

APPENDIX 2: ASSESSMENT OF CERAMIC BUILDING MATERIAL/ ASSESSMENT OF FIRED CLAY

Susan Pringle

1. Introduction

1.1 A total quantity of 5.085 kilogrammes of ceramic building material and daub, comprising 4.79 kilogrammes of daub and 0.295 kilogrammes of tile, was recovered by hand excavation from five contexts. All the contexts are small with the exception of [342] and [383]. All the ceramic building material has been examined for the assessment.

1.2 The study of the material should assist with the following field event aims:

- *to provide information on Iron Age land use, environment and economy.*

2. Methodology

2.1 All the material was examined and recorded for the assessment using a binocular microscope. Fired ceramic building material has been divided by form, and fragments counted and weighed. The fabric types have been noted, using the Museum of London fabric type series (type series numbers recorded in the comments field of Table 9), and any complete dimensions or other features of interest recorded.

2.2 The fired clay assemblage has been counted and weighed, and the presence of features such as original surfaces, impressions, the presence of mortar or tempering noted.

2.3 The data has been entered on the MoLAS Oracle database, subsequently converted to RLE Datasets. All the material has been retained.

3. Quantification

3.1 The total weight of ceramic building material scanned for the assessment is 5.085 kilogrammes, of which 4.79 kilograms is daub, 0.285 kilogrammes is securely identified Roman tile and 0.01 kilogrammes is abraded tile, thought to be of Roman date. Roman material was noted in two contexts, [213] and [242], both otherwise undated.

Roman building material

- 3.2 The Roman tile assemblage is very small, with only 0.285 kilogrammes of securely identified tile. Types represented are tegula and imbrex, both of which were used primarily for roofing. Such small quantities suggest that the material is not in primary destruction deposits, but is either residual, or has been dumped on the site as rubbish. No complete tiles, or complete dimensions, were noted.

Table 1: Roman tile counts and weights for each tile type (securely identified material only)

Form	Count	Weight (grammes)
Tegula	1	260
Imbrex	1	25
Total	2	285

- 3.3 Both tiles were in similar red-firing fabrics of the type, made from London clays, which is commonly found in London (2815 group). Both have medium-grade moulding sand. Much of the material of this type from the London area is thought to have produced at kilns on Watling Street to the north-west of London between c 50 and 160 AD. It is interesting that there was no white-firing tile present, as this was produced in large quantities by the kilns at the Eccles Roman villa, some 7 kilometres south-east of Cuxton on the other bank of the Medway, and was exported to London in the 1st century AD. However, the assemblage is too small for this type of negative evidence to have validity.

Daub

- 3.4 Daub was present in three contexts, two of which ([342] and [383]) have Early to Middle Iron Age pottery dates and the third of which [105] is undated. The quantities are set out below.

Table 2: The daub assemblage by subgroup, context, count and weight in grammes.

Subgroup	Context	Count	Weight (grammes)
64	342	29	2910
64	383	52	1870
185	105	1	10

- 3.5 The daub assemblage from context [342] is of interest. Many of the fragments have one smoothed surface, and clear impressions of interwoven wattle on the other surface, indicating that they are the remains of a wattle and daub structure, probably a hut or house. The daub itself is orange-firing with a light brown skin on the smoothed (?external) surfaces, although much of it is reduced showing that it was burnt in anaerobic conditions. This is the usual pattern of discoloration seen when a standing wattle and daub structure is destroyed by fire. The daub contains traces of an organic temper, probably either grass or straw.
- 3.6 The assemblage has two features of particular interest. Firstly, some of the smoothed surfaces have traces of what appears to be a thin, light brown, slightly sandy limewash or mortar, which may have been applied to improve resistance to rain erosion. Secondly, two conjoining ‘corner’ fragments have a moulded ridge or flange on the angle (context [383]); they also show traces of limewash. Their function is not known, but it is possible that they represent some sort of

simple architectural moulding around a doorway or similar feature, and they should be illustrated.

- 3.7 Small fragments of a second type of daub or fired clay were noted in subgroups 64 and 185; this is a pale orange-firing sandy clay with white limy streaks and coarse calcareous inclusions. In contexts [105] and [342], these include fragments with a columnar structure which is probably gypsum. These also occur in samples of natural taken from the site.

4. Provenance

- 4.1 The precise provenance of the material is not known at this stage. The daub is in subgroups 64 and 185, which are pit-fills; the Roman tile is in subgroups 111 and 132, Saxon grave fills.

5. Conservation

- 5.1 The material is in good condition but care should be taken to store it in a stable environment of mid-range temperature and relative humidity, as the daub could be adversely affected by damp. The material should not be put into long term storage until the provenance and date of the daub has been established, as it may be necessary to do further analysis on the assemblage. No further work is necessary on the Roman tile assemblage.

6. Comparative material

- 6.1 The material comprises of a good assemblage and should be compared with the daub and fired clay from other Iron Age, Roman and Saxon sites in the project.

7. Potential for further work

- 7.1 The assemblage appears to be composed of material of two periods, Early to Middle Iron Age and Roman. It thus has the potential to provide information on the following original Landscape Zone aims and Field Event aims.

7.2 Farming communities (2,000-100 BC)

- *Determine spatial organisation of the landscape in terms of settlement location in relation to fields, pasture, woodland, enclosed areas and ways of moving between these (original landscape zone aim 2.3.a)*
- *Determine how settlements were arranged and functioned over time (original landscape zone aim 2.3.c)*

- 7.3 Assuming the daub assemblage in context [342] is contemporary with the Iron Age pottery, it has the potential to provide information on the structures of the Early to Middle Iron Age settlement. It is very unlikely that wattle and daub destruction debris would have been moved very far.

7.4 There are features of interest in the daub assemblage, such as the mortar coating and the moulded flange, that could potentially provide information about the construction and appearance of domestic structures in the early Iron Age. These features are of considerable interest and the most diagnostic pieces in the assemblage should be compared with examples from other Iron Age settlements, and examined in relation to re-constructions of domestic structures.

7.5 Town and their rural landscapes (100 BC – 1700 AD)

- *How were settlements and rural landscapes organised and how did they function?*

Although sparse, the presence of Roman tile suggests the possibility of Roman activity in the vicinity of the site.

7.6 Field event aims

- *To provide information on Iron Age land use, environment and economy*

7.7 If the daub represents, as seems likely, the remains of a domestic structure from the Early or Middle Iron Age, its analysis has the potential to provide information on Iron Age land use and on the appearance of domestic structures.

7.8 No further work is needed on the Roman ceramic building materials. The potential value of the daub assemblage is such that more detailed examination is required to retrieve information on the methods of manufacture, form and finishing treatments.

Further Work

7.9 Further work should include:

- re-examine the daub to define more precisely the materials of which the structure was built (e.g. dimensions of wattles; identification of other organics) and the nature of the limewash, and select material for illustration
- search the literature for parallels of similar date with the aim of identifying the function of the flanged fragments
- write report
- editing

8. Bibliography

None

Table 10: Assessment of Ceramic Building Material /Assessment of Fired Clay

Context	Count	Weight	Type (brick/ tile etc.)	(spot date)	Comments
105	1	10	DAUB	550-300BC	MoL 3102
213	1	10	TILE	AD 50-160	MoL 2815
213	1	260	TEGULA	AD 50-160	MoL 2815
242	1	25	IMBREX	AD 50-160	MoL 2815
342	29	2910	DAUB	550-300BC	MoL 3102
383	52	1870	DAUB	550-300BC	MoL 3102