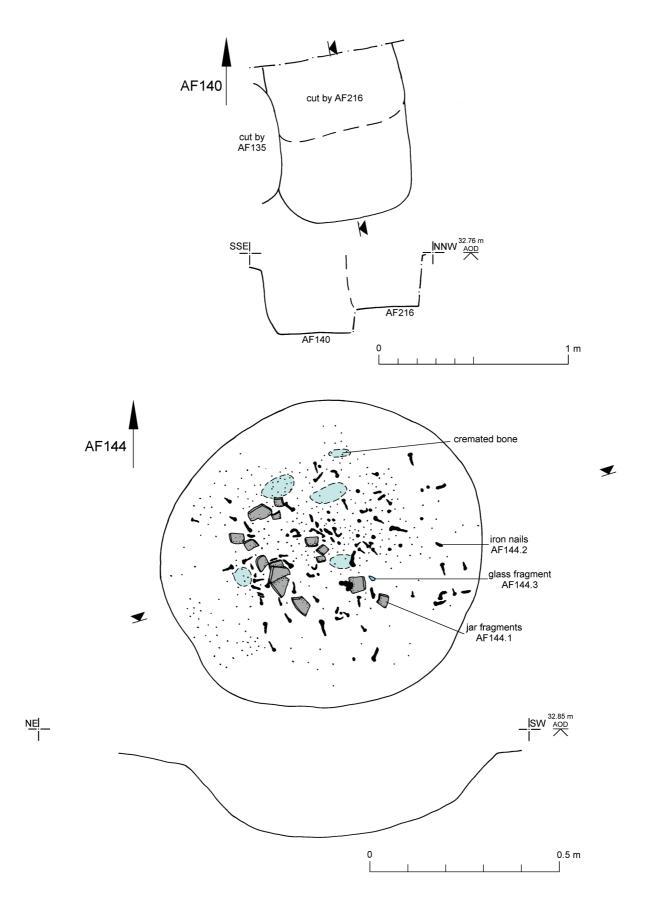


Fig 51 AF140 and AF144: burial plans and profiles.

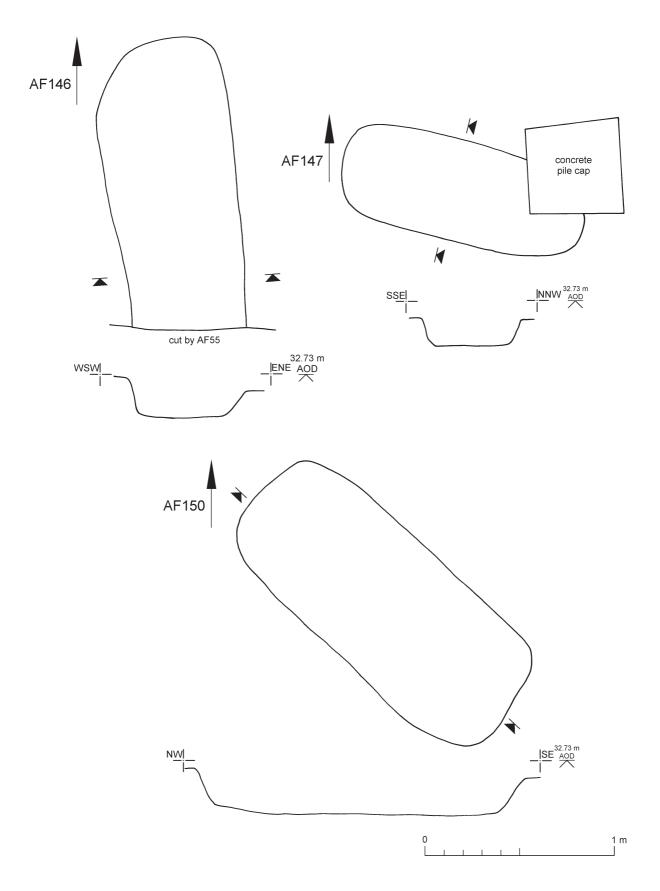


Fig 52 AF146-7 and AF150: burial plans and profiles.

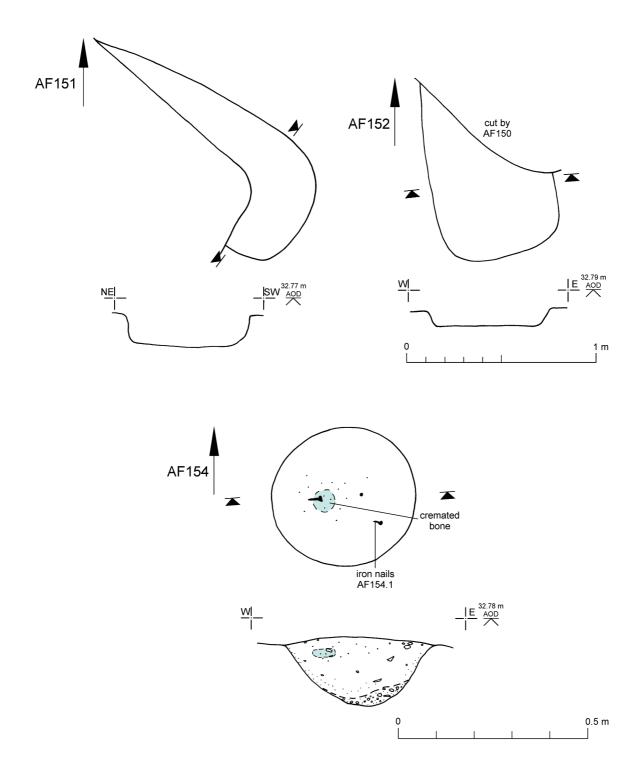
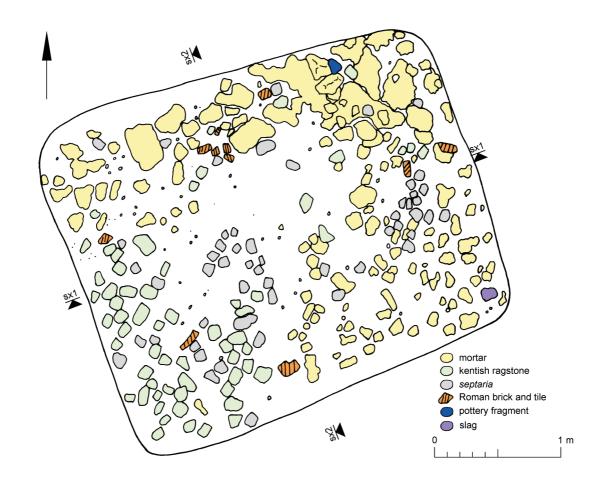
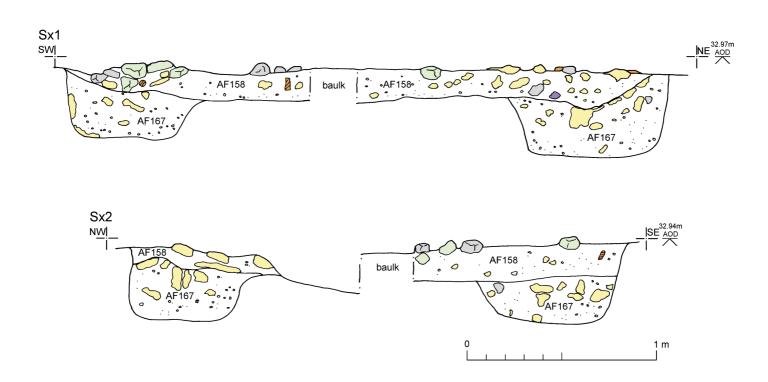
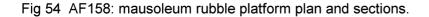


Fig 53 AF151-2 and AF154: burial plans and profiles.







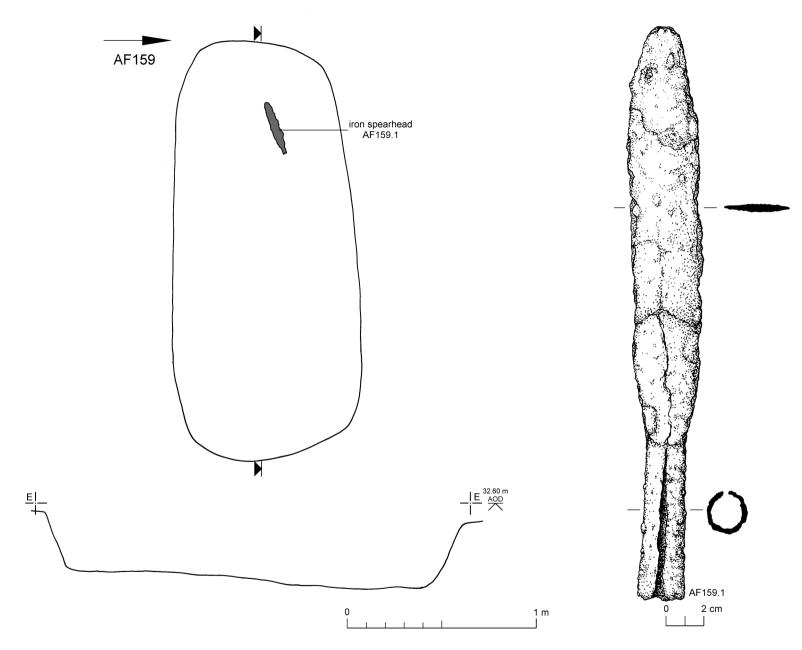


Fig 55 AF159: burial plan, profile and small find.

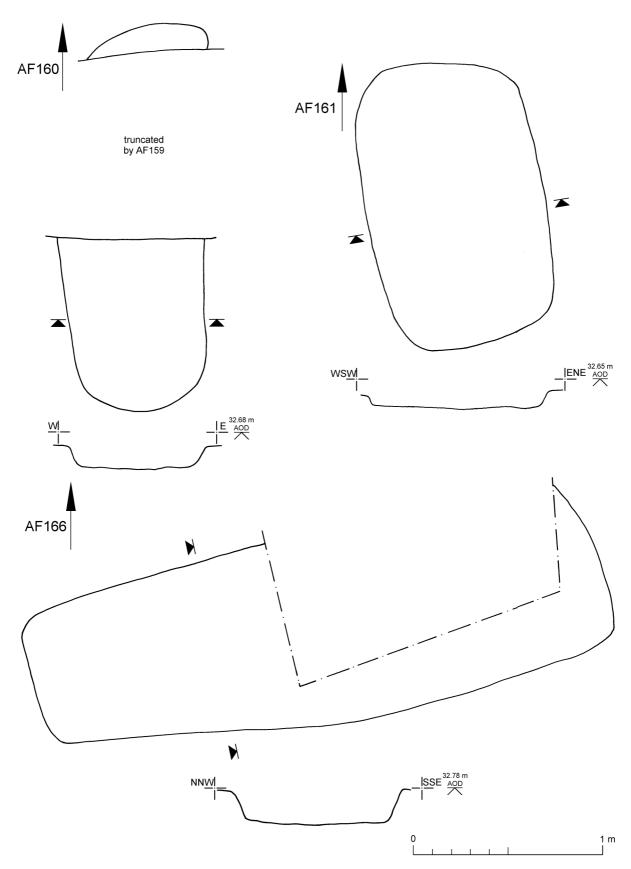


Fig 56 AF160-1 and AF166: burial plans and profiles.

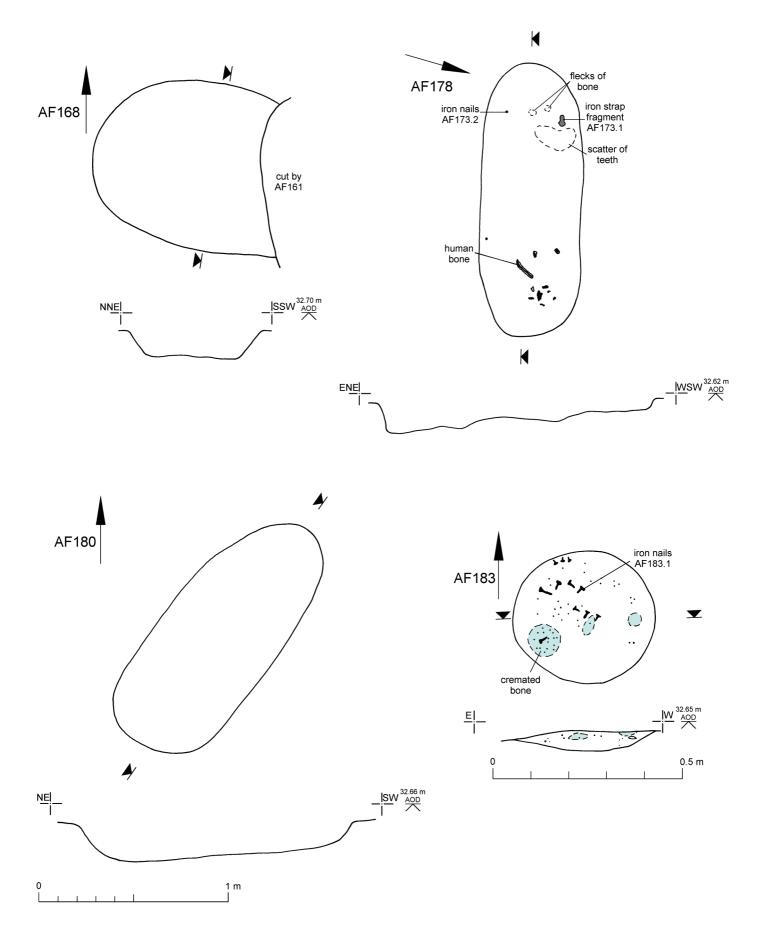


Fig 57 AF168, AF178, AF180 (scale 1:20) and AF183 (scale 1:10): burial plans, profiles and section.

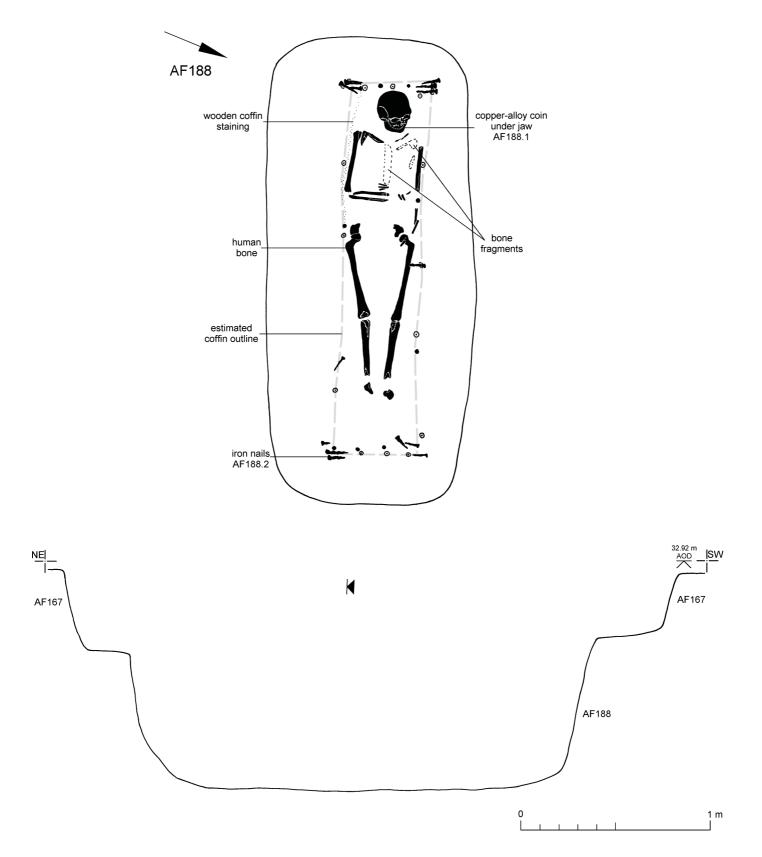


Fig 58 AF188: burial plan and profile.

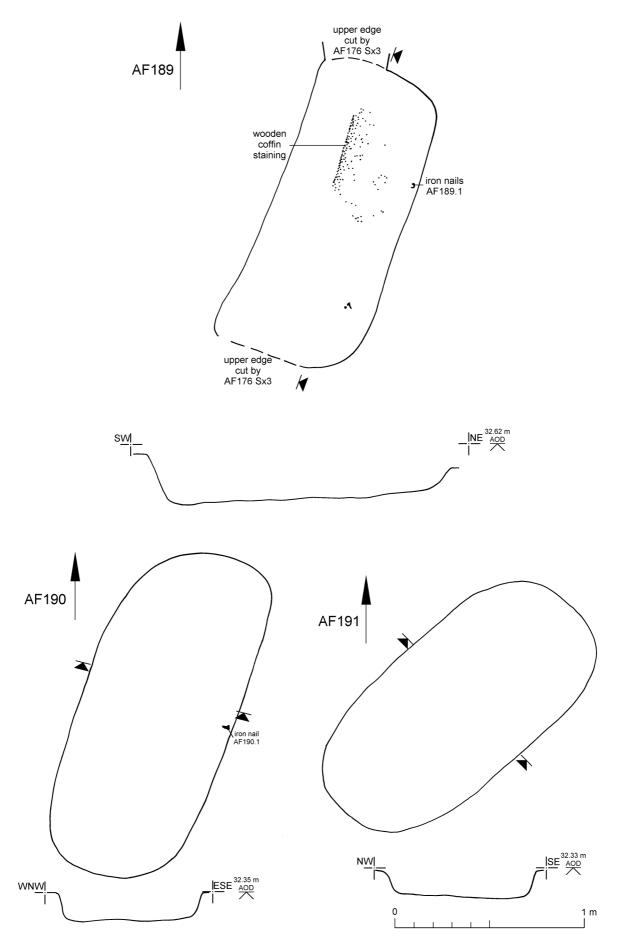


Fig 59 AF189-AF191: burial plans and profiles.

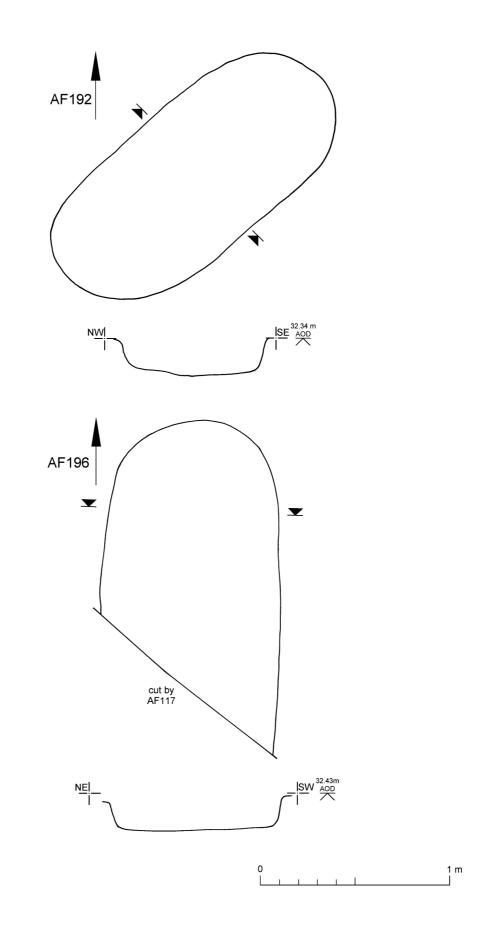


Fig 60 AF192 and AF196: burial plans and profiles.



Fig 61 AF199: tomb monument base plan and profile.

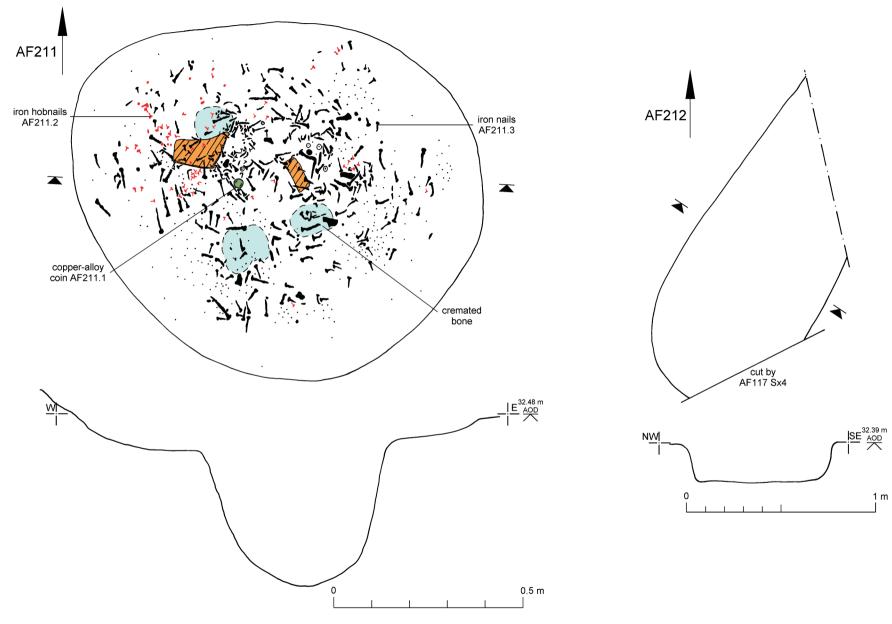


Fig 62 AF211-AF212: burials and profiles.

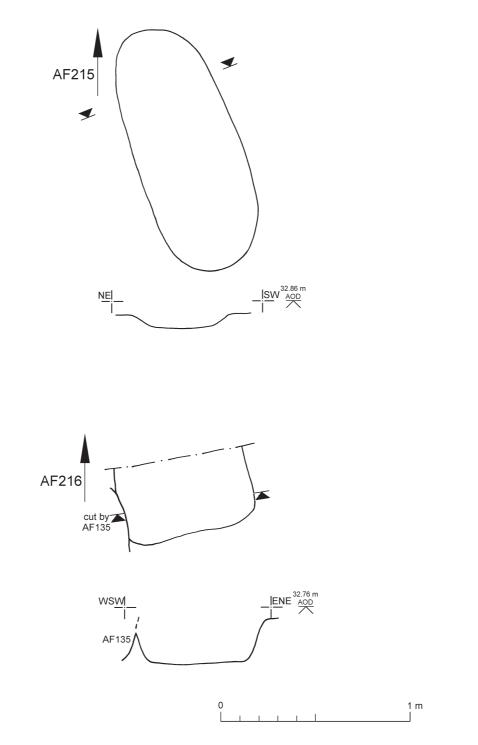
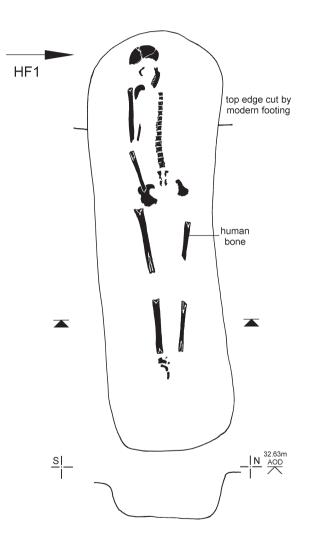


Fig 63 AF215-AF216: burial plans and profiles.



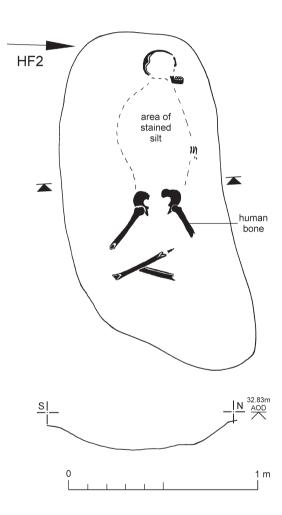
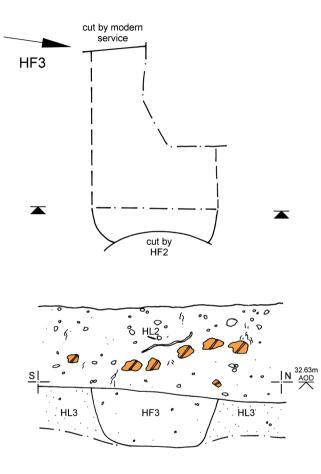


Fig 64 HF1 and HF2: burial plans and profiles.



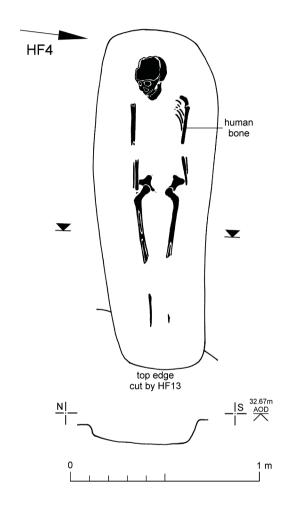


Fig 65 HF3 and HF4: burial plans, section and profile.

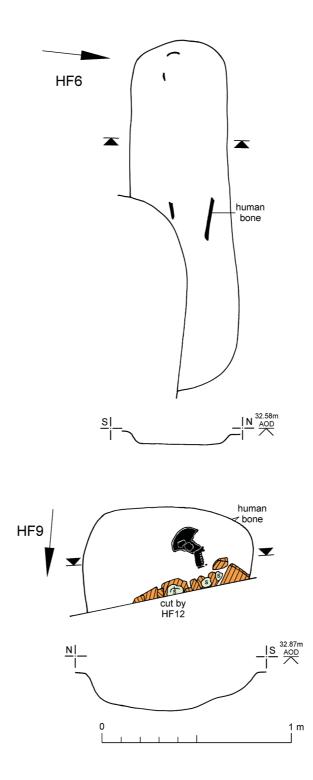


Fig 66 HF6 and HF9: burial plans and profiles.

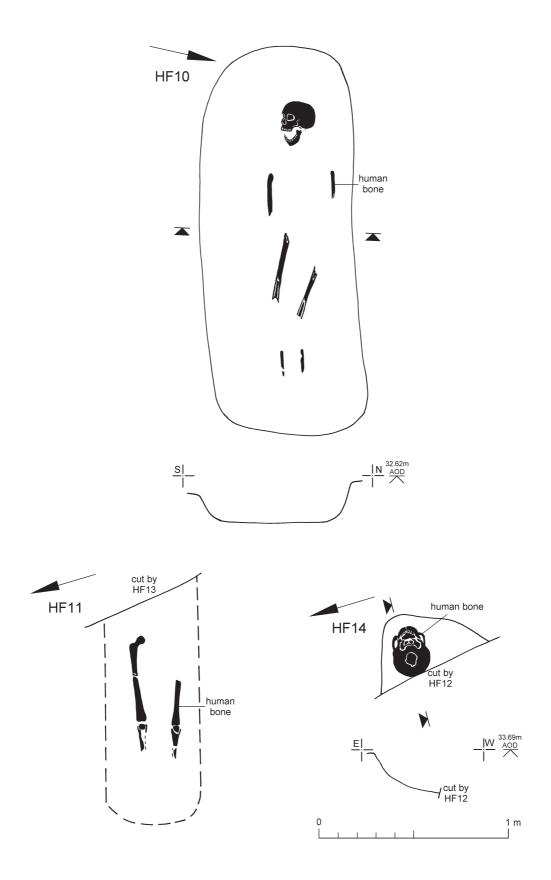


Fig 67 HF10, HF11 and HF14: burial plans and profiles.

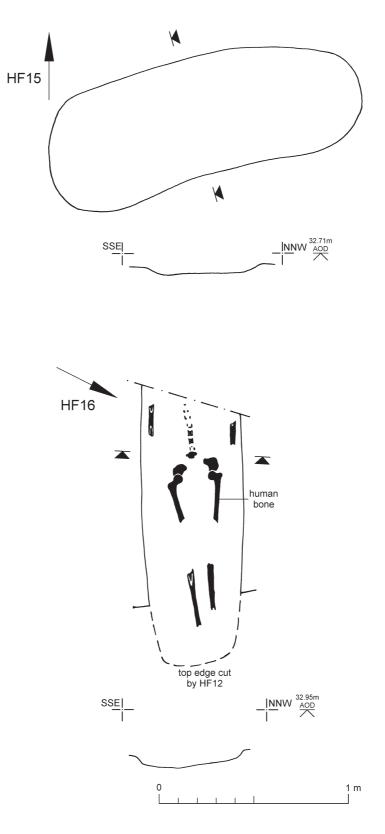


Fig 68 HF15 and HF16: burial plans and profiles.

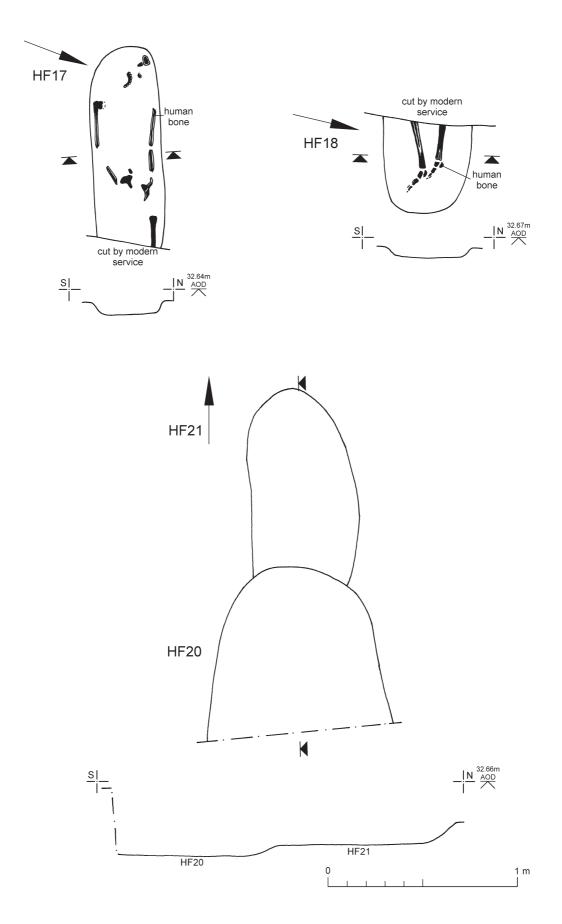


Fig 69 HF17, HF18, HF20 and HF21: burial plans and profiles.

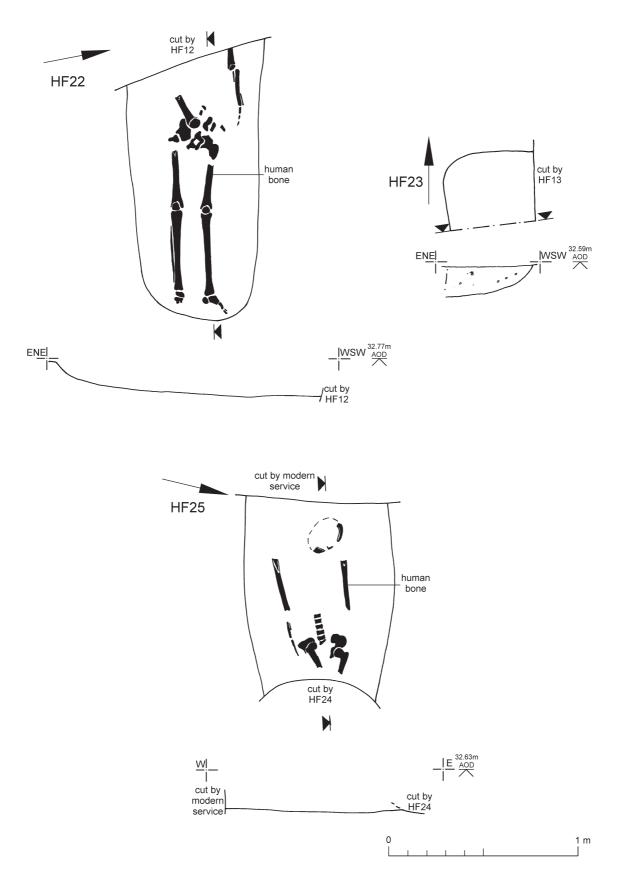


Fig 70 HF22, HF23 and HF25: burial plans, section and profiles.

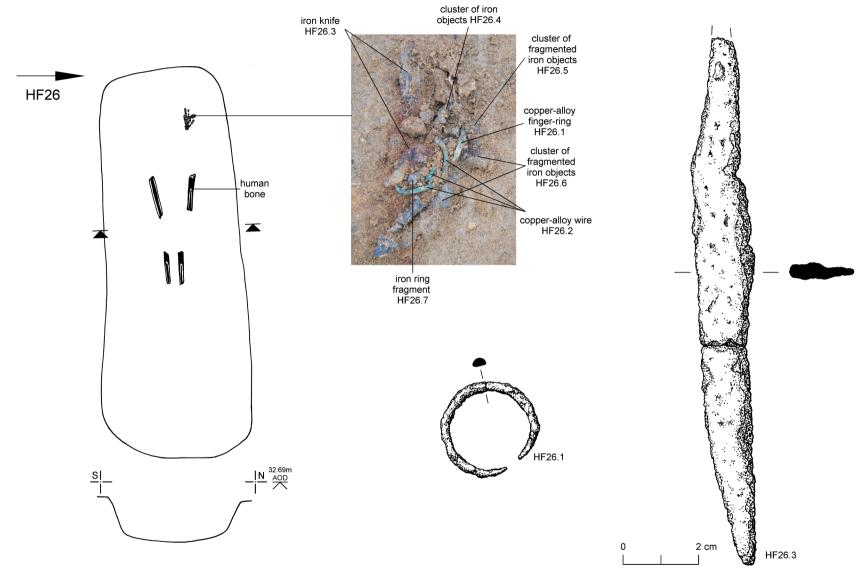
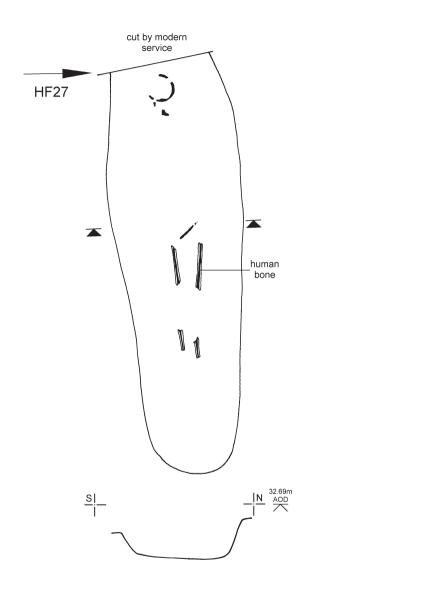


Fig 71 HF26: burial plan and profile.



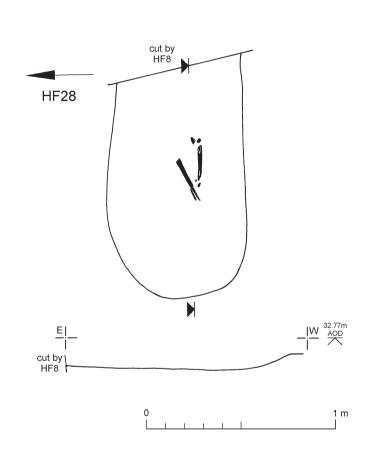


Fig 72 HF27 and HF28: burial plans and profiles.

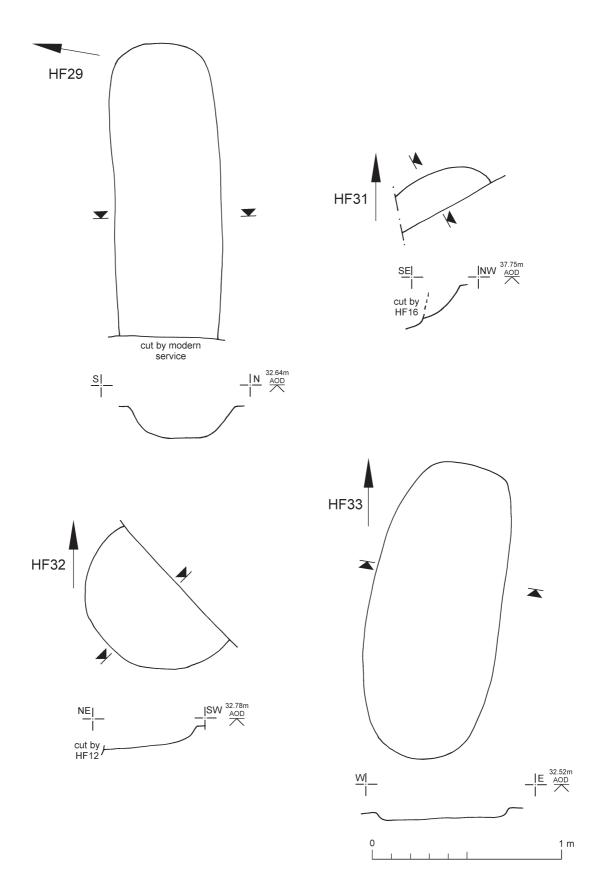


Fig 73 HF29 and HF30-3: burial plans and profiles.

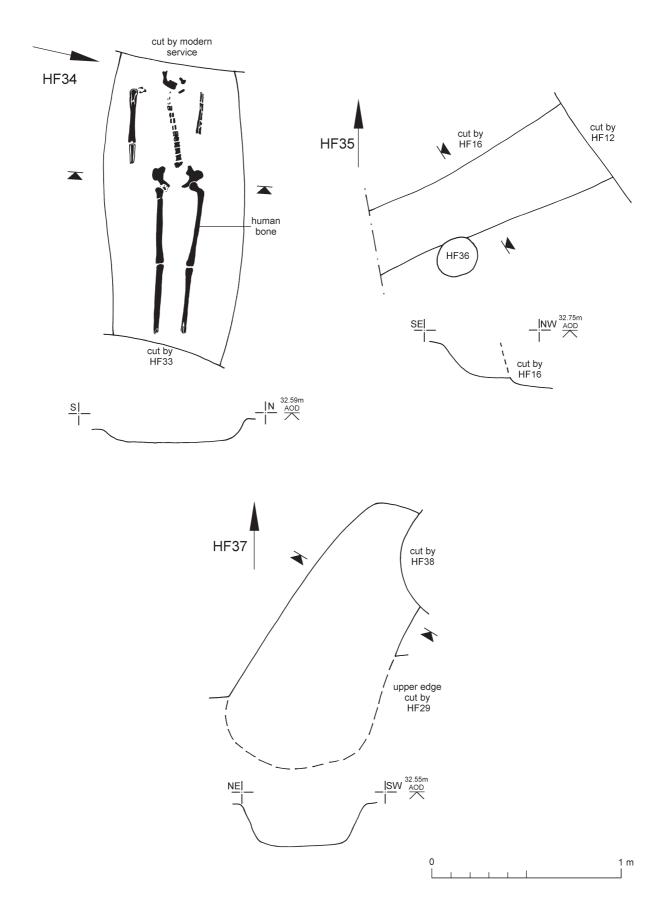


Fig 74 HF34, HF35 and HF37: burial plan and profiles.

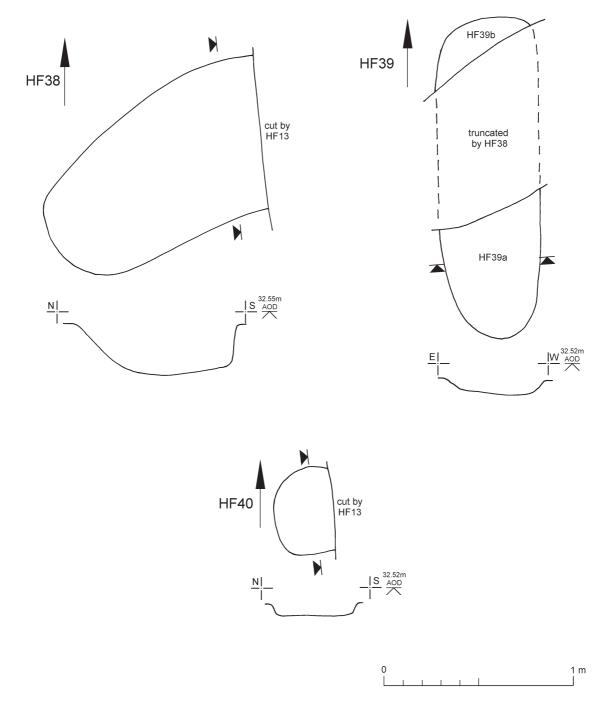


Fig 75 HF38-HF40: burial plans and profiles.

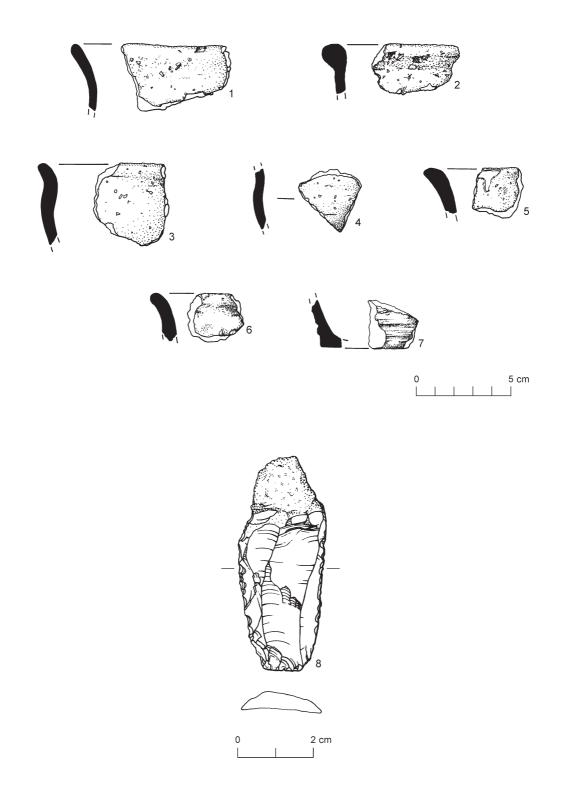


Fig 76 Neolithic-Iron Age pottery (1-7) and Neolithic flint (8).

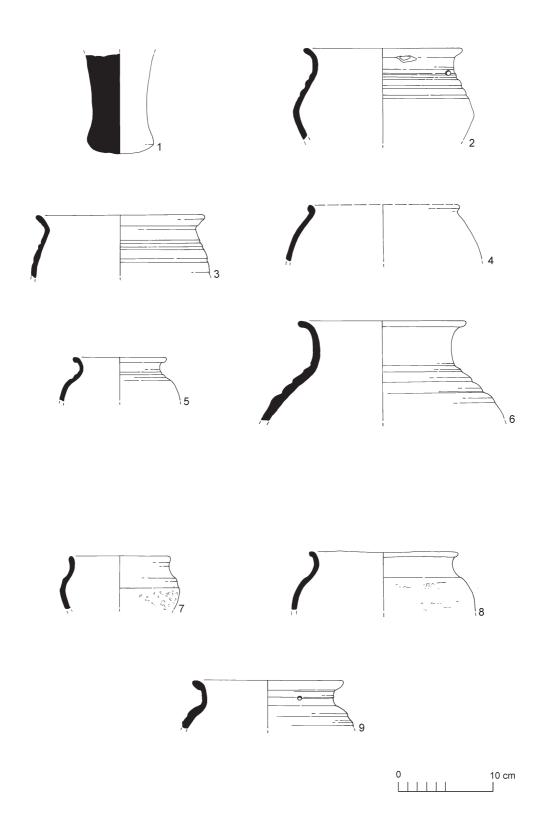


Fig 77 JF2 Sx1: Late Iron Age and Roman pottery (JL8 1-6 and JL6 7-9).

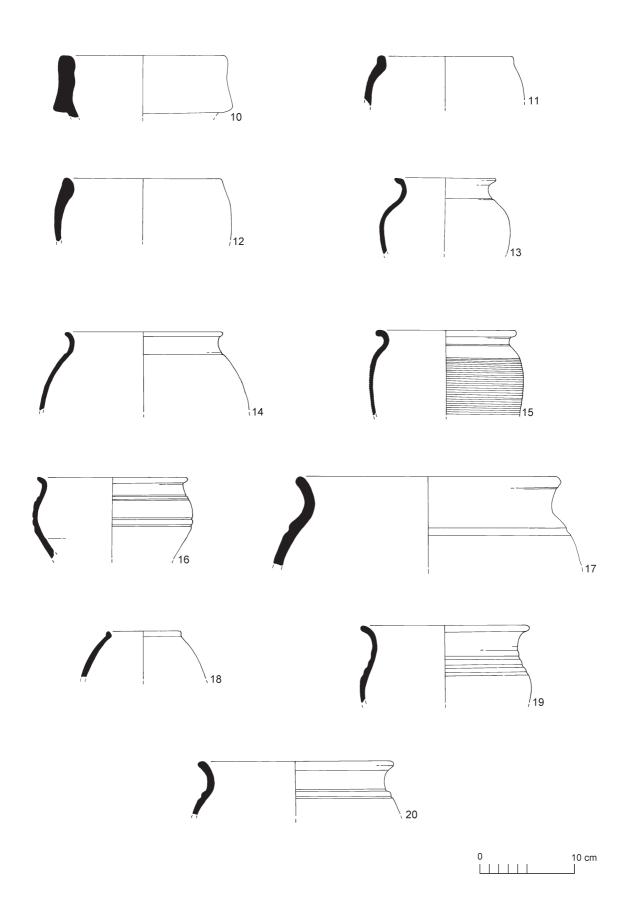


Fig 78 JF2 Sx1: Late Iron Age and Roman pottery (JL5 spit 3).

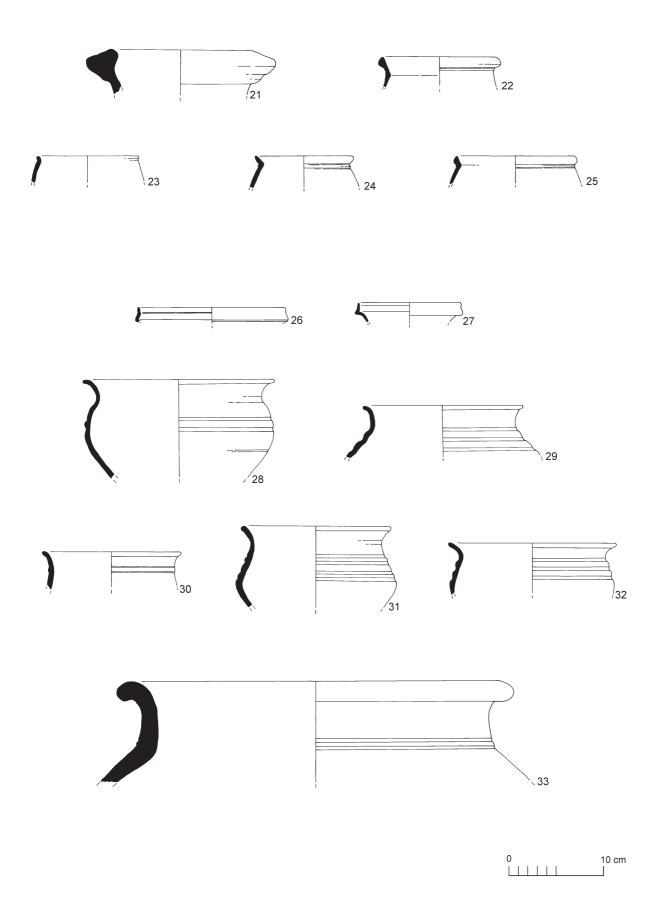


Fig 79 JF2 Sx1: Late Iron Age and Roman pottery (JL5 spit 2 21-25, other pottery from JL5 26-33).

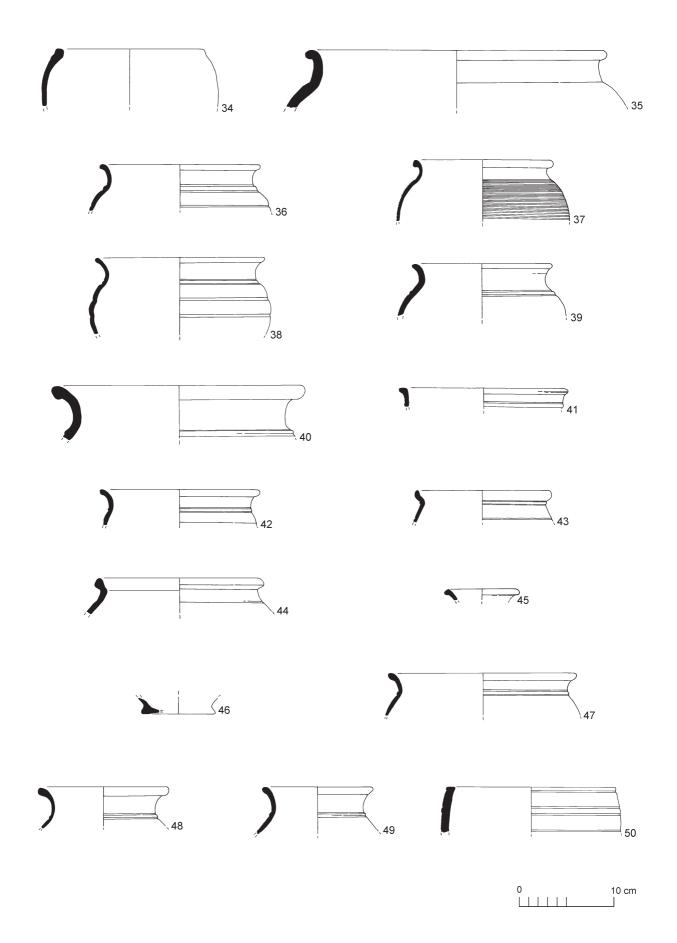


Fig 80 JF2 Sx1: Late Iron Age and Roman pottery (other pottery from JL5).

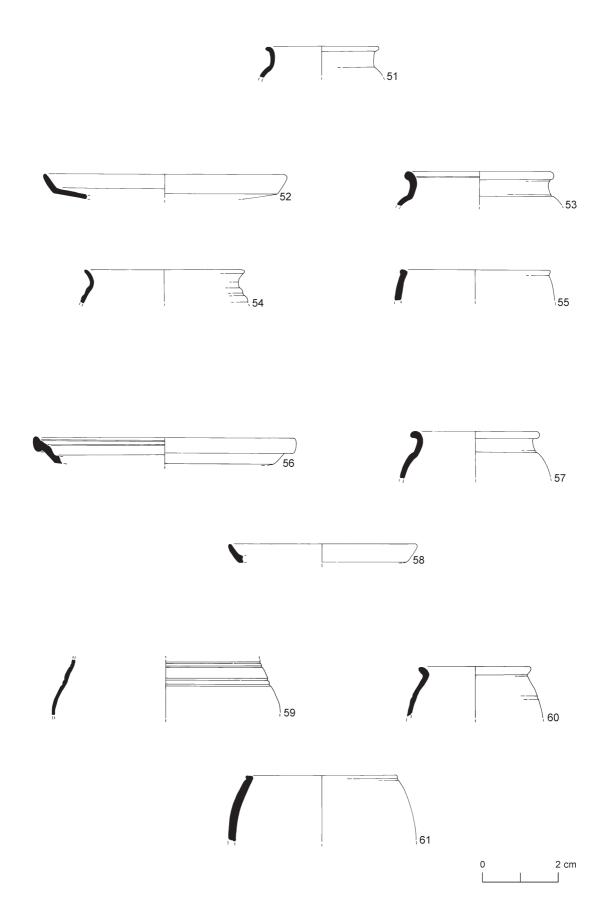


Fig 81 JF2 Sx1-2: Late Iron Age and Roman pottery (JL2 Sx1 JL5 other pottery 51, JL4 spit 2 52-55, JL4 spit 1 56-7, JL4 surface 8 58, JF2 Sx2 JL15-16 59-61).

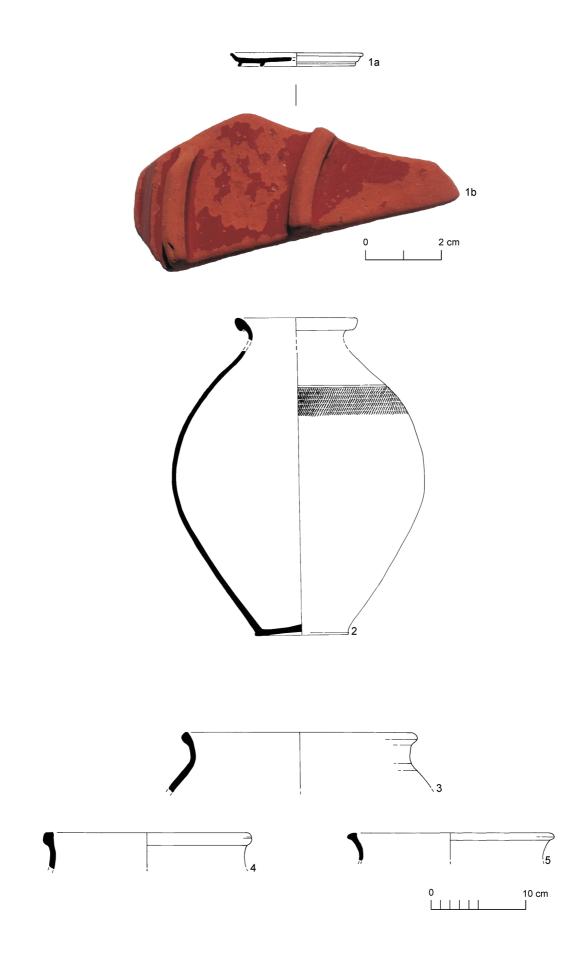


Fig 82 Unusual samian base fragment (1a illustration scale 2:4, photo showing base scale 1:1), evaluation T2 F204 Roman burial pottery (2), post-Roman pottery (3-5).

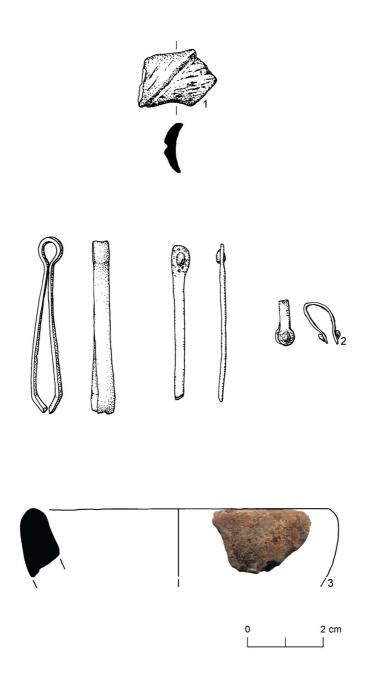
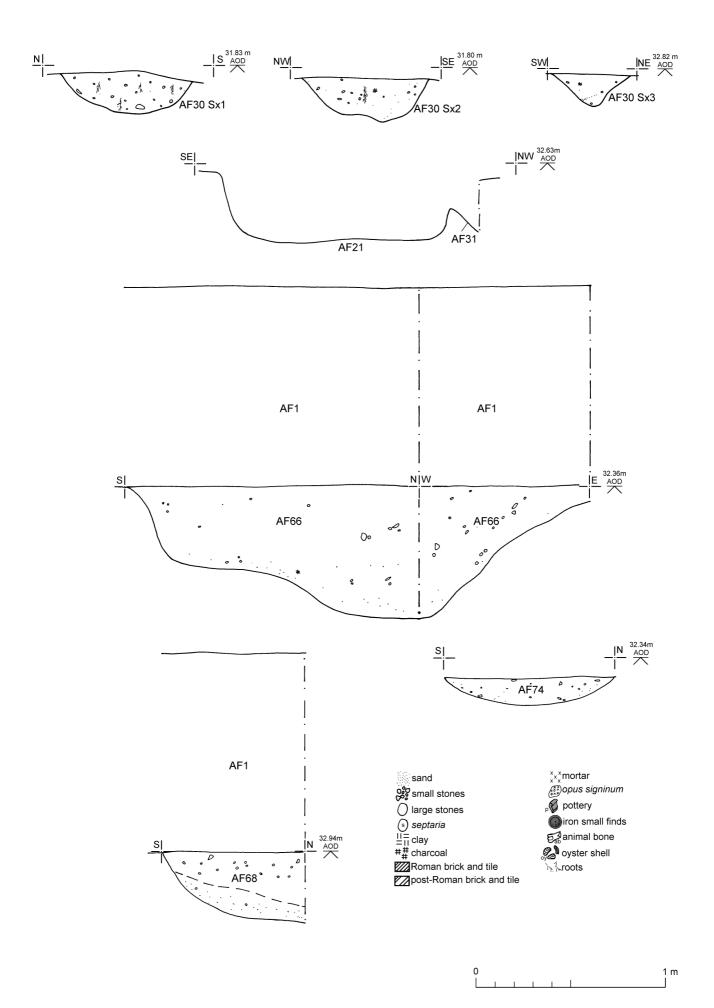
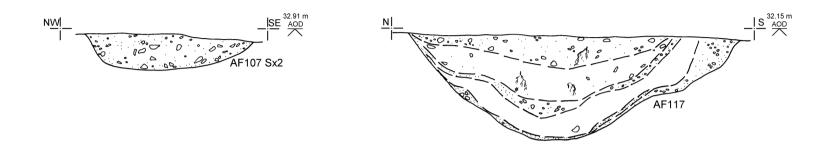


Fig 83 Non-burial small finds.





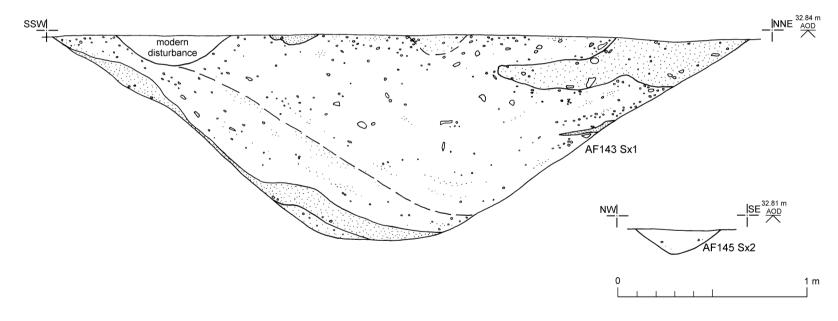


Fig 85 Area A: sections.

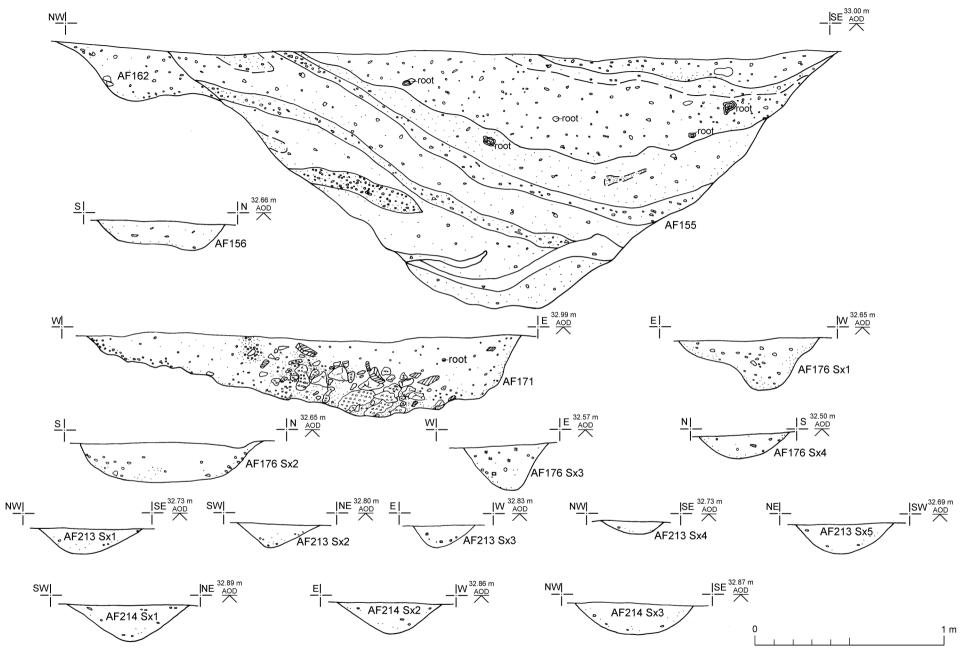


Fig 86 Area A: sections.

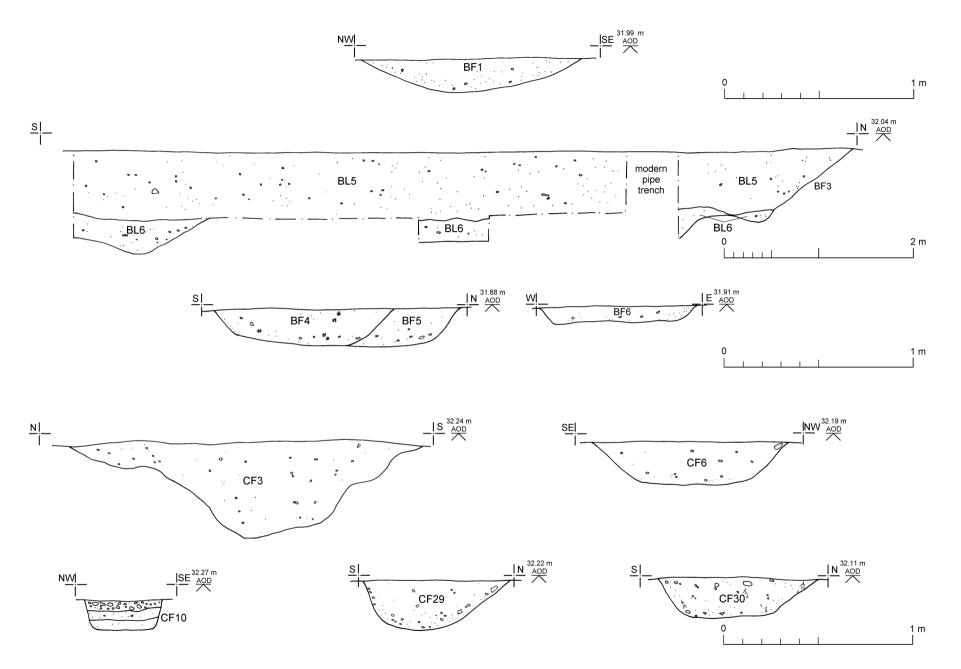
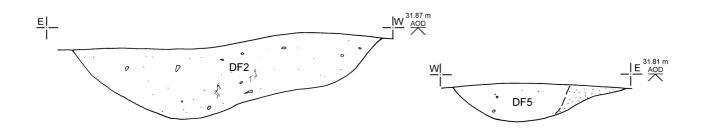
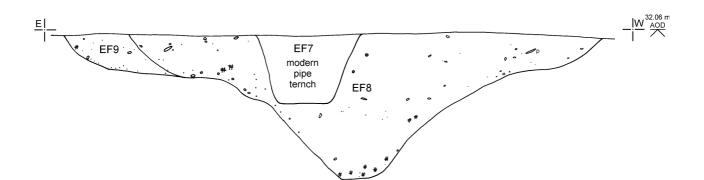


Fig 87 Areas B and C: sections.





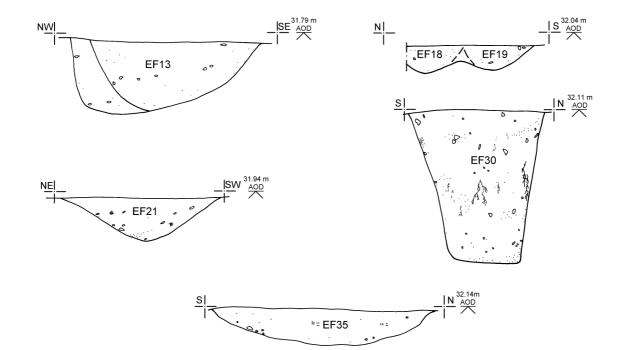




Fig 88 Areas D & E: sections.

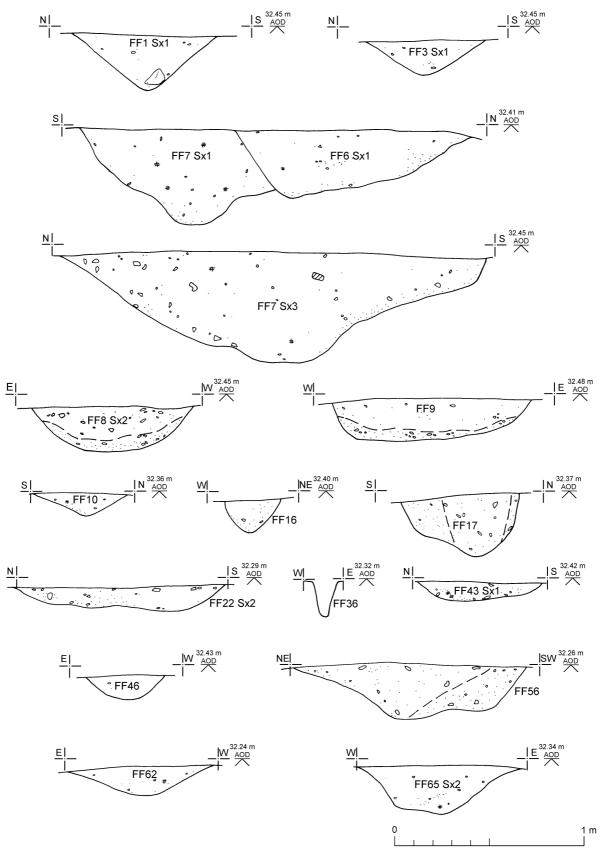


Fig 89 Area F: sections.

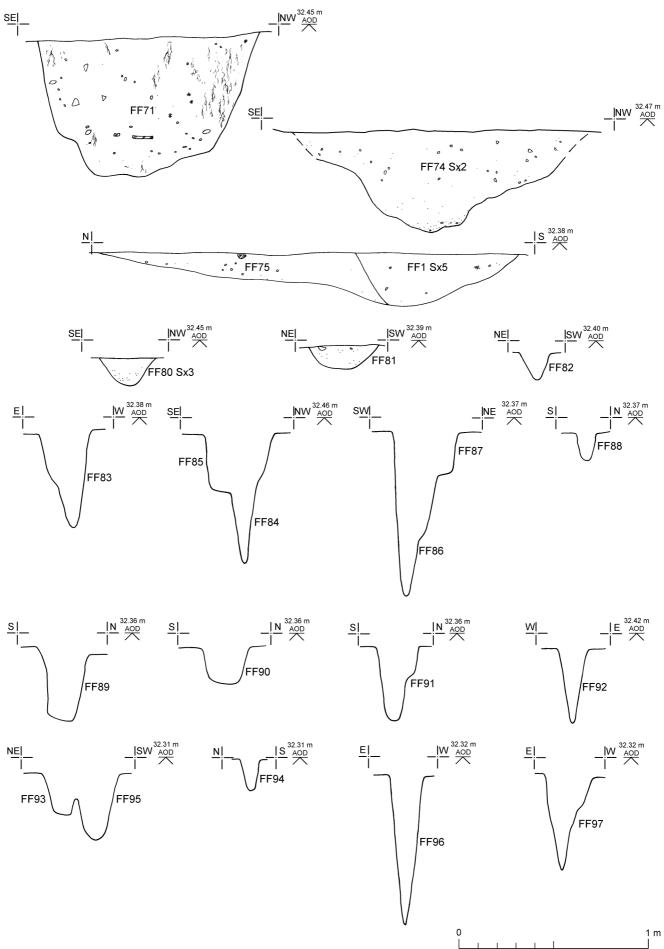
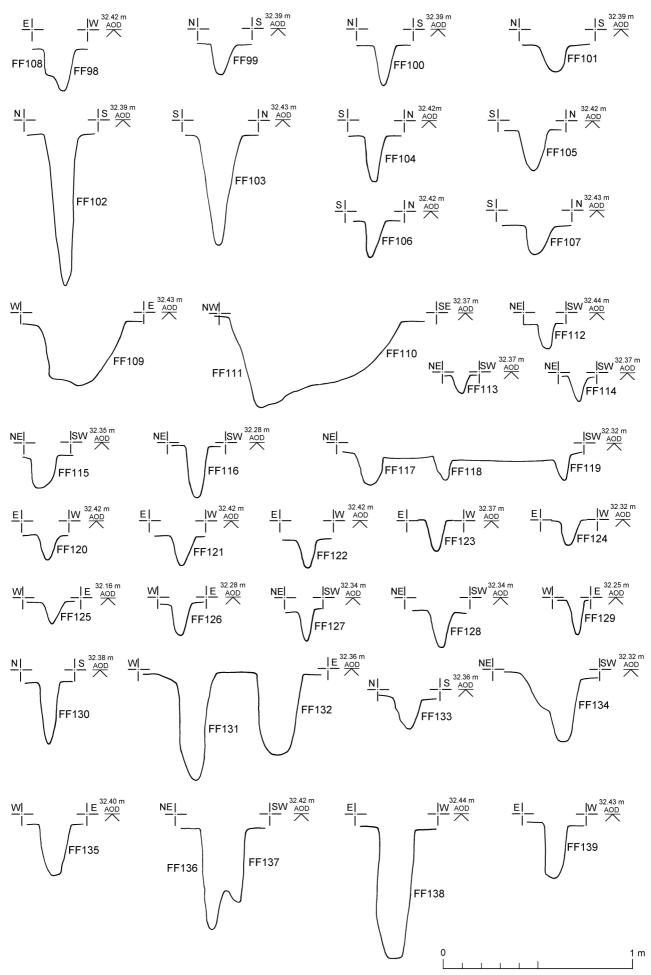


Fig 90 Area F: sections.





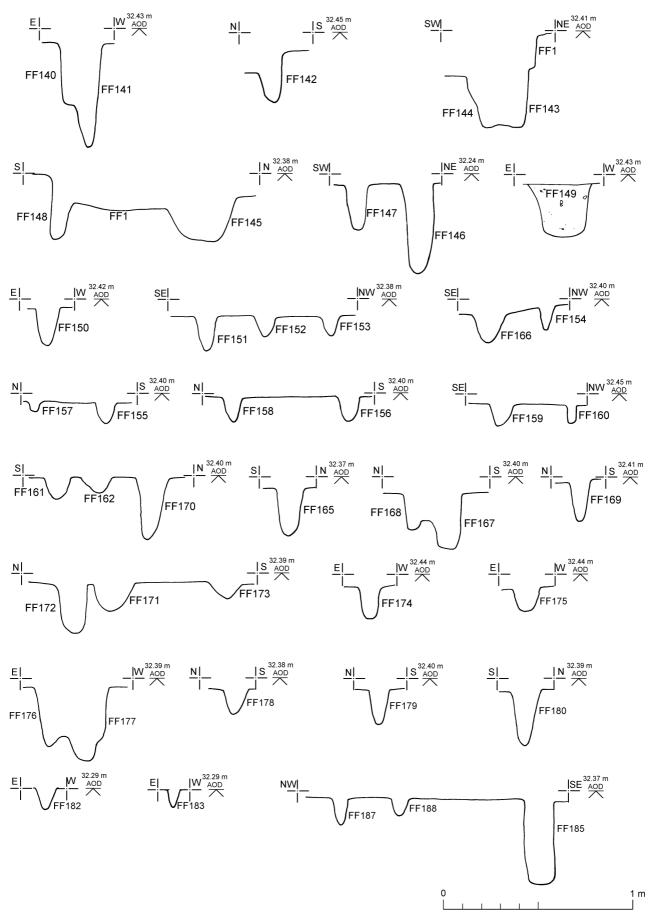


Fig 92 Area F: sections.

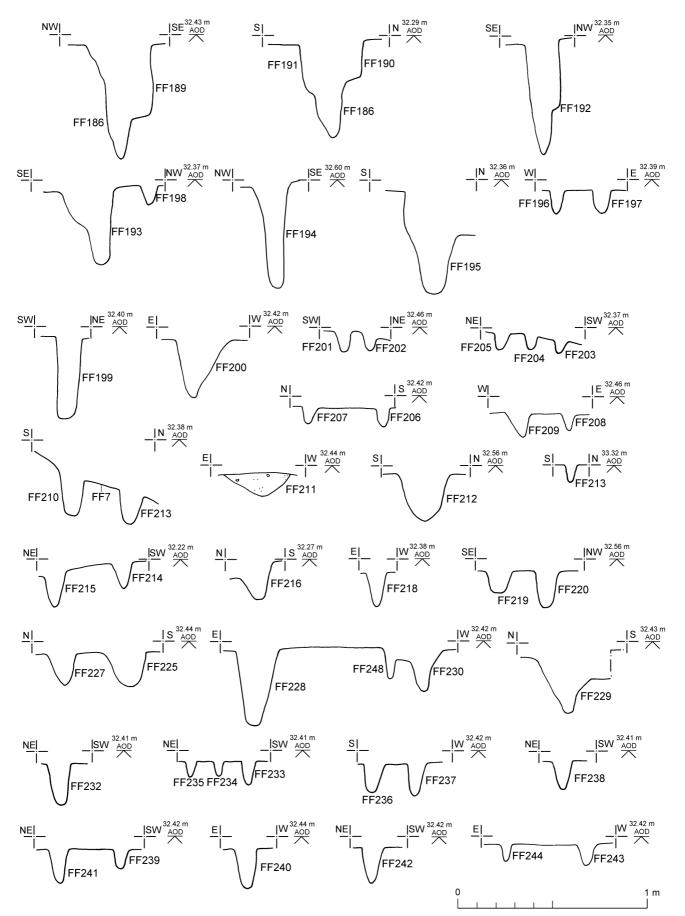


Fig 93 Area F: sections.

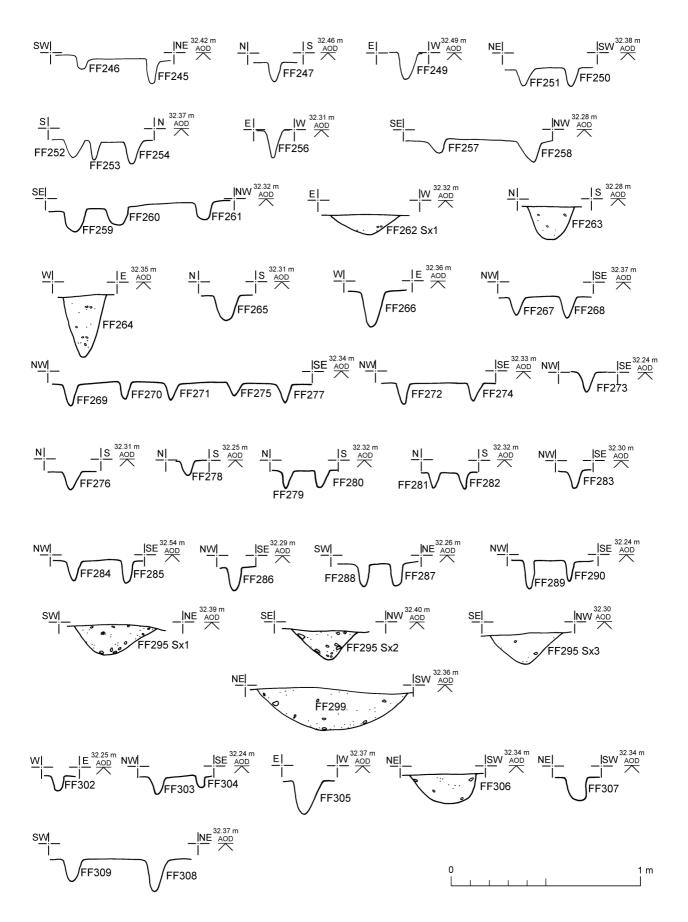
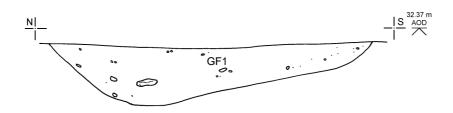
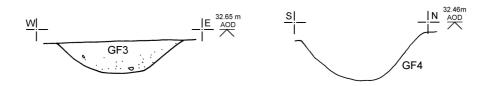
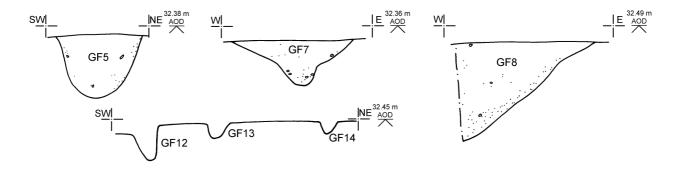
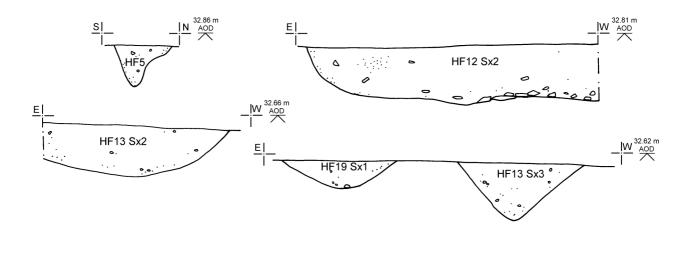


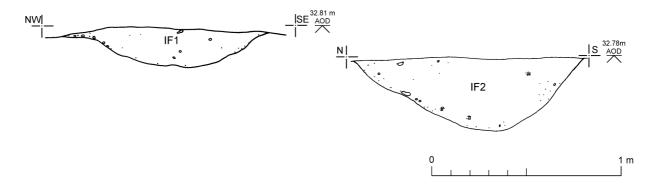
Fig 94 Area F: sections.











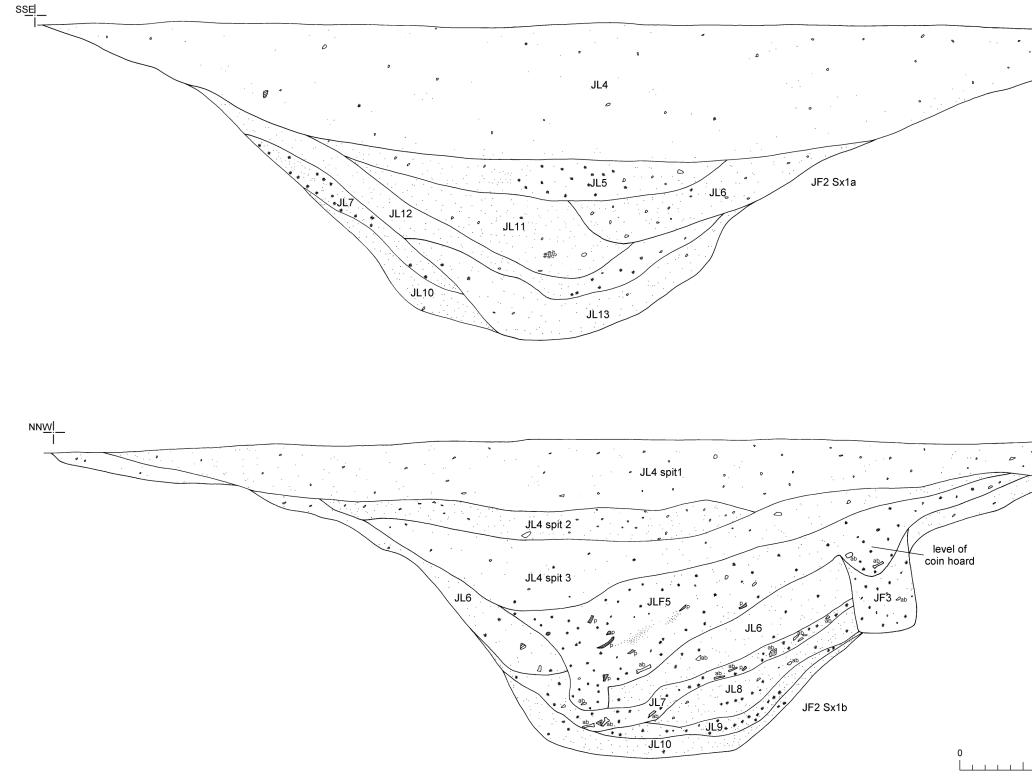
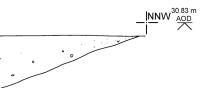
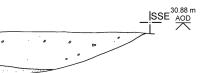
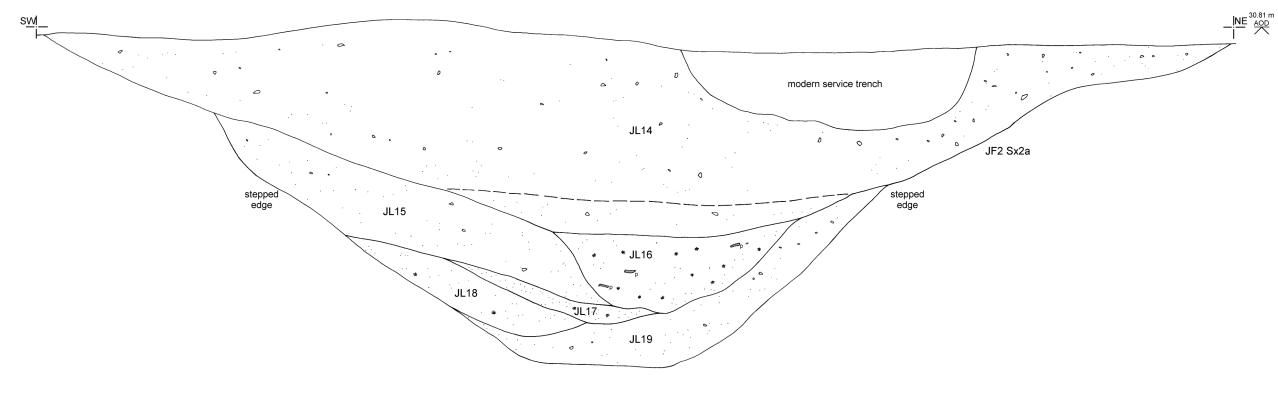


Fig 96 Area J: JF2 Sx1 sections.









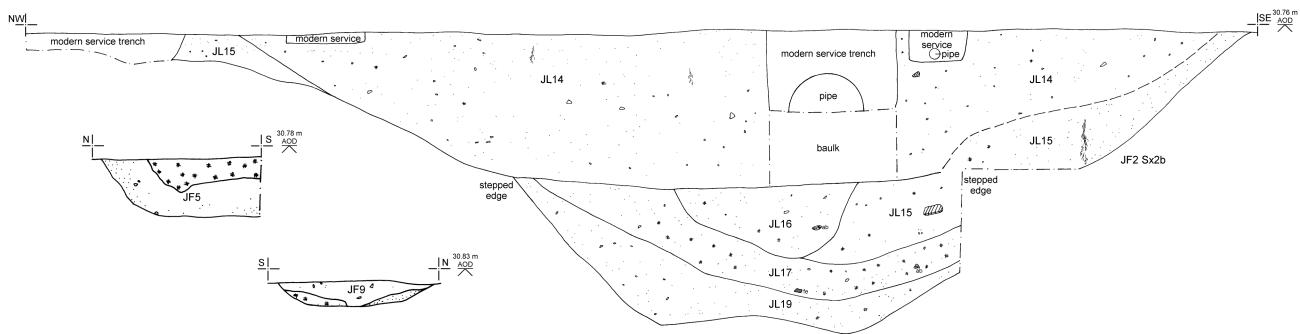
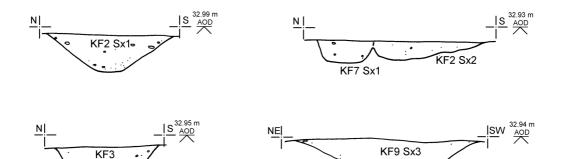
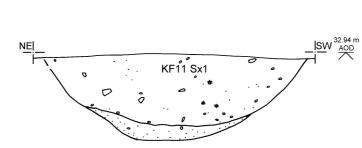
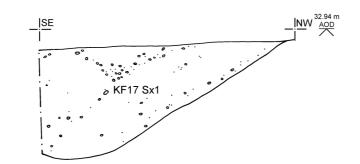


Fig 97 Area J: JF2 Sx2 sections.

0







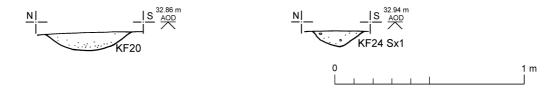


Fig 98 Area K: sections.

KF3

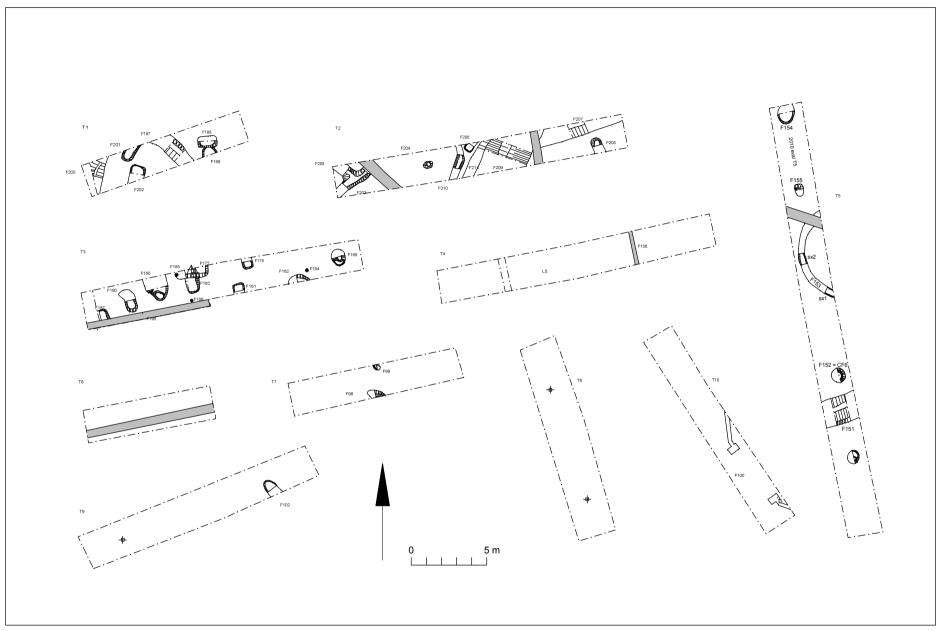
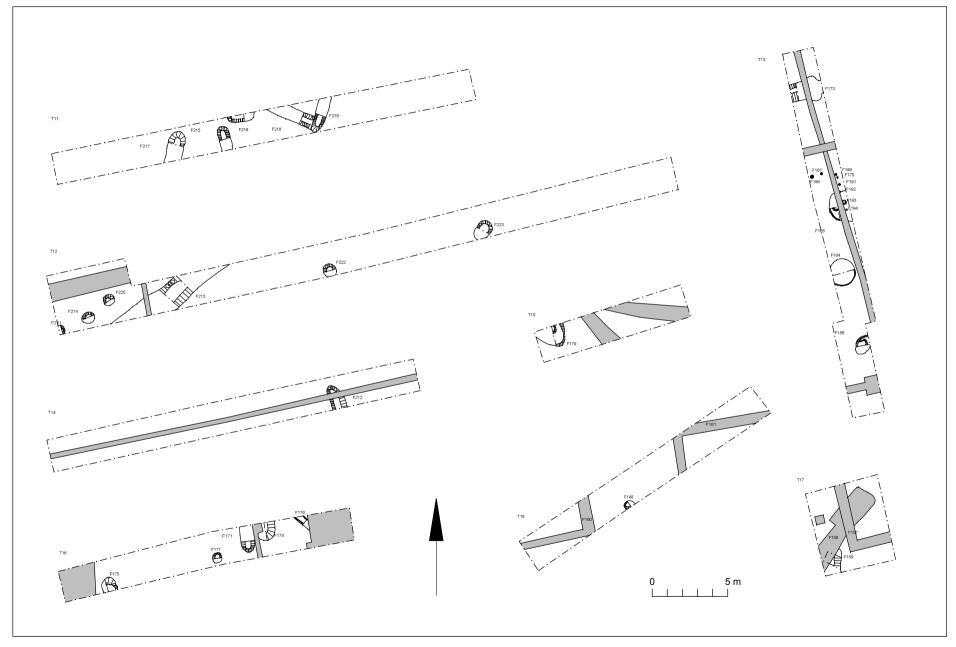
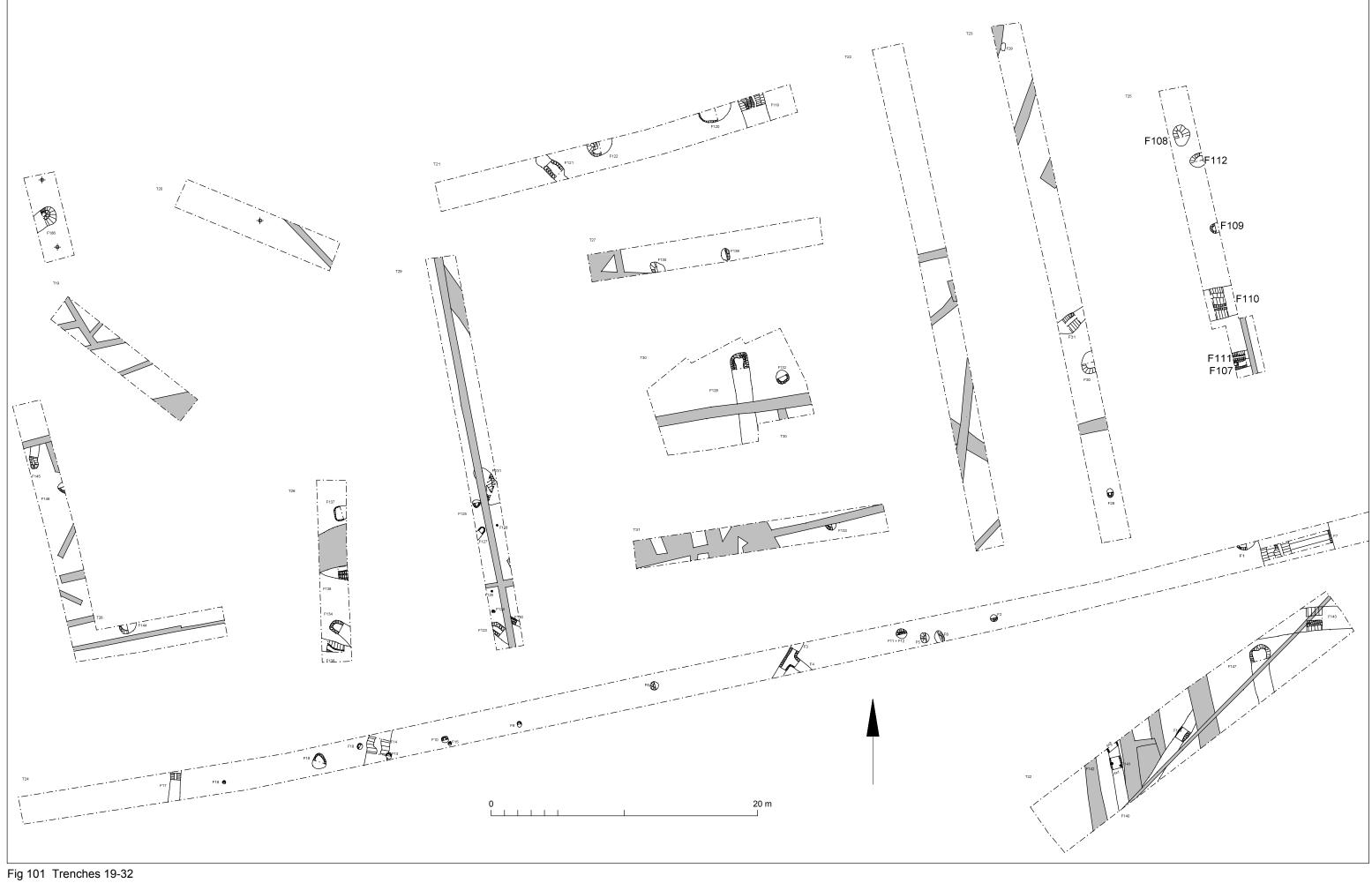
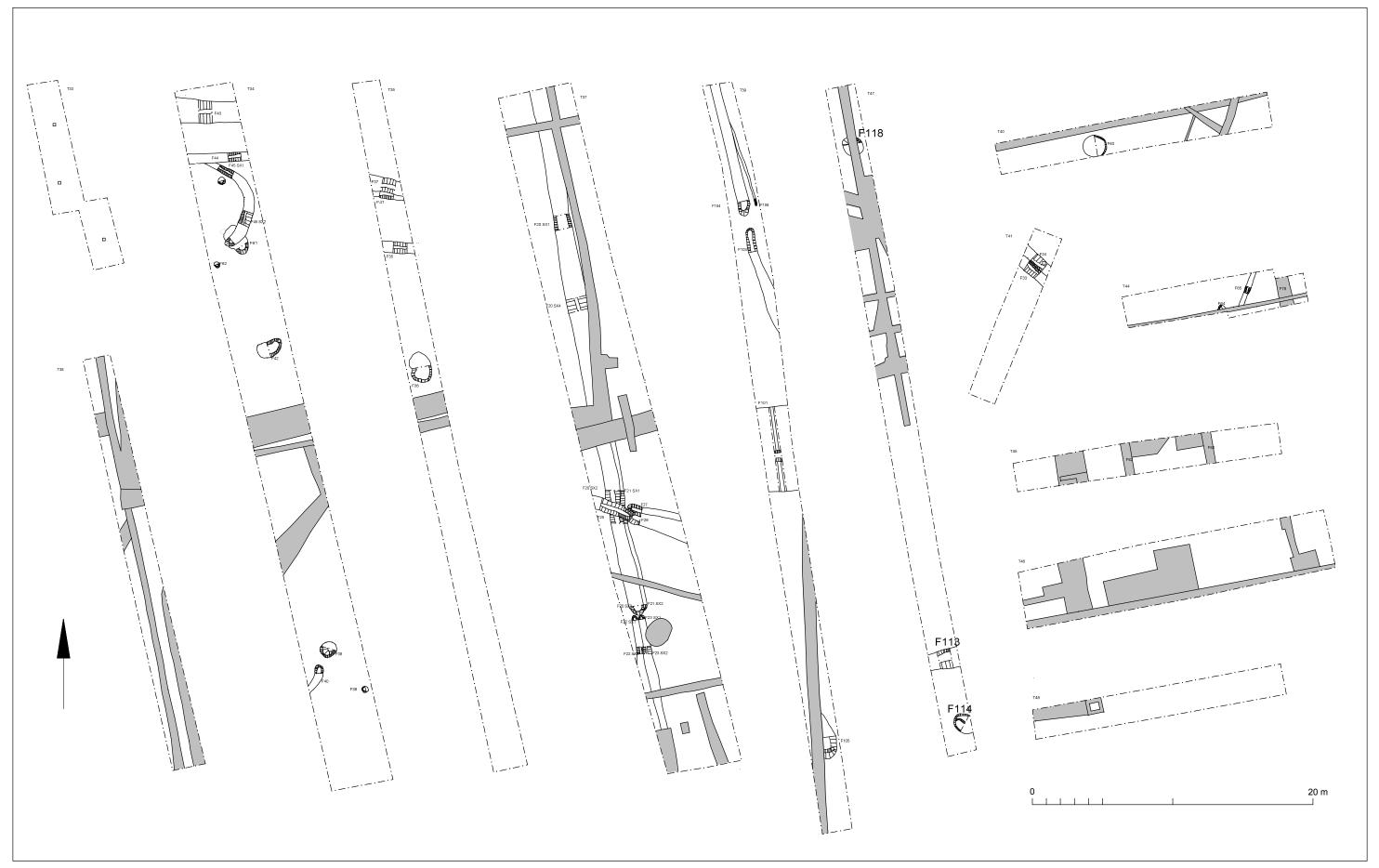


Figure 99 Trenches 1-10 (to common north)









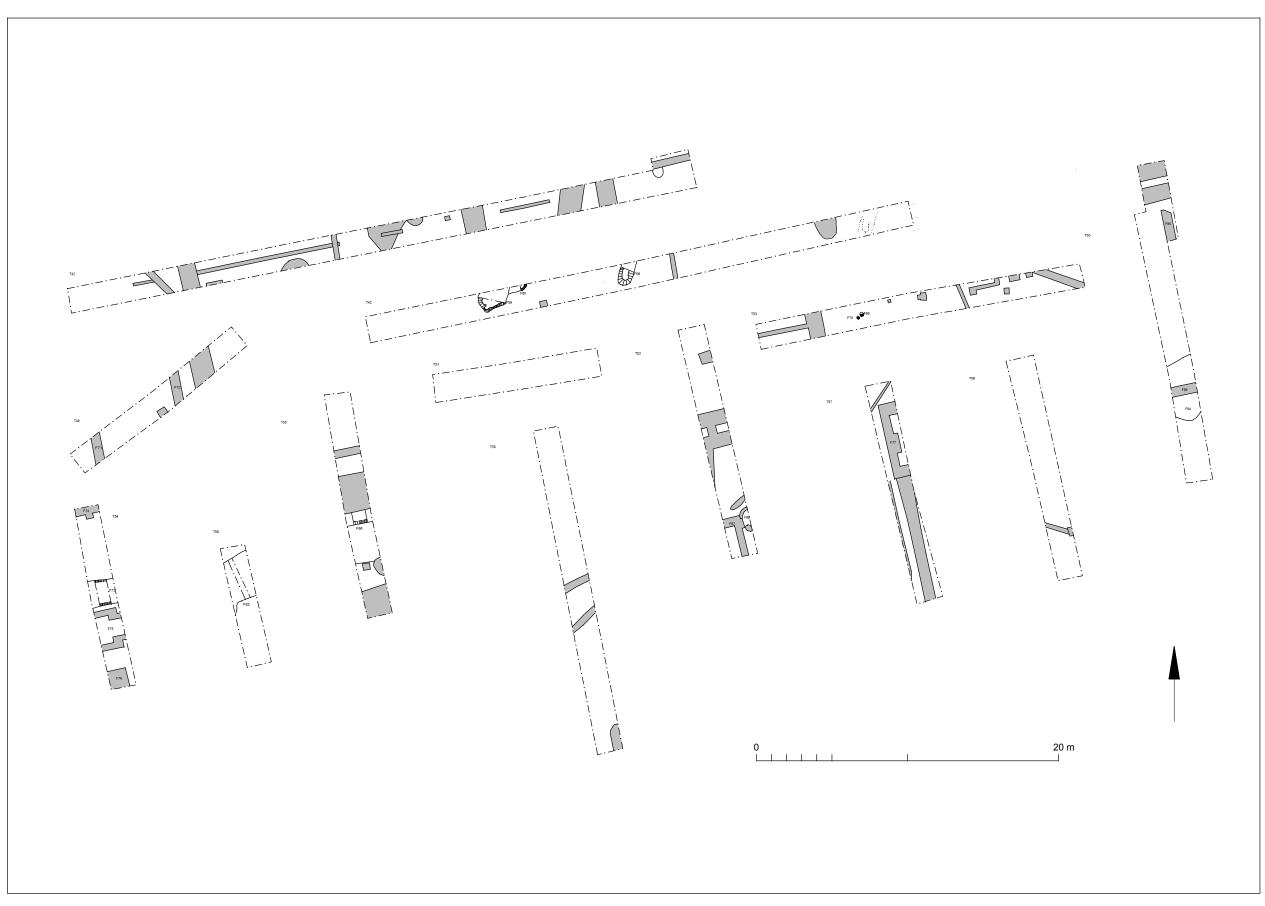


Fig 103 Trenches 42-3, 49-59

