INTEGRATED WASTE MANAGEMENT CENTRE, ELY ROAD, WATERBEACH

Archaeological Investigation



Anwen Cooper & Paula Whittaker

CAMBRIDGE ARCHAEOLOGICAL UNIT UNIVERSITY OF CAMBRIDGE



Integrated Waste Management Centre, Ely Road, Waterbeach:

Archaeological Investigation

Anwen Cooper & Paula Whittaker

With contributions by Katie Anderson, Rachel Ballantyne, Emma Beadsmoore & Chris Swaysland

Cambridge Archaeological Unit University of Cambridge

November 2004

Report No 652

Contents

		Page				
BACKGRO	DUND	1				
METHOD	DLOGY	4				
RESULTS		4 4 9				
Area A Trenches 1-7						
DISCUSSION						
SPECIALISTS REPORTS Roman pottery (Katie Anderson) Flint (Emma Beadsmoore) Faunal Remains (Chris Swaysland) Environmental remains (R.M. Ballantyne) Human remains		13 13 13 14 15				
FEATURE	DESCRIPTIONS	21				
REFERENCES						
	Figures					
		Page				
Figure 1	Location map	2				
Figure 2	Overall plan of Area A, Trenches 1-7 and previous evaluation trenches					
Figure 3	Archaeology in Area A					
Figure 4	Detailed plan of archaeology in Trenches 1-7					
Figure 5	Plan of features in Trenches 1-7 in relation to those from previous evaluation trenches	9				
Figure 6	Archaeology in the wider context of the PDA	11				

Further archaeological investigations were undertaken by a team from Cambridge Archaeological Unit on land adjacent to the A10 Ely Road, Waterbeach, Cambridgeshire (centred NGR 488 690) in January 2002. The work was commissioned by M. Dickerson Ltd. prior to the construction of an Integrated Waste Management Park (IWM Park). It was carried out according to a specification (Gibson 2001) approved by Andy Thomas of the Cambridgeshire County Council Archaeological Office. The investigation comprised a programme of excavation and trial trenching over an area of 11 hectares that was intended to clarify the results of earlier trial trenching on the site (Masser 2000). Three further undated cremations were located in the vicinity of a postulated 4th century AD Romano-British temple (Taylor 1980). In addition, prehistoric activity and Romano-British gravel quarries and field boundaries were identified.

BACKGROUND

The Proposed Development Area (PDA) comprised 11 ha of arable land, bounded by A10 Ely road to the south east, and an artificial channel, the Beach Ditch, to the north west (Figure 1). The modern ground surface lay between 2.2 and 3.2m OD. The underlying geology was 1st and 2nd terrace gravels and sand, overlying Kimmeridge Clay and Lower Greensand.

The results of recent investigations in advance of the proposed Integrated Waste Management Centre are outlined elsewhere (Gibson 1999; Masser 2000). The reader is referred to these reports for a comprehensive review; the main findings are summarised below.

A desktop study (Gibson 1999) identified sparse evidence of prehistoric activity, much of which was located to the north or north west of the PDA. This included Bronze Age settlement features and a Neolithic flint scatter alongside a palaeochannel at Gravel Diggers Farm, 500m to the north (Oswald 1992) and later Bronze Age settlement at the fen edge along the Old West River (Masser 2000).

Evidence for Iron Age and Romano-British activity was widespread. The A10 Ely road followed the course of Akeman Street (Margary 1967), and the Car Dyke ran 750m further to the west. A near-continuous landscape of settlements, fields and droveways was recorded as cropmarks on all sides of the PDA (Hall 1996; Palmer 1999). Recent excavations (Hall 1999; Hedges & Symonds 1990; Masser 2000; Wait 1992; Whittaker 1997) revealed that many of these cropmarks related to Romano-British settlement and agriculture, although Iron Age activity was also identified.

A Romano-British temple was recorded on aerial photographs immediately to the north west of the PDA. This was destroyed by quarrying in 1980, but numerous finds were recovered including more than one hundred 4th century AD coins and a miniature votive axe. A group of cropmarks to the south and west of the temple was also largely removed by quarrying. However ditches and deep waterlogged pits were identified from which pottery, metalworking debris and a leather shoe were retrieved (Taylor 1980). Cropmark features relating to this settlement, including a droveway, extended into the south western margins of the PDA (see below).

Saxon and Medieval activity was focused around the present villages of Cottenham and Waterbeach. The PDA stood within a seasonally flooded fen for much of these periods. However Beach Ditch to the north west was Medieval in origin (Ravensdale 1974) and Denny Abbey to the south east, was founded in the 12th century.

Previous trial trenching within the PDA (Masser 2000) revealed 2nd to 4th century AD Romano-British settlement activity in the south west corner of the site. This formed the northern edge of a much larger settlement identified on aerial photographs (see above). Outlying fields and droveways were identified across the eastern part of the site. In addition, a later Bronze Age/earlier Iron Age ditch was recorded at the southern end of the PDA and an undated cremation was excavated close to the site of the former Romano-British temple (Taylor 1980).

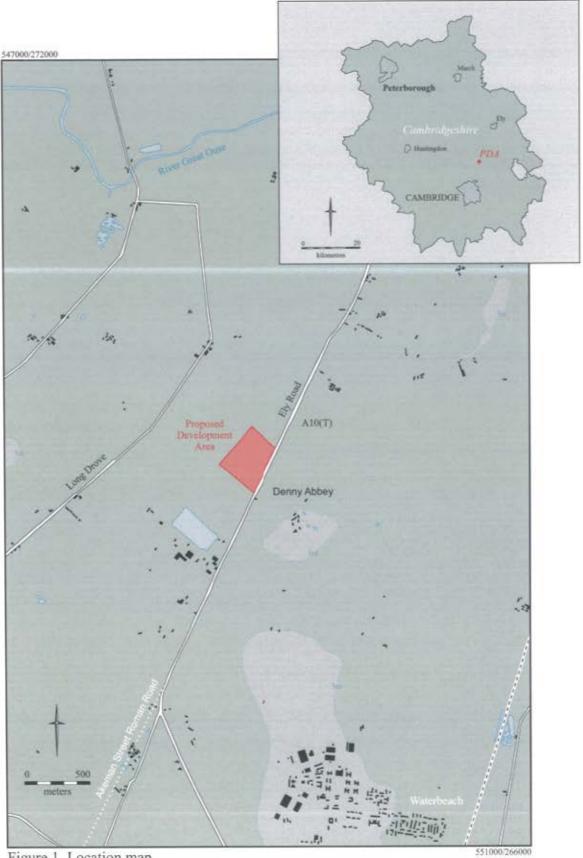


Figure 1. Location map

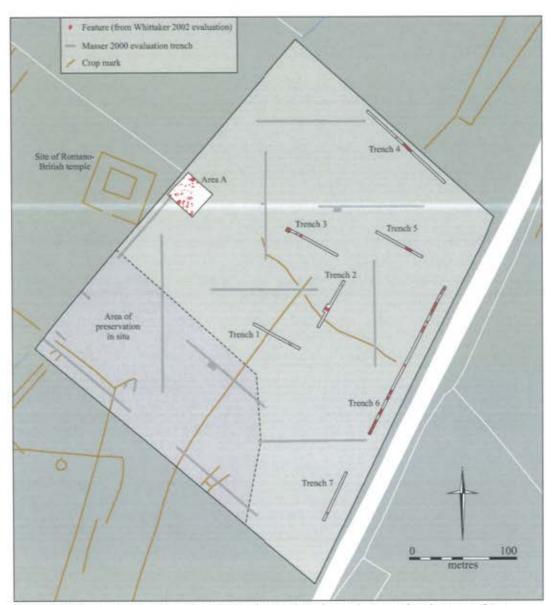


Figure 2. Overall plan of Area A, Trenches 1-7 and previous evaluation trenches

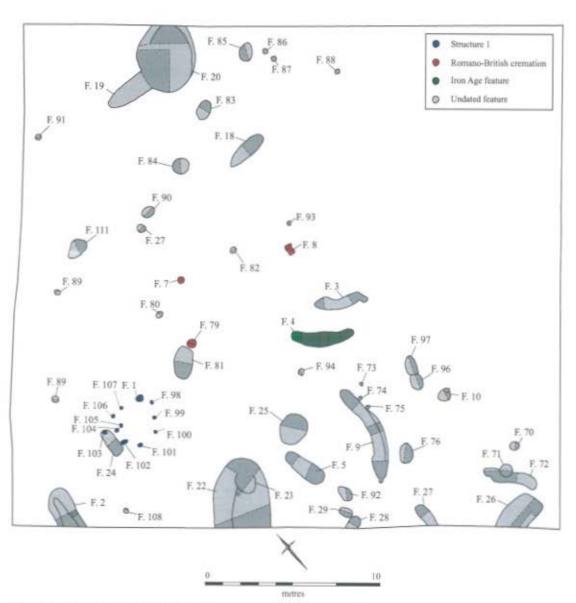


Figure 3. Archaeology in Area A

On the basis of this assessment, a decision was made to preserve what remained of the Romano-British settlement *in-situ* (Figure 2). The current investigation was commissioned in order to clarify the character and extent of archaeology in the remainder of the PDA and locate any further cremations close to the former Romano-British temple.

METHODOLOGY

An area of 28.5m x 30m (Area A) was machined around the undated cremation recorded in an earlier trial trench (Masser 2000). A further 500m of trench (2m wide) was located in the remainder of the PDA (Figure 2). In total, an area of 1855 square metres (1.69 % of the PDA) was investigated. Overburden and the stripped surface of the trenches were scanned by eye and with a metal detector.

The trenches and excavation area were machined under archaeological supervision and all archaeological features were immediately planned. The archaeology was tested by half-sections of discrete features and 1m wide slots across linear features. A CAU-modified version of the MoLAS recording system was employed throughout. Excavated stratigraphic entities (e.g. a cut, a fill) were recorded as individual contexts, with interrelated stratigraphic events (e.g. a ditch cut and its fill) assigned feature numbers. Sections were drawn at 1:10, base plans at 1:50. Environmental bulk samples were taken from a representative cross-section of features.

RESULTS

Area A (Figure 3)

Fifty-eight archaeological features were identified. This included three further cremations, a curvilinear gully, a well, the butt ends of two ditches, seventeen pits, and thirty-one postholes, eleven of which appeared to define a small, circular structure (Structure 1). Many of these features contained no diagnostic material and could not be assigned to any particular period. However the material that was recovered from their fills indicated that they related to later prehistoric and Romano-British activity.

Undated archaeology

Undated archaeology comprised a small circular structure (Structure 1, F.s 1 & 98-107), a curvilinear gully (F.9), a well (F.20), linear boundaries (F.s 2 & 22), pits (F.s 3-5, 18-9, 23-5, 28-9, 71, 76, 81, 83-4 & 92), and postholes. Whilst no datable material was recovered from these features, some did contain worked and burnt flint, indicating that they probably represented prehistoric activity.

Structure 1 comprised a small circle (c.2.5m in diameter) of eleven postholes at the south western corner of Area A. The postholes were evenly spaced (at 0.75-1.25m intervals) and fairly consistent in size and form (0.15-0.45m in diameter by 0.10-0.28m deep). However, no obvious entrance was identified which could suggest that they represent a raised platform or store rather than a building. Two of the postholes

(F.s 1 & 100) contained evidence of post-packing at their base and small quantities of burnt flint were recovered from F.s 1 & 103. The charred plant remains included species that were typical of later Bronze Age/earlier Iron Age plant assemblages (after Greig 1991). They also indicated that the structure was associated with storage or dehusking of hulled wheat grain.

A curvilinear gully (F.9) was located towards the south east of Area A. It was c.5.75m in length with steep, shallow sides and a flattish base. The fills were sterile and contained no datable material. It is possible that this represents part of the truncated gully of a later prehistoric round house. Three undated postholes (F.s 73-75) were located close to the northern end of this feature and may have been associated with it.

A large pit or well (F.20) was excavated at the northern corner of Area A and contained the richest artefact assemblage on the site. This feature was impressive in size (at least 3.3m wide by 1.25m deep) with a pronounced shaft at the centre. Several episodes of infilling were recorded including an initial period of sedimentation [561], and a subsequent deposit of partly articulated lamb bones and the head and body of a decapitated calf [560]. One of the upper fills [558] also contained a single piece of residual earlier Neolithic worked flint. Whilst the date of this feature remains uncertain, both its form and the assemblage of material recovered from its fills indicated that it represented later prehistoric rather than Romano-British activity. The deposition of articulated animal remains at the base of pits or wells is commonplace in the Iron Age of southern Britain (Cunliffe 1992, Hill 1995). For example, similar deposits were recorded at Broom Quarry, Bedfordshire (Mortimer 1997; Cooper 2004) and Addenbrookes Hospital, Cambridge (Evans, McKay & Webley 2004).

Two elongated features (F.s 2 & 22), aligned north-south and north east-south west respectively, were located at the southern western edge of Area A. Both were fairly shallow with pale fills and F.2 contained fragments of burnt flint. These could represent the terminals of prehistoric boundary ditches. However given their slightly different alignments, and the lack of evidence to suggest that they continued to the south, they could instead represent large, elongated prehistoric pits (see below).

Sixteen pits were recorded across the southern and western extent of Area A within which two main forms were identified. There were eleven small (0.75-1.85m in length, 0.65-1.60m wide & 0.07-0.35m deep), sub-circular or oval pits (F.s 23-5, 28-9, 71, 76, 81, 83-4 & 92) and five larger, shallow (2.50-3.75m in length, 0.85-1.20m wide & 0.05-0.34m deep), oval or sub-rectangular pits (F.s 3-5 & 18-9). Two further features (F.s 26-7) continued beneath the edge of Area A and may also represent elongated pits. Most of these features contained pale, compacted fills with very little cultural material. They were probably in-filled by a slow silting process, rather than being deliberately backfilled (for example) with settlement debris. Many of the pits were also very shallow suggesting that they were heavily truncated. Very few of them contained artefacts. However F.4 contained the heavily burnt base of a small, later Iron Age jar and F.3 contained fragments of burnt flint. Again, these features probably relate to later prehistoric activity, the nature of which is hard to determine.

A further nineteen, isolated postholes were distributed across the southern and western part of Area A. Most were insubstantial, and only three (F.s 10 & 77-8) contained any artefacts. A piece of later Neolithic worked flint was recovered from

F.10, there were fragments of burnt flint in F.77, and burnt animal bone and earlier Neolithic worked flint were recovered from the fill of F.78. Given their lack of structural form in plan, and the scarcity of material culture from within these postholes, they can only be seen to provide further evidence of prehistoric activity in the vicinity.

Romano-British cremations

Three pits containing cremated human remains (F.s 7, 8 & 79) were located close to the cremation identified in an earlier evaluation trench (Masser 2000). These were very shallow (0.13m, 0.07m & 0.08m respectively) and appeared to have been heavily truncated. There was no pottery in their fills and only a small amount (68g, 74g & 19g respectively) of calcined human bone was recovered. There were also fragments of charred wood and iron nails in the fills of F.s 7 and 8. The charred condition of this material suggested that it was derived from the funerary pyre, perhaps representing the burnt remains of a coffin. The four cremations from this and the previous phase of investigation (Masser 2000) formed a roughly linear arrangement from east to west. The associated plant remains included fen sedge; a typical component of Roman assemblages in this area (see Environmental Remains, below).

Whilst no chronologically diagnostic material was recovered from the cremations, their location immediately to the south east of a postulated 4th century AD temple, and the charred wood and iron nails within the fills of two, clearly indicated that they were of Romano-British rather than prehistoric origin. Their alignment upon the temple also suggested that they were placed with reference to this feature. The deposition of simple, unaccompanied cremated human remains was one of an array of later Romano-British burial practices (Philpott 1991). However, it is worth noting that cremations were more typically an earlier Romano-British burial practice; by the 4th century AD, inhumation was generally favoured (ibid.). The choice of cremating these bodies may therefore have been made specifically because of their association with the temple. Alternatively, the use of this rather than a typically later Roman burial rite could be seen to suggest that the temple had an earlier Romano-British origin.

Trenches 1-7 (Figures 4 & 5)

Trenches 1-7 were located in order to further characterise archaeology identified during the earlier evaluation (Masser 2000). In particular they were intended to assess the date, layout and extent of Romano-British fields and droveways relating to the late 3rd/early 4th century AD settlement in the south west corner of the PDA.

Seven linear features (F.s 31-2, 36, 40, 52, 60 & 64), six ditch/gully terminals (F.s 35, 53, 57, 61-2 & 65), four small pits (F.s 30, 37-8 & 59), one larger pit (F.16), one posthole (F.114) and numerous gravel extraction pits (twenty-seven of which were tested F.s 39, 41-46, 49-51, 54-56, 58, 63, 66-7, 68, 109-113, 115, 116 & 119-20) were identified. Of these, only one of the pits (F.16) and six of the gravel extraction pits (F.s 41, 44-5, 109 & 118-9) contained datable material.

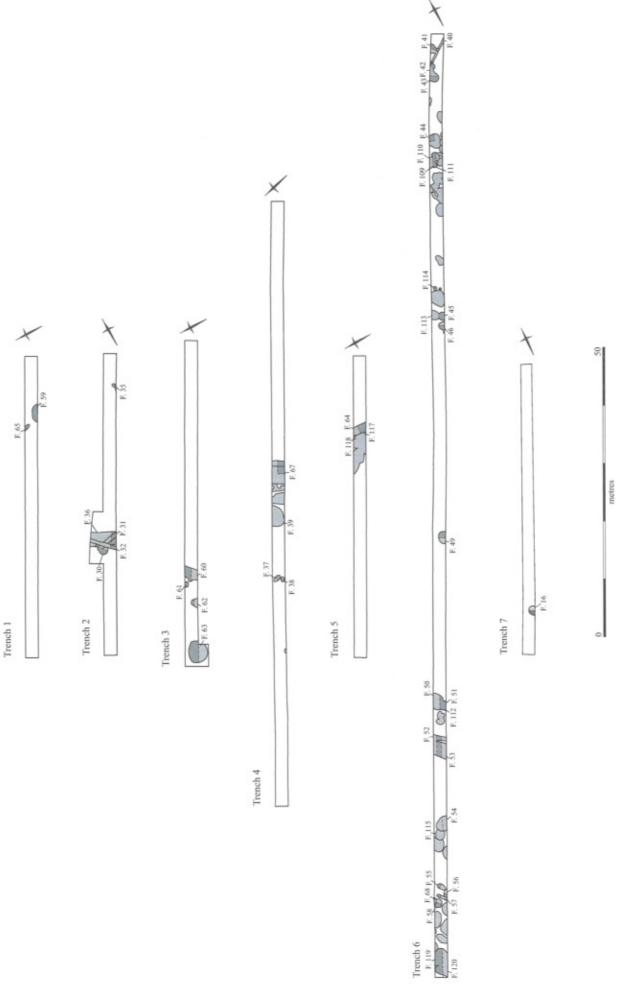


Figure 4. Archaeology in Trenches 1-7

The ditches varied considerably in form however all contained pale fills with very little cultural material, and all but two were aligned north east-south west or north west-south east. This orientation corresponded with that of the Romano-British settlement boundaries and field system of this date that was identified during the earlier evaluation (Masser 2000). In fact two of the ditches (F.32 in Trench 2 & F.40 in Trench 7) appeared to connect directly with those identified in earlier evaluation trenches (Figure 5). It is therefore likely that many of the ditches within Trenches 1-7 were part of a system of fields associated with the 3rd to 4th century AD Romano-British settlement investigated at the south west corner of the PDA (ibid.).

It is also worth noting that two of the ditches (F.s 31 & 64) in Trenches 2 and 5 were aligned north-south/east-west and did not appear to form part of the Romano-British field system. Unfortunately, the date and character of these boundaries was not clear. F.31 contained worked and burnt flint however it clearly cut two ditches on the same alignment as the Romano-British settlement (F.s 32 & 36). Furthermore there was no consistency to the organisation or character of these ditches, the undated ditches in Area A, or the Iron Age ditch from the earlier evaluation (Masser 2000). This is in marked contrast to the remarkably coherent systems of prehistoric land division that have been excavated elsewhere in the region at Eye Quarry, Peterborough (Patten 2001-2 & forthcoming) and Broom Quarry, Biggleswade (Mortimer 1997, 1999 & 2002; Mortimer & McFadyen 1999; Garrow 2000; Hatherly 2001).

Most of the pits and the single posthole identified in Trenches 1-7 were unremarkable; they were shallow and irregular in form with pale fills and contained no datable material. By contrast, pit F.16 in Trench 7 was substantial (c.1.9m in diameter by 0.75m deep) and was backfilled with a series of deposits that included a small sherd of later Iron Age pottery and an expediently worked flint core. This feature was located at the southern end of the PDA and stood in apparent isolation. However together with the later Iron Age ditch recorded in the earlier evaluation (Masser 2000) it provided evidence of a low density of Iron Age activity in the southern part of the site.

There were three main concentrations of gravel extraction pits in Trenches 4 and 6, twenty-six of which were tested during this phase of investigation. Small, abraded sherds of undiagnostic or later (2nd to 4th century AD) Romano-British pottery were recovered from five of these pits in Trench 6; the remainder were undated. One other isolated Romano-British extraction pit (F.118) was excavated in Trench 5 and a further group of undated quarry pits was recorded at the eastern end of Trench 46 during the earlier evaluation (Masser 2000). Most of these features were probably associated with later Romano-British activity at the fringes of the main settlement area in the south western corner of the PDA.

DISCUSSION

The second phase of investigation at the proposed Integrated Waste Management Centre, Waterbeach, Cambridgeshire complemented and enhanced the findings of the earlier assessment (Masser 2000) (Figure 6).

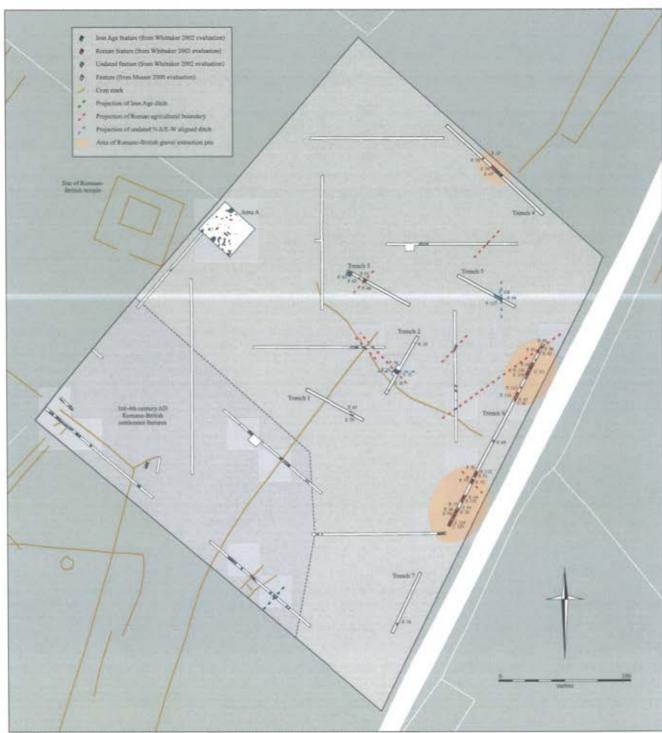


Figure 5. Archaeology in Trenches 1-7 in relation to that from the earlier evaluation (Masser 2000)

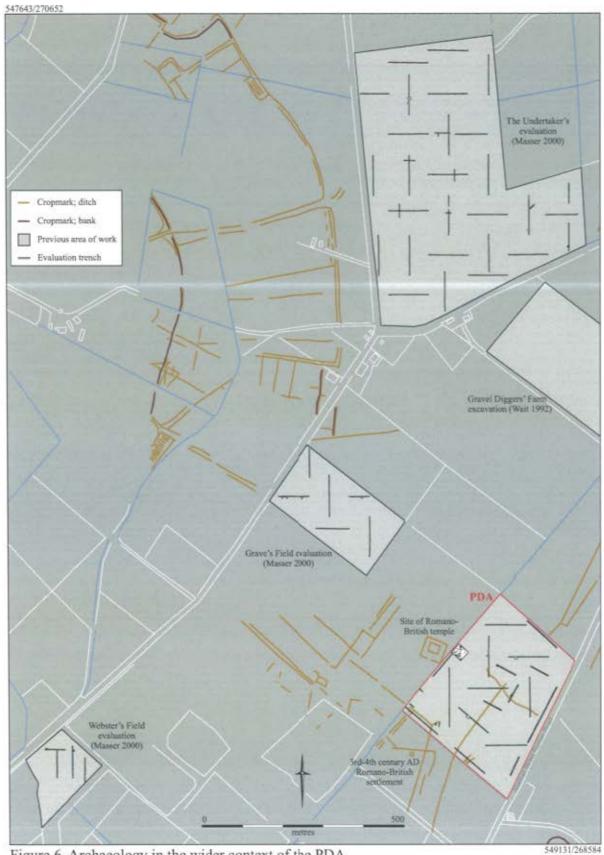


Figure 6. Archaeology in the wider context of the PDA

Undated and prehistoric archaeology

A low density of undated archaeology was recorded across the site, including boundary ditches, gullies, pits, postholes, and a well. Some of these features contained worked and burnt flint, suggesting that they related to prehistoric activity. In addition, two later Iron Age pits were identified; one in Area A, the other at the southern end of the site. Together these features can be seen to indicate dispersed later prehistoric activity with a slightly greater intensity of Iron Age activity at the southern end of the site. Both the density and character of this prehistoric archaeology corresponded with the findings of other recent investigations in the vicinity (Hall 1999; Hedges & Symonds 1990; Masser 2000; Wait 1992; Whittaker 1997) in which occasional Neolithic and Bronze Age worked flint and dispersed later Bronze Age and Iron Age occupation were recorded.

Romano-British archaeology

Evidence of Romano-British activity included three additional cremations adjacent to the temple, undated ditches on a north west-south east/north east-south west alignment and numerous gravel extraction pits along the northern and eastern edges of the PDA. Only the latter were dated with certainty to the Romano-British period on the basis of pottery in their fills. Together this evidence provided an important context for the postulated 4th century Romano-British temple (Taylor 1980) to the north west of the PDA, and the 2nd to 4th century settlement and agricultural boundaries recorded on aerial photographs and excavated during the previous assessment (Masser 2000).

The discovery of three further cremations, making a total of four, confirmed that the undated cremation from the earlier evaluation did not stand in isolation. Furthermore, the material that accompanied the burnt human bone indicated that these cremations were of Romano-British rather than later prehistoric origin. It is therefore of interest that this burial rite was relatively rare in the later Romano-British period. This could indicate that the postulated 4th century temple, with which these cremations were probably associated, had earlier origins.

Further evidence was uncovered of the Romano-British field system identified in the previous assessment (Masser 2000). None of the ditches excavated in this phase of investigation were securely dated. However their position, immediately to the north east of a significant 2nd to 4th century AD settlement, and their similarity in fill and alignment to Romano-British field boundaries excavated in the earlier assessment, suggested that many of them probably did represent agricultural boundaries of this period. Few of the ditches were re-cut suggesting that they represented a fairly short period of activity. It is also worth noting that this field system did not extend into the western part of the site, close to the Romano-British temple, suggesting that this area was differently defined.

The Romano-British gravel extraction pits provided evidence of wider activity in the landscape around the 3rd to 4th century AD settlement at the south west corner of the PDA. A similar pattern of later Romano-British land use was recorded at Bannold Lodge c.1km to the south east (Whittaker 1999).

ACKNOWLEDGEMENTS

The archaeological investigation was commissioned by M. Dickersons Ltd. Andy Thomas of Cambridgeshire County Council monitored the work. The team responsible for excavating and interpreting the site is detailed in full below.

List of Contributors

Excavation

Marcus Abbott Nick Armour David Brown Paul Donahue Alex Hall Ricky Patten Christina Robinson Paula Whittaker (director)

Survey

Marcus Abbott

Post-excavation

Marcus Abbott (Computer illustration) Katie Anderson (Roman pottery) Emma Beadsmoore (Flint) Norma Challands (Finds co-ordination) Chris Swaysland (Animal bone)

Project Management

David Gibson

REFERENCES

Bass, W.M. 1992 Human Osteology: A Laboratory and Field Manual. Columbia: Missouri Archaeological Society, Inc.

Boardman, S. & Jones, G. 1990 Experiments on the effects of charring on cereal plant components. *Journal of Archaeological Science* 17, 1-11.

Cooper A.J. 2004 Investigation of the Archaeological Landscape at Broom Quarry, Bedfordshire (Phase 8). CAU Report 614.

Cunliffe, B.W. 1992 Pits, preconceptions and propitiation in the British Iron Age. In Oxford Journal of Archaeology 11, 69-84.

Davis, S. 1992 A rapid method for the recording information about mammal bones from archaeological sites. Ancient Monuments Laboratory Report 19/92.

Evans, C. McKay, D. & Webley, L. 2004 Excavations at Addenbrooke's Hospital, Cambridge. The Hutcheson Site: Assessment Report. CAU Report 609.

Gibson, D. 1999 The Proposed Integrated Waste Management Centre, Ely Road, Waterbeach, Cambridgeshire. A Desktop Study. CAU Report 307.

Gibson, D. 2002 A Revised Specification of Works for Archaeological Excavation and Preservation In Situ at the Proposed Integrated Waste Management Centre, Ely Road, Waterbeach. CAU Internal Report.

Grant A. 1982 'The use of tooth wear as a guide to the age of domestic animals'. In Wilson, B., Grigson, C. and Payne, S., (eds.) Ageing and sexing animal bones from archaeological sites. BAR British Series, Oxford, 109 & 91-108.

Greig, J.R.A. 1991 The British Isles. in W. van Zeist et al. (eds.) Old World Palaoethnobotany. Rotterdam: Balkema.

Hall, C. 1999 Archaeological Investigations of the Anglia Water Cottenham-Landbeach Sewage Pumping Main, Cambridgeshire. CAU Report 345.

Hall, D.N. 1996 The Fenland Project No.10: Cambridgeshire Survey, Isle of Ely and Wisbech. EAA Report 79.

Hall, D.N. & Coles, J. 1994 Fenland Survey: An essay in landscape and persistence. English Heritage, London.

Hedges, J.W. & Symonds, J. 1990 An Archaeological Assessment at Denny, Waterbeach. Tempus Reparatum.

Hill, J.D. 1995 Ritual and Rubbish in the Iron Age of Wessex: A study on the formation of a specific archaeological record. BAR 242. Oxford.

Humphrey, J. 2003. The Utilisation and Technology of flint in the British Iron Age. In J. Humprey (ed.) Re-searching the Iron Age: Selected Papers from the Proceedings of the Iron Age Research Student Seminars. Leicester: Leicester Archaeology Monographs No.11.

Jones, M.K.J. 1984 The plant remains. In B. Cunliffe (ed.) Danebury: an Iron Age hillfort in Hampshire: Volume 2, The excavations, 1969-7. CBA Report 52, 483-495.

Knight, M. 2000 The Prehistoric and Roman Archaeology of Stonald Field, King's Dyke West, Whittlesey: Monuments and Settlements. CAU Report 393.

Lucas, G. & Whittaker, P. 2001 Vicars Farm, Cambridge: Post Excavation Assessment Report. Volume 1: Main Text. CAU Report 425.

Margary, I. 1967 Roman Roads in Britain. London.

Masser, P. 2000 The Cambridge Centre for Recycling, Ely Road, Waterbeach: Archaeological Evaluation of Graves' Field, The Undertakers, Webster's Field and The IWM Park. CAU Report 403.

McFadyen, L. 2000 Archaeological Excavations at Eye Quarry, Peterborough (Phase 2). CAU Report 355.

Mortimer, R. 1995 Archaeological Investigations at King's Dyke Pits, Whittlesey. CAU Report 122.

Mortimer, R. 1997 Investigation of the Archaeological Landscape at Broom, Bedfordshire: The Plant Site and Phases 1 & 2. CAU Report 202.

Mortimer, R. 1999 Investigation of the Archaeological Landscape at Broom, Bedfordshire: Phase 3. CAU Report 294.

O'Connor, T. 1989 'Bones from Anglo-Scandinavian Levels at 16-22 Coppergate'. In *The Archaeology of York* 15 (3). Council for British Archaeology, London, 137-207.

Oswald, A. 1992 Archaeological Investigations at Gravel Diggers Farm, The Lots, Cottenham, Cambridgeshire. CAU Report 49.

Patten R. 2003 Prehistoric & Roman Field Systems at Eye Quarry, Tanholt Farm, Peterborough (Phase Two). CAU Report 545.

Payne, S. 1973 'Kill-off patterns in sheep and goats: the mandibles from Asvan Kale'. In *Anatolian Studies* 23, 281-303.

Pfleger, V. & Chatfield, J. 1988 A Guide to Snails of Britain and Europe. London: Hamlyn.

Philpott, R. 1991 Burial practices in Roman Britain. BAR British Series 219. Oxford.

Ravensdale, J.R. 1974 Liable to Floods. Cambridge. CUP.

Schmid, E. 1972 Atlas of Animal Bones: For Prehistorians, Archaeologists and Quaternary Geologists. Elsevier, Amsterdam, London, New York.

Silver I.A. 1969 'The ageing of domestic animals'. In D. R. Brothwell and E. S. Higgs (eds.) Science in archaeology: a survey of progress and research, Thames and Hudson, London, 283-301.

Stace, C. 1997 The New Flora of the British Isles. Cambridge: CUP.

Steel, D.G. and Bramblett, C. A. 1988 The Anatomy and Biology of the Human Skeleton. Texas: A&M University Press.

Taylor, A. 1980 Notes. In PCAS 70.

Wait, G. 1992 Archaeological Investigations at Gravel Diggers Farm, The Lots, Cottenham, Cambridgeshire. CAU Report 64.

Whittaker, P. 1997 Excavations at Bannold Lodge, Chittering, Cambridgeshire. CAU Report 226.

Wilson, B. 1992 Considerations for the identification of ritual deposits of animal bones in Iron Age pits. In *International Journal of Osteoarchaeology* 2, 341-49.

SPECIALIST REPORTS

1) Roman Pottery - Katie Anderson

Eight sherds of Roman pottery, weighing 103g were recovered from seven contexts on the site. All of the sherds were examined and details of fabric, form and date (where possible) were recorded.

Assemblage Composition

All of the sherds were small and abraded with a mean weight of 12g, which is probably due to their residuality. Each context only contained a single sherd with the exception of [709] which contained two sherds. All of the sherds were coarsewares and only one sherd was diagnostic, thus making more accurate dating difficult.

Contexts [846] and [709] both contained a reduced sandy ware, neither of which was diagnostic. Therefore these contexts can only be dated Romano-British. Context [699] contained a single sherd of grey sandy ware. This sherd was also non-diagnostic and thus this context is dated Romano-British. Context [778] contained one body sherd from an oxidised sandy ware, dated Romano-British.

The two final contexts, [714] and [784] could be more specifically dated. Context [714] contained the only diagnostic sherd in the assemblage, which was an everted jar rim from a black slipped ware. This vessel dates between the 2nd and 4th century AD. Context [784] contained one body sherd, which was a very similar fabric to that from [714] and therefore has also been dated 2nd-4th century AD.

Conclusion

Overall the pottery excavated from this site provided very little information. Most sherds could not be dated and only one vessel form could be determined. The quality of the pottery is largely due to the intense quarrying that has taken place. Other sites in the immediate area have been late Roman in date (3rd and 4th century AD), however, the pottery evidence from this site neither confirms nor refutes this date.

2) Flint - Emma Beadsmoore

Area A

The majority of the flint recovered from Area A comprises of unworked burnt chunks. Fourteen chunks, weighing 40g were retrieved from features 1, 2, 3, 77, 103 and context 689. Area A yielded only three worked flints, a flake, a blade and a retouched flake. The blade and retouched flake, recovered from F 78 and F 20 respectively, are the products of controlled core reduction, focusing on narrow flakes and blades and date to the earlier Neolithic. The flake, recovered from F 10, is also the product of systematic core reduction, however, the platform is facetted, suggesting it could be

later rather than earlier Neolithic. The very limited quantity of worked flint provides evidence for low-density, background Neolithic activity.

Trenches

The flint recovered from the trenches is comparable to the material from Area A, as the majority of the flint from the trenches also comprises of unworked burnt chunks with only a few worked pieces. Nine burnt chunks, weighing 76g, were retrieved from features 16, 31, 32 and 57. The trenches yielded only three worked flints, a core and two flakes, one of which shows signs of use. The flakes are comparable to those recovered from Area A; products of systematic core reduction and also likely to be Neolithic.

The core, however, is the result of a different type of technology. An irregular core forcefully worked with a hard hammer, with no obvious signs of structure or control over core reduction and focused simply on producing flakes regardless of their morphology. The core is fresh and was recovered from a pit, F16 that also yielded Iron Age pottery. Flint was utilised in the Iron Age and is characterised by *ad hoc* and expedient core reduction using hard hammers, resulting in irregular core morphology (Humphrey 2003:20). Hence the core could be Iron Age and broadly contemporary with the pit it was recovered from.

The flakes from the trenches and Area A provide evidence for low-density, background Neolithic activity. Whereas the irregular core provides tentative and very limited evidence that flint could have been expediently exploited in the Iron Age.

3) Faunal Remains - Chris Swaysland

Background

A quantity of animal bone numbering 638 fragments or 6384 grams was recovered from the site. The majority of bone was hand recovered during the excavation; a small amount was subsequently retrieved by wet sieving of bulk samples taken for the retrieval of environmental remains.

The material was analysed in order to characterise the assemblage in terms of species represented, their relative importance to the cultural and economic life of the site, and any other relevant patterning. The bone was in a poor state of preservation, it was fragile and brittle, and in addition many of the bones are obscured by iron rich concretions.

Methods

The material was identified with the reference collection of the Cambridge Archaeological Unit and the aid of Schmid (1972). No attempt has been made to distinguish between the remains of sheep and goat; these bones are recorded as sheep/goat. The assemblage was quantified using the method of Davis (1992). In

brief, all mandibular teeth and a predetermined restricted suite of elements are recorded. In addition one skull element, the zygomatic arch, was added to the list of countable elements. Bones were only recorded if at least 50% of a given part was present. Any non-countable elements from less common species or elements displaying butchery marks or pathological changes were also recorded but not used in counts.

Information on gnawing, butchery and pathology was recorded where present. Butchery was recorded by type (i.e. chop, knife cut, sawn), location and orientation (using standard anatomical terms and orientation). Pathological conditions were categorised where possible and detailed descriptions made as to form and location.

The ageing data of Silver (1969) was used to assess epiphyseal fusion of the postcranial skeleton and fusion categories follow O'Connor (1989). Epiphysis are recorded as 'fused' when the epiphyseal plate joining epiphysis to metaphysis is closed, 'fusing' once spicules of bone have formed across the epiphyseal plate and 'unfused' if none of these changes had taken place. Tooth wear and mandible wear stages were recorded following Payne (1973) for sheep/goat, and Grant (1982) and O'Connor (1989) for cattle and pigs

Results

All of the animal bone came from one well, F20. This contained two partially articulated animals. The partially articulated remains of the skull, vertebrae, ribs and some of the long bones of an immature cow were recovered. Epiphyseal fusion places the age at death to around 12 months. The condition of the bones was poor; no butchery marks could be observed.

The partially articulated remains of a sheep/goat were also recovered. These were aged from tooth eruption and wear to 1-2 years. This animal was represented by skull fragments, vertebrae, ribs and some of the long bones. A sheep/goat metacarpal was recovered with pronounced exostosis (bony growth) on the mid shaft of the bone. This may have been a result of a localised infection.

Unfortunately, the purpose and date of this deposit were difficult to define given the poor condition of the bone and the lack of other associated material.

4) Environmental Remains - R.M.Ballantyne

Background

The limited charred plant remains suggest that archaeological activity has been dispersed and ephemeral. Only the post holes from Structure 1 contain good charred remains, which suggest that it was a later prehistoric building associated with the storage or dehusking of hulled wheats. The two cremations may be of Roman date from their wild seed taxa.

All samples were processed by hand using bucket flotation. The flots were collected in $300\mu m$ sieves, and the heavy residue washed over 1mm mesh. Both flots and heavy residues were dried prior to examination under a low-power binocular microscope. One potentially waterlogged context was washed over a stack of 2mm, 1mm, $500\mu m$ and $300\mu m$ sieves. The residues from this sample were scanned wet under the same low-power microscope.

All plant nomenclature follows Stace (1997), and for molluscs Pfleger and Chatfield (1988). The results are summarised in table form at the end of this report.

Most contexts contain limited amounts of charred plant remains, which are often highly fragmented and abraded. The one possible waterlogged context [561] includes low amounts of organic material, and displays differential preservation; the watertable appears to have fluctuated.

There are low to moderate amounts of intrusive plant material, usually of fine rootlets with orache (*Atriplex patula/prostrata*) and stitchworts (*Stellaria* spp.) the most common seeds. Low to moderate amounts of mollusc shells, particularly of the marsh species *Lymnaea trunculata*, are present in many of the flots. The shells are generally translucent and glossy, and may be intrusive from recent flooding events.

Results

Area A

The majority of samples were taken from this area, however only those from Structure 1 contain good charred plant remains. Most contexts include charcoal, and amounts of burnt flint (gravel) which suggest events of burning nearby.

The cremations (Fs 7/[521] & [522] and F8/[518]) do include a small number of seeds with their charcoal. Fescue/rye-grass (Festuca/Lolium sp.) is present in all three contexts, as are seeds of great fen sedge (Cladium mariscus). There are also low amounts of charred Monocotyledon stems/leaves (i.e. grasses, sedges) and indeterminate charred roots.

The consistency of identifiable plant types between the cremations suggests they shared a common setting. Whilst the grasses could represent the local environment, the great fen sedge must have been collected from the fen-edge, and it may indicate a pyre fuel/kindling. Bronze Age cremations in Cambridgeshire are usually characterised by charred grasses and roots, particularly with false-oat grass (Arrhenatherum elatius var. bulbosum) and blinks (Montia fontana). Both these taxa are absent here, and the great fen sedge is much more characteristic of Roman sites in this area. It may tentatively be suggested that the cremations are therefore more likely to be of Roman origin.

Eight samples were taken from the post holes that defined Structure 1 (F1(a & b) & Fs 98-100, 102, 104 & 107). The cereal remains are poorly preserved, and this has limited their identification. A mixture of emmer (*Triticum dicoccum*) and spelt wheat (*T. spelta*) was identified from the few better-preserved chaff and grain items. Low amounts of barley grain (*Hordeum vulgare sensu lato*) also occur, although no chaff was recovered.

The seeds of wild taxa are few, and are of smaller or grain-sized types. Lesser cats-tail (*Phleum bertolonii*) is consistently present in the richer samples, exceptionally so (51 seeds) within F104/[666]. This plant is confined to grassland today, but appears to have been more significant as a weed in the past; it is not tolerant of modern ploughing. The other consistently represented plants are vetch/wild pea types (*Vicia/Lathyrus* spp.), which suggest that the soils of cultivation were low in nitrogen.

Context	[654]a	[654]b	[658]	[660]	[666]	[674]	[656]	[664]
Feature	1	1	99	100	104	107	98	102
Description	p/h	p/h	p/h	p/h	p/h	p/h	p/h	p/h
Volume/ litres	3	10	3	1	4	1	1.5	1.5
Grain (all types)/ count per litre	35	3	35	40	34	6	3	0
Glume bases (wheat chaff)/ count per litre	38	7	4	8	3	2	0	0
Wheat grain:chaff	0.6	0.2	9	5	7	1.5		
Seeds/ count per litre	13	1	7	12	17	3	4	1
Burnt flint/ grams per litre	1.3	0	2.4	4.1	3.7	3.1	0	0

Table 1: Calculations regarding charred plants from Structure 1

There appears to be marked variation in the representation of grain and chaff items between contexts (Table 1), which may be due to preservation conditions or the original charred cereals. Experimental work (Boardman & Jones 1990) has shown that cereal chaff survives charring much more poorly than grain, and may often be underrepresented. However the post holes containing lower amounts of chaff to grain do not have markedly worse preservation (as indicated by %grain unidentifiable), and the results seem to show real archaeological variation. Overall the contexts fit three types:

- A) Rich in cereal chaff and grain, post hole F1/[654]a & [654]b. F1/[654]a includes particularly good remains, with both barley and hulled wheats (emmer and spelt) represented. Although hulled wheat chaff dominates over grain (Table?) the remains are equally of spikelet forks and glume bases, and it is possible that intact spikelets may have been charred. When hulled wheats are threshed and winnowed, the ears break up but do not release the grain from the husks. These units are called spikelets, and are then pounded to release the grain before milling. Storage of hulled wheat grain was commonly as spikelets rather than clean grain in later prehistoric Britain, the husks protecting the grain (Jones 1984). F1/[654]b is analogous but less rich in plant remains than F1/[654]a, and may well contain re-worked material.
- B) Contexts rich in grain, post holes F99/[658] F100/[660] and F104/[666]. Virtually all grain is of hulled wheat (both emmer and spelt) with very little barley. Few chaff

components are present, but are still mainly of spikelet forks. Although the preservation quality of the grain and chaff is no worse than in F1/[654], it is possible that intact spikelets are still represented charred. The high numbers of spikelet forks support this interpretation, as does the survival of two articulated grains (ventral sides co-joined) within F99/[658]. For some reason, perhaps charring conditions or subsequent movement of charred items, the wheat chaff has survived badly within these three contexts. Post holes F107/[674] and F98/[656] may also fit this category, but with notably fewer plant remains.

C) Post hole F102/[664] contained virtually no charred plant remains other than low amounts of wood charcoal. It seemed displaced either in time or space from the source(s) of charred material represented in the other two categories above. It also included none or very few remains of burnt stone, suggesting the absence of charred plants is archaeological and not preservational.

The mixture of spelt and emmer wheat with some barley is characteristic of later prehistoric, particularly later Bronze Age and Iron Age archaeology (Greig 1991). Analysis of charred plant remains from other prehistoric structures has suggested that artefactual concentrations often occur towards entranceways, but at Waterbeach the charred plant remains are not richer on any side of the structure.

The sample from the waterlogged well base (F20/[561]) includes limited organic remains, mainly of indeterminate vegetative material: stems and root fragments. A number of fragmented hazelnut shells (Corylus avellana) were recovered, which could represent a food resource. Only one waterlogged seed, of a true sedge (Carex sp.) survives, and it seems that only more robust, woody components have survived within this context.

Trench 2

Two ditches were examined; F31/[808] and F32/[813]. Of these, F31/[808] includes a large amount of burnt flint, but very little charcoal and two hulled wheat grains (*Triticum spelta/dicoccum*). F32/[813] contains a moderate amount of burnt flint and charcoal, with low amounts of spelt wheat chaff, and wheat grain.

Due to the low amounts of charred remains, no date can be suggested for these features. Although hulled wheats are most characteristic of the prehistoric and Roman periods in Britain, such low quantities could have been re-worked into later contexts at the site.

Trench 5

One ditch was examined; F64/[840]. This sample has very little burnt flint, but numerous charcoal, and low amounts of hulled wheat chaff.

The three sampled contexts, ditches F53/[759] F48/[744] and F47/[739], are all devoid of charred plant remains other than low amounts of charcoal. Low amounts of burnt flint are also present in F48/[744] and F53/[759].

Trench 7

Two samples were examined from contexts [724] and [726] within a large pit F16. These contain low amounts of charcoal with some burnt flint in the latter context.

Discussion

The majority of samples contain very little artefactual or ecofactual material. The remains appear to be surface debris from activities which were displaced from the sampled features by space and/or time. As a result of generally ephemeral activity at the site charred remains are very localised, within features directly associated with 'domestic' activity.

Structure 1 has rich charred remains in certain post holes, which may have slumped into the fills from nearby spreads of debris. The remains suggest the structure may have been associated with the storage or de-husking of hulled wheat grain, both emmer and spelt, some of which became charred. No entranceway is apparent from the distribution of material, but the cereal types do suggest the structure was of late Bronze Age or Iron Age date.

The three cremation contexts examined may be of Romano-British date, due to the low amounts of great fen sedge and the absence of 'characteristic' Bronze Age cremation plant types. The remains compare well to a cremation [275] excavated during the earlier evaluation which was similarly interpreted as of probable Roman date (Masser 2000).

5) Human Remains

Background

Three small deposits of calcined bone were recovered from small pits (Fs 7, 8 & 79) in Area A. During excavation, the deposits of cremated bone were subject to 100% recovery as whole earth samples. The samples were wet-sieved and bone > 2mm was extracted for examination. A proportion of each sample was floated for the retrieval of environmental evidence.

Results

F7 [520-22]

68g of cremated human bone was recovered from a small oval pit, F7. Most of the fragments were well-calcined, although some fragments were blue/grey in colour. A single incisor of ?adult size was identified. One of the fills of this feature [522] also contained fragments of charred wood (5g) and the remains of at least two iron nails (3g).

F8 [518]

74g of cremated human bone was recovered from a small rectangular pit, F8 to the east of F7. Once again, the majority of the fragments were well-calcined, although some fragments were blue/grey in colour. Five molar/premolar roots of adult size were identified. The fill of this feature [118] also contained fragments of charred wood (25g) and the remains of at least four iron nails (4g).

F79 [552]

19g of cremated human bone was recovered from a small, circular pit F79. Most of the fragments were blue/grey in colour, suggesting that they were not well-calcined. A single long bone fragment was identified. No other material was retrieved from this feature.

Discussion

Together, the location of these deposits close to the postulated 4th century temple (Taylor 1980), and the association of two of them (Fs 7 & 8) with iron nails, suggested that they were of Romano-British rather than prehistoric date. Given that the wood within these features was charred it probably represented the remains of a coffin or planks from the pyre rather than a wooden burial casket. The lack of other grave offerings could be a product of later truncation but is also a common characteristic of later Romano-British cremation (Philpott 1991).

FEATURE DESCRIPTIONS

Area A

Structure 1

F.1 Post hole. Cut: [653] 0.45m x 0.35m, depth 0.2m. Sub circular in plan with moderately steep sloping sides. One fill: [654] Dark-grey sandy silt with frequent charcoal flecks.

F.98 Post hole. Cut: [655] 0.25m x 0.2m, depth 0.15m. Sub-circular in plan, U-shaped profile. One fill: [656] Same as [654].

F.99 Post hole. Cut: [657] 0.2m x 0.2m, depth 0.15m. Sub-circular in plan, U-shaped profile. One fill: [658] Same as [654].

F.100 Post hole. Cut: [659] 0.2m x 0.18m, depth 0.15m. Sub-circular in plan, U-shaped profile. One fill: [660] Same as [654].

F.101 Post hole. Cut: [661] 0.25m x 0.2m, depth 0.1m. Sub-circular in plan, U-shaped profile. One fill: [662] Pale grevish with moderate pea-grit inclusions.

F.102 Post hole. Cut: [663] 0.35m x 0.25m, depth 0.1m. Elongated oval shape in plan. One fill: [664] Marly pale creamy-orange fill amidst sandy silt.

F.103 Post hole. Cut: [665] 0.25m x 0.2m, depth 0.21m. Sub-circular in plan, U-shaped profile. One fill: [666] Same as [664].

F.104 Post hole. Cut: [667] 0.25m x 0.2m, depth 0.28m. Sub-circular in plan, U-shaped profile. One fill: [668] Same as [664].

F.105 Post hole. Cut: [669] 0.2m x 0.2m, depth 0.1m. Sub-circular in plan, U-shaped profile. One fill: [670] Same as [664].

F.106 Post hole. Cut: [671] 0.2m x 0.2m, depth 1.8m. Sub-circular in plan, U-shaped profile. One fill: [672] Same as [664].

F.107 Post hole. Cut: [673] 0.18m x 0.18m, depth 0.1m. Sub-circular in plan, U-shaped profile. One fill: [674] Same as [664].

Other features

F.2 N-S ditch terminal. Cut: [569] width 1.4m, depth 0.4m. Bowl-shaped profile. One fill: [570] a very compact greyish orange sandy silt. Contained flint and burnt flint. Re-cut: [571] U-shaped with steep sides. Fill: [572] mid grey sandy silt.

F.3 Pit. Elongated oval in plan, steep sides, rounded base. Length 3.00m. 2 slots.

- a) Cut: [637]: width 0.65m, depth 0.34m. Two fills: [635] brownish orange sandy-silty clay; [636] mid grey clayey silt with occasional stones.
- b) Cut: [640]: width 0.60m, depth 0.26m. Two fills: [638] mid grey clayey silty sand with occasional stone inclusions [639]; brownish orange sandy clay with frequent stone inclusions.

F.4 Pit. Elongated oval in plan, steep sides, rounded base. Length 3.70m. 3 slots.

a) Cut: [642]: width 0.50m, depth 0.05m. Fill: [641]: mixed orangish greyish brown clayey sandy silt with occasional stone inclusions.

- b) Cut: [644] width 0.97m, depth 0.18m. Fill: [643]: same as [641].
- c) Cut: [646] width 0.70m, depth 0.12m. Fill: [645]: same as [641].
- F.5 Pit. Sub-rectangular in plan, moderate sides, flattish base. Length 2.7m. 2 slots.
- a) Cut: [686] width 0.80m, depth 0.25m. Fill: [685]: mid-brownish grey clayey sandy silt with moderate stone inclusions and occasional charcoal flecks.
- b) Cut: [688]: width 1.00m, depth 0.12m. Fill: [687] same as [685].
- F.7 Cremation pit. Cut: [523] diameter 0.30m, depth 0.13m. Circular in plan, steep sides, rounded base. Three fills: [520] black sandy silt with moderate bone inclusions; [521] brownish sandy silt; [522] black sandy silt with moderate bone inclusions.
- F.8 Cremation pit. Cut: [519] diameter 0.44m, depth 0.07m. Rectangular in plan, steep sides, irregular base. One fill: [518] dark black silty fill with moderate amounts of burnt bone.
- F.9 Curvilinear gully. Curvilinear in plan, steep sides, rounded base. Length 4.50m. 3 slots.
- a) Cut: [527] width 0.62m, depth 0.53m. Three fills: [524] light grey clayer silt with occasional angular stone inclusions; [525] re-deposited natural; [526] very light grey silty sand with no obvious inclusions.
- b) Cut: [530] width 0.93m, depth 0.27m. Two fills: [528] same as [524]; [529] same as [525].
- c) Cut: [532] width 0.90m, depth 0.30m. Two fills: [531] mid grey silty clay with occasional charcoal flecks and small angular stones; [534] re-deposited natural with occasional charcoal flecks.
- F.10 Post hole. Cut: [706] diameter 0.34m, depth 0.35m. Sub-circular in plan, steep sides, rounded base. Fill: [707] very pale grey sand silt with mottling.
- F.18 Pit. Cut: [587] 1.74m x 0.67m, depth 0.24m. Elongated oval in plan, steep sides, rounded base. Two fills: [585] mottled reddish grey silty sand with occasional gravel and charcoal inclusions; [586] mottled brownish grey silty sand with gravel lenses and occasional charcoal inclusions.
- F.19 Pit. Cut: [575] 3.40m x 1.21m, depth 0.30m. Elongated oval in plan, steep sides, rounded base. Two fills: [573] mid grey silty sand with occasional charcoal inclusions; [574] mid reddish brown silty sand with occasional charcoal inclusions.
- F.20 Large pit or well. Cut: [562] 3.75m x 2.20m, depth 0.62m. Oval in plan, sides gradual at top, steep/undercut towards base, irregular base. Four fills: [558] mid-light grey silty sand with iron panning and occasional charcoal flecks; [559] yellowish brown silty sand and gravel with occasional gravel inclusions; [560] mottled reddish brown and pale grey silty sand with occasional charcoal and gravel inclusions. Contains deposit of articulated animal bones; [561] greyish brown silty sand with occasional charcoal inclusions.

F.22 N-S ditch terminal, 3 slots.

- a) Cut: [616]/[620] width 2.58m, depth 0.45m. Moderate-steep sides, irregular base. Fills: [615] light orangish grey sandy silt with gravel inclusions; [617] mid-light grey silty sand with occasional gravel inclusions; [618] mid-light brownish grey sandy silt with occasional gravel inclusions; [619] light greyish orange sandy silt with occasional gravel inclusions. Re-cut [614]. Fill: [613] light grey sandy silt with gravel lenses.
- b) Cut: [695] width 3.25m, depth 0.35m. Sides gradual towards top, steep towards base, flattish base. Fill: [694] light greyish orange sandy silt with occasional gravel inclusions. Re-cut: [693] same as [614]. Fill: [692] same as [613].
- F.23 Pit. Cut: [691] 1.35m x 1.15m, depth 0.35m. Oval in plan, steep sides, flat base. Fill: [690] mid grey sandy silt with occasional stone inclusions.

- F.24 Pit. Cut: [675] 1.65m x 1.20m, depth 0.18m. Sub-rectangular in plan, steepish sides, slightly rounded base. Fill: [676] mid grevish brown with reddish brown patches.
- F.25 Pit. Cut: [625] 1.77m x 1.34m, depth 0.20m. Sub-circular in plan, moderately steep sides, rounded base. Two fills: [623] mid greyish brown silty sand with occasional gravel and charcoal; [624] mid orange brown sandy gravel.
- F.26 Pit/ditch terminal. Cut: [537] width 1.42m, depth 0.36m. Moderately steep sides, flat base, aligned N-S. Two fills: [535] mottled greyish orange silty clay; [536] mid brown silty sand with gravel inclusions.
- F.27 Pit/ ditch terminal. Cut: [680] >1.50m x 0.40m, depth 0.12m. N-S linear/sub-rectangular in plan, gentle sides, rounded base. Fill: [679] pale grey sandy silt.
- F.28 Pit/ditch terminal, Cut: [684] > 0.60m x 0.30m, depth 0.30m. N-S linear/sub-rectangular in plan, steep sides, rounded base. Fill: [683] mid-dark grey brown sandy silt.
- F.29 Pit. Cut: [682] 0.70m x 0.40m, depth 0.10m. Oval in plan, gentle sides, rounded base. Fill: [681] pale-mid grey brown sandy silt.
- F.70 Post hole. Cut: [513] 0.40m x 0.41m, depth 0.21m. Circular in plan, steep sides, V-shaped base.
 Fill: [512] light-mid orange grey clayer silt.
- F.71 Pit. Cut: [515] 0.80m x 0.60m, depth 0.31m. Oval in plan, steep sides, rounded base. Fill: [514] light-mid grey clayey silt.
- F.73 Post hole. Cut: [539] diameter 0.14m, depth, 0.24m. Circular in plan, steep sides, rounded base.
 Fill: [538] light brown silty sand with occasional charcoal inclusions.
- F.74 Post hole. Cut: [541] diameter 0.22m, depth 0.11m. Circular in plan, steep sides, rounded base.
 Fill: [540] light brown silty sand with gravel inclusions.
- F.75 Post hole. Cut: [543] diameter 0.15m, depth 0.06m. Circular in plan, gradual sides, rounded base.
 Fill: [542] very light brown clayey sand.
- F.76 Pit. Cut: [547] diameter 0.16m, depth 0.07m. Circular in plan, gradual sides, rounded base. Two fills: [544] very light bluish grey clayey sand; [546] mid grey clayey sand.
- F.77 Post hole. Cut: [549] diameter 0.35m, depth 0.22m. Circular in plan, steep sides, rounded base.
 Fill: [548] dark brown sandy silt with occasional gravel inclusions.
- F.78 Post hole. Cut: [551] diameter 0.30m, depth 0.13m. Circular in plan, steep sides, rounded base.
 Fill: [550] pale greyish brown sandy silt.
- F.79 Cremation pit. Cut: [553] diameter 0.50m, depth 0.08m. Circular in plan, steep sides, rounded base. Fill: [552] mid grey sandy silt. Contains burnt bone.
- F.80 Pit. Cut: [555] diameter 0.38m, depth 0.14m. Circular in plan, steep sides, rounded base. Fill: [554] pale greyish brown silty sand.
- **F.81** Pit. Cut: [557] 2.00m x 1.00m, depth 0.15m. Sub-rectangular in plan, steep sides, irregular base. Fill: [556] mid greyish brown sandy silt.
- F.82 Post hole. Cut: [564] diameter 0.30m, depth 0.07m. Circular in plan, steep sides, rounded base.
 Fill: [563] mid grey silty sand.
- F.83 Pit. Cut: [577] 0.76m x 0.60m, depth 0.12m. Oval in plan, shallow sides, rounded base. Fill: [576] mid grev silty sand with gravel and occasional charcoal inclusions.

- F.84 Post hole. Cut: [579] 0.70m x 0.66m, depth 0.11m. Oval in plan, shallow sides, flat base. Fill: [578] light orangish grey silty sand.
- F.85 Post hole. Cut: [589] 0.75m x 0.60m, depth 0.32m. Circular in plan, sides gradual at top with steep shaft at the centre, narrow base. Fill: [588] pale-mid greyish brown sandy silt.
- F.86 Post hole. Cut: [591] diameter 0.20m, depth 0.34m. Circular in plan, steep sides, narrow base. Fill: [590] pale-mid greyish brown sandy silt.
- F.87 Post hole. Cut: [593] 0.25m x 0.13m, depth 0.20m. Oval in plan, steep sides, rounded base. Fill: [592] pale-mid greyish brown sandy silt.
- F.88 Post hole. Cut: [597] diameter 0.16m, depth 0.16m. Circular in plan, steep sides, rounded base.
 Fill: [596] pale-mid greyish brown sandy silt.
- F.89 Post hole. Cut: [609] diameter 0.30m, depth, 0.16m. Circular in plan, steep sides, rounded base.
 Fill: [608] pale grey silty sand.
- F.90 Post hole. Cut: [612] diameter 0.70m, depth 0.64m. Circular in plan, steep sides, rounded base. Two fills: [610] dark grey silty sand; [611] pale grey silty sand.
- F.91 Post hole. Cut: [622] diameter 0.35m, depth 0.14m. Circular in plan, steep sides, rounded base. Fill: [621] pale-mid grey silty sand.
- F.92 Post hole. Cut: [630] 0.97m x 0.64m, depth 0.24m. Two fills: [628] mid-dark grey silty sand with occasional charcoal inclusions; [629] orange brown sand.
- F.93 Post hole. Cut: [632] diameter 0.21m, depth 0.10m. Circular in plan, steep sides, rounded base. Fill: [631] pale grev silty sand.
- F.94 Post hole. Cut: [634] diameter 0.30m, depth 0.14m. Circular in plan, steep sides, rounded base. Fill: [633] mid grey sandy silt.
- F.95 Post hole. Cut: [648] diameter 0.30m, depth 0.14m. Circular in plan, steep sides, rounded base. Fill: [647] mid grevish brown sandy silt.
- F.96 Post hole. Cut: [650] 0.50m x 0.40m, depth 0.50m. Oval in plan, steep sides, rounded base. Fill: [649] mid grey sandy silt with gravel lenses.
- F.97 Post hole. Cut: [652] 0.90m x 0.50m, 0.12m deep. Oval in plan, shallow sides, irregular base. Fill: [651] pale grey sandy silt.

- F.59 Pit. Cut: [851] length unknown, width 1.69m, depth 0.34m. Oval in plan, gentle sides, gently rounded base. Fill: [850] compact, greyish mid brown clayey silt with occasional small and medium sized sub angular pebble inclusions.
- F.65 NE-SW gully/ditch terminal. Cut: [849] width 0.37m, depth 0.11m. Very steep sides, flat base.
 Fill: [848] fairly loose light grey, slightly clayey silt with occasional fine sized pebbles.

Trench 2

F.30 Pit. Cut: [820] 1.50m x > 1.00m, depth 0.23m. Oval in plan, moderately steep sides, flat base. Fill: [819] light mid orangey grey clayey silt with occasional stone inclusions.

- F.31 E-W ditch. Cut: [809]/[816] width 1.00m, depth 0.40m. Steep sides, flat base. Fill: [808]/[815] mid brownish grey clayey silt with occasional stone inclusions.
- F.32 NW-SE ditch. Cut: [814] width 0.80m, depth 0.45m. Narrow profiled, steep sides, rounded base.
 Fill: [813] mid grey clayey silt with occasional stone inclusions.
- F.35 NW-SE ditch terminal. Cut: [807] width 0.46m, depth 0.27m. Curvilinear in plan, U-shaped profile, steep sides, rounded base. Fill: [806] mid brownish grey clayey silt with frequent gravel stone inclusions.
- F.36 NW-SE ditch. Cut: [811]/[818] width 2.25m, depth 0.30m. Moderately sloped sides, flat base. Fill: [810]/[817] mid orangey grey clayey silt with occasional stone inclusions.

- F.60 NE-SW ditch. Cut: [822] width 2.24m, depth 0.40m. Irregular sides, rounded base. Fill: [821] moderately compact orangish brown-grey slightly silty clay with occasional sub angular gravel stones.
- F.61 NE-SW ditch terminal. Cut: [829] width 0.68m, depth 0.13m. Moderately sloped sides, wide, flat base. Fill: [828] soft orange brown silty clay.
- F.62 NE-SW ditch terminal. Cut: [825] width 0.95m, depth 0.56m. Very steep sides, narrow, flat base. Two fills: [823] greyish mid-brown slightly silty clay with occasional small sub-angular pebble inclusions; [824] very compact orangey light grey clay with lenses of a very pale orange clay and occasional small sized pebbles.
- F.63 Quarry pit. Cut: [805] 3.10m x 3.00m, depth 0.62m. Circular in plan, fairly steep sides, flat base. Two fills: [803] moderately compact bluish dark grey clayer silt with occasional small pebbles; [804] moderately compact, brownish mid-orange clayer silt with moderate-to-frequent medium sized pebble stone inclusions.

Trench 4

- F.37 Pit. Cut: [831] 1.08m x 0.88m, depth 0.16m. Oval in plan, gently sloping sides, flat base. Fill: [830] moderately compact orangey mid grey-brown clayey silt with occasional small stone inclusions.
- F.38 Pit. Cut: [833] 0.60m x 0.47m, depth 0.09m. Oval in plan, gently sloping sides, flat base. Fill: [832] moderately loose, friable brownish dark orange sandy silt with occasional small pebbles.
- **F.39** Quarry pit. Cut: [504] .1.75m x 1.15m, depth 0.40m. Sub-circular in plan, gently sloping sides, flat base. Two fills: [505] Mid-dark grey sandy silt with occasional gravel inclusions; [506] very dark blackish brown silt with rare gravel and pea grit inclusions.
- F.66 Quarry pit. Cut: [507] >2.50m x 1.75m, depth 0.50m. Irregular oval in plan, irregular sides, flat base. Fill: [508] Pale grey sandy gravely silt with lenses of olive brown.
- **F.67** Quarry pit. Cut: [509] 2.75m x 2.50m, depth 0.35m. Irregular in plan, steep sides, irregular base. Fill: [510] Mid grey, gravely sandy silt with iron panning.
- F.116 Quarry pit. Cut: [502] >1.70m x 1.35m, depth 0.34m. Oval in plan, irregular sides, flattish base.
 Fill: [503] Mid grey sandy silt with iron panning and gravel inclusions.

- F.64 N-S ditch. Cut: [841]/[845] width 1.46m, depth 0.26m. Moderately steep sides, flat base. Fills: [840]/[844] mid brownish grey silty clay with occasional stone inclusions.
- F.117 Quarry pit. Cut: [843] only excavated at intersection with F64. Irregular in plan. Fill: [842] Mid grey-brown silty clay with frequent gravel inclusions.
- F.118 Quarry pit. Cut: [847] only excavated at intersection with F64. Irregular in plan.. Fill: [846] Mid grey silty clay with frequent gravel inclusions. Contains Romano-British pottery.

Trench 6

- F.40 NE-SW ditch. Cut: [696] width 0.50m, depth 0.10m. Narrow with gently sloping sides and rounded base. Fill: [697] mid greyish brown sandy silt.
- F.41 Quarry pit. Cut: [698]. 0.90m x 1.00m, depth 0.40m. Irregular oval in plan, steep sides, rounded base. Fill: [699] mid greyish brown sandy silt. Contains Romano-British pottery.
- F.42 Quarry pit. Cut: [700] diameter 1.00m, depth 0.70m. Sub-circular in plan, steep sides, rounded base. Five fills: [701] dark grey sandy silt; [702] pale, mixed sand and silt layer; [703] mid greyish brown sandy silt; [704] pale, mixed silt and gravel slump layer; [705] mid greyish brown sandy silt.
- F.43 Quarry pit. Cut: [720] >0.95m x 0.80m, depth 0.40m. Sub-oval in plan, moderately sloping sides, flat base. Fill: [721] mid greyish brown sandy silt.
- **F.44** Quarry pit. Cut: [713] 2.25m x 1.75m, depth 0.37m. Irregular oval in plan, steep sides, flat base. Five fills: [708] brownish orange sandy clay with moderate stone inclusions; [709] mid greyish brown sandy clayey silt with occasional stone inclusions. Contains Romano-British pottery; [710] brownish orange sandy clay with moderate stone inclusions; [711] mid greyish brown sandy clayey silt with occasional stone inclusions; [712] brownish orange sandy clay with moderate stone inclusions.
- F.45 Quarry pit. Cut: [781] diameter 1.20m, depth 0.52m. Roughly circular in plan, steep sides, rounded base. Three fills: [782] mid grey clayey silt with a high amount of organic material; [783] light mid grey sandy silt with patches of orange gravel; [784] light orangey brown sandy silt.
- F.46 Quarry pit. Cut: [749] >2.10m x >1.00m, depth 0.60m. Sub-circular in plan, very steep sides, rounded base. Fill: [748] mid-dark grey clayey sandy silt with occasional stone inclusions.
- F.49 Quarry pit. Cut: [733] >2.00m x >1.00m, depth 0.80m. Sub-circular in plan, steep sides, rounded base. Three fills: [730] mixed orangey, mid grey clayey, sandy silt with moderate stone inclusions; [731] orange silty sand with frequent stone inclusions; [732] mid dark grey clayey, sandy silt with occasional stone inclusions.
- F.50 Quarry pit. Cut: [750] Not fully exposed in plan, width 2.40m, depth 0.50m. Irregular oval in plan, steep sides, slopes into section edge. Fill: [751] mid greyish brown sandy silt with slumping lenses within it.
- F.51 Quarry pit. Cut: [754] Not fully exposed in plan, depth 0.20m. Fill: [755] mid greyish brown sandy silt.
- F.52 NW-SE ditch. Cut: [757] width 0.85m, depth 0.13m. Gently sloping sides, rounded base. Fill: [756] mixed orangey grey sandy, clayey silt with moderate stone inclusions.
- F.53 NW-SE ditch terminal. Cut: [766] width 2.40m, depth 0.42m. Very steep sides, flat base. Eight fills: [758] dark orangey silty gravel; [759] mid grey sandy, clayey silt with occasional stone inclusions; [760] pale whitish grey clayey silt; [761] mixed orange grey silty clay; [762] mid grey

- sandy clayey silt with occasional stone inclusions; [763] lenses of orange sand; [764] mid grey sandy clayey silt; [765] dark orangish brown gravel.
- F.54 Quarry pit. Cut: [789] diameter 1.45m, depth 0.35m. Sub-circular in plan, steep sides, rounded base. Four fills: [790] light-mid orangish grey gravel; [791] light yellowish orange sand; [792] light mid grey with sandy patches, a sandy silt with occasional stone inclusions; [793] mid greyish orange sandy silt with frequent gravel stone inclusions.
- F.55 Quarry pit. Cut: [767] 1.25m x 0.80m, depth 0.30m. Oval in plan, moderately sloping sides, flat base. Fill: [768] pale-mid greyish orange mottled sandy, gravely silt. Contains burnt flint.
- F.56 Quarry pit. Cut: >1.20m x >0.60m, depth 0.44m. Oval in plan, fairly gentle sides, rounded base. Fill: [772] mid-pale grey sandy silt.
- F.57 NW-SE ditch/gully terminal. Cut: [769] width 0.50m, depth 0.46m. Gradually sloping sides, rounded base. Fill: [770] mid pale greyish silt, mottled with orange natural gravels. Contains worked flint.
- F.58 Quarry pit. Cut: [775] 1.20m x 1.10m, depth 0.30m. Sub-circular in plan, moderately steep sides, irregular base. Fill: [776] pale orangish grey gravely silt.
- F.68 Quarry pit. Cut: [773] Not fully exposed in plan, depth >0.24m. Fill: [774] mid grey silts and patches of re-deposited natural gravels.
- **F.109** Quarry pit. Cut: [715] diameter 1.50m, depth 0.38m. Sub-circular in plan, steep sides, rounded base. Fill: [714] Mid greyish brown sandy clayey silt. Contains Romano-British pottery.
- F.110 Quarry pit. Cut: [717] 0.75m x 0.65m, depth 0.10m. Sub-circular in plan, steep sides, rounded base. Fill: [716] Mid greyish brown sandy clayey silt.
- F.111 Quarry pit. Cut: [719] 1.00m x 0.50m, depth 0.30m. Oval in plan, steep sides, rounded base. Fill: [718] Mid greyish brown sandy clayey silt.
- F.112 Quarry pit. Cut: [754] Not fully exposed in plan or section. Fill: [755] Mid grey brown sandy silt.
- F.113 Quarry pit. Cut: [785] Not fully exposed in plan or section. Fill: [786] Mid grey sandy silt.
- F.114 Post hole. Cut: [787] diameter 0.60m, depth 0.37m. Circular in plan, steep sides, rounded base.
 Fill: [788] Dark grey sandy silt.
- F.115 Quarry pit. Cut: [794] Not fully exposed in plan or section. Fill: [795] Mid grey sandy silt. Contains worked flint
- F.119 Quarry pit. Cut: [778] 3.35m x >2.00m, depth 0.34m. Sub-circular in plan, gradual sides, irregular base. Fill: [777] Mottled grey silty gravel.
- F.120 Quarry pit. Cut: [780] >2.0m x 1.60m, depth 0.30m. Sub-oval in plan, moderately sloping sides, irregular base. Fill: [779].

F.16 Pit. Cut: [722] Not fully exposed in plan, width 1.90m, depth 0.70m. Oval/sub-circular in plan, steep sides, rounded base. Five fills: [723] mid greyish brown sandy silt with patches of iron panning, occasional charcoal flecks and gravel inclusions; [724] mid grey sandy silt with occasional charcoal flecks and gravel stone inclusions; [725] orange brown subsoil; [726] pale grey sandy silt, a primary fill. Contains worked flint; [727] pale beige orange sandy silt.