# 1.1 Fired clay

By Susan Pringle

Introduction

- 1.1.1 Fired clay was recovered by hand excavation from a variety of contexts in order to address the Fieldwork Event Aims.
- 1.1.2 The Fieldwork Event Aims which the an analysis of this assemblage can be expected to contribute to are as follows:
  - Fieldwork Event Aim 1: To establish the origins and decline of the Roman settlement.
  - Fieldwork Event Aim 2: To recover the plan and a dated occupation sequence for all phases of that section of the Roman settlement (including the rural-urban fringe and immediate hinterland) affected by the CTRL, to further the understanding of the extent and character of the core Roman settlement, its interaction with its immediate environs, and changes through time.
  - Fieldwork Event Aim 3: To recover artefact assemblages (especially pottery) to elucidate the sequence of site development; provide information on trade and exchange within the local, regional and international economy, and the status and economy of the settlement.
  - Fieldwork Event Aim 4: To determine the origins and decline of urban functions within the settlement.
  - Fieldwork Event Aim 7: To establish the chronology of the cemetery.
  - Fieldwork Event Aim 8: To establish the spatial development of the cemetery as far as possible within the area of investigation.
  - Fieldwork Event Aim 9: To establish if spatial variations exist within the cemetery in relation to burial practice.
  - Fieldwork Event Aim 11: To establish the nature and distribution of structural features located within the cemetery.
  - Fieldwork Event Aim 12: To identify ancillary features associated with a specific burial practice.
  - Fieldwork Event Aim 13: To establish the nature and date of occupation pre-dating the cemetery.
  - Fieldwork Event Aim 14: To determine the nature of activity and land utilisation, other than that directly forming part of the cemetery, associated with the Roman town of Springhead.

### Methodology

1.1.3 All of the material has been scanned for the assessment using a binocular microscope. The assemblage has been counted and weighed, and the presence of features such as original surfaces, impressions or tempering noted.

## Fired clay

- 1.1.4 The total assemblage of fired clay comprising 18.023 kg was assessed (0.188 kg from ARC PHL97 and 17.835 kg from ARC NBR98).
- 1.1.5 Some of the fired clay scanned is likely to be natural soil that has been accidentally fired by contact with cremation fires. Some, however, has smoothed surfaces or, more rarely, impressions which suggest that it formed part of some sort of structure or feature. No signs of wattle imprints or attached lime mortar were

noted on any of the fragments, which suggests that the fired clay/daub was not destruction debris from clay and timber domestic buildings.

- 1.1.6 Fabric analysis has not been carried out, but two types were noted: a fine, orange brown, sandy fabric with fine mica, and a harder greyish brown fabric with inclusions of white flint flakes.
- 1.1.7 Much of the fired clay and daub was reduced and blackened, suggesting that it may have been burnt in anaerobic conditions. This is presumably a result of the nature of the procedures or rituals which were used for the cremation process.
- 1.1.8 The following features of interest were noted: smoothed surfaces (contexts 168, 597, 1177, 1701, 1703 and 1738), grass impressions (469, 556, 1322), perforations (samples <93> and <96>, context 586) have 3 mm wide holes running through them). The origin of these is uncertain; further examination is needed to assess whether these perforations are natural and due to worm or root action, or whether they are the result of human activity, either as impressions of some organic material incorporated into the daub, or deliberately formed with a twig or similar tool. The daub slab in which they occur has one smoothed surface and one quite rough, as though it may have formed part of the lining of a fire-pit or hearth.
- 1.1.9 One fragment of fired clay has a corroded iron object attached, possibly the remains of a nail (context 560).

#### Provenance

1.1.10 The provenance of the fired clay is also not clear at this stage, but as it is associated with a number of cremations and cremation burials it should be examined again when fuller stratigraphic information is available.

### Conservation

1.1.11 The condition of the material is fairly abraded, but there is no risk to its preservation. Further analysis may be needed on some of the material, so it should not be placed in long term storage until this has been carried out. There are no special requirements for long term storage, other than the use of robust packaging materials and a dry environment.

### *Comparative material*

1.1.12 A brief review of published sources suggests that fired clay has not been identified elsewhere as a component of burial ritual. This implies that further analysis of the Waterloo Connection material will be required in order to establish whether genuine fired clay structures were indeed present, or whether the fired clay is the result of incidental burning by contact with cremation pyres.

### Potential for further work

1.1.13 The fired clay and daub is a potential source of information on the types of structure associated with Roman cremation practices.

### Recommended future work

1.1.14 As noted in 1.4.13 above, further analysis of the contexts in which the fired clay occurred, and the spatial distribution of the material, will be required in order to establish whether it represents funerary structures or natural soil that has been incidentally burned through contact with cremation pyres.

Context	Count	Weight (grammes)	Туре	Comments				
ARC PHI	ARC PHL97							
106	5	17	Fired clay	Fine sandy, oxidized to dk orange, sparse white flint flakes.				
296	3	8	Fired clay					
371	3	7	Fired clay	<77> daub - reduced blackened crumbs				
695	3	8	Fired clay	Fine sandy orange daub - abraded scraps				
753	1	5	Fired clay					
883	4	82	Fired clay	Lumps of burnt clay - no obvious features				
963	9	25	Fired clay	Fine sandy orange daub, mostly very small; no impressions.				
1003	1	1	Fired clay					
1003	1	26	Fired clay	Brown sandy fabric, calcareous incl., incl. shell, white flint.				
1013	3	1	Fired clay	All small crumbs of daub (Spit 2).				
1077	4	8	Fired clay					
ARC NB	<b>R</b> 98		1					
10004	14	72	Fired clay	Daub - abraded scraps				
10030	1	15	Fired clay	Abraded				
10057	2	24	Fired clay	Abraded				
10150	44	148	Fired clay	Daub? orange brown fine sandy with fine mica				
10168	53	353	Fired clay	Daub, most abraded, <15> spit 12 incl. smoothed surfaces; spit 8, f/c or daub, 1 smoothed or abraded surface				
10177	6	73	Fired clay	Abraded daub				
10246	13	32	Fired clay	Scraps, no impressions				
10261	6	8	Fired clay	Abraded				
10425	74	224	Fired clay	Mostly fired clay, with some flinty daub. Mostly very fragmentary				
10449	2	16	Fired clay	Abraded daub				
10469	2	3	Fired clay	<68> grass impressions?				
10491	6	12	Fired clay	Scraps				
10492	2	6	Fired clay	<43> flinty daub, some fired clay				
10501	2	5	Fired clay	Scraps of daub				
10502	28	77	Fired clay	Abraded daub				
10502	100	40	Fired clay	100+ count; abraded crumbs				
10511	37	51	Fired clay	May be very abraded daub				
10523	2	13	Fired clay	Abraded				
10556	142	993	Fired clay	<65> daub, flinty fabric; some?grass imprints; most is blackened				
10558	4	15	Fired clay	Abraded ?daub				
10560	15	90	Fired clay	1 frag has corroded iron object attached - ?nail				
10564	122	380	Fired clay					
10586	749	5372	Fired clay	Daub, fine sandy orange fabric, flint flakes; some impressions. <93>, <96> have 3mm holes running through them - origin uncertain. Also fired clay				
10593	18	39	Fired clay	Reduced and sooted				
10597	162	452	Fired clay	Includes daub, some smoothed. Some burnt black.				
10604	92	242	Fired clay					
10623	5	10	Fired clay	Blackened scraps				
10629	3	12	Fired clay	Blackened				

Table 1.9:Quantification of fired clay by count and weight.

Context	Count	Weight (grammes)	Туре	Comments
10630	3	9	Fired clay	
10635	9	14	Fired clay	<121>, abraded, burnt black
10651	40	88	Fired clay	Abraded scraps
10654	2	7	Fired clay	Abraded
10679	11	32	Fired clay	Abraded daub
10688	3	22	Fired clay	
10690	9	79	Fired clay	Daub?
10693	12	50	Fired clay	Daub? - no impressions
10701	3	7	Fired clay	Abraded
10702	2	2	Fired clay	Abraded
10711	11	23	Fired clay	
10748	14	94	Fired clay	Daub, some smooth surfaces
10827	49	44	Fired clay	Abraded crumbs
10830	1	12	Fired clay	Abraded ?daub
10847	3	11	Fired clay	Scraps
10867	8	15	Fired clay	Blackened scraps
10869	2	38	Fired clay	Daub? - no impressions
10885	6	26	Fired clay	
10938	1	2	Fired clay	<173>, abraded
10957	2	15	Fired clay	No impressions
10959	12	30	Fired clay	
11000	2	1	Fired clay	Scrap
11010	189	969	Fired clay	Abraded ?daub, no impressions; some is flinty <222>, area 3
11013	70	600	Fired clay	Daub, some flinty
11095	5	37	Fired clay	Burnt, abraded
11177	330	818	Fired clay	Daub, some smoothed surfaces (convex and concave), but too small to ID
11181	33	55	Fired clay	<253>, no impressions
11292	1	3	Fired clay	<299>, abraded
11300	1	4	Fired clay	Abraded
11322	51	126	Fired clay	Clay or daub, mostly blackened scraps, 1 with ?grass marks
11410	3	8	Fired clay	Abraded
11503	56	127	Fired clay	Small burnt bits
11505	6	122	Fired clay	No impressions
11558	1	1	Fired clay	Crumb
11565	1	7	Fired clay	
11594	2	6	Fired clay	
11676	75	114	Fired clay	
11701	314	1420	Fired clay	314+ count; <396>; daub, largest frag smoothed
11703	550	2470	Fired clay	550+ count. Some daub with smoothed curved surface - too fragmentary to ID
11709	104	192	Fired clay	Small frags, some marly with flints
11714	1	8	Fired clay	
11724	12	21	Fired clay	Small scraps, no impressions
11738	163	330	Fired clay	F/c or daub; some smoothed, no impressions, very fragmentary
11753	224	758	Fired clay	Daub
11754	4	16	Fired clay	
11759	51	127	Fired clay	Smallish and abraded
11824	36	98	Fired clay	