

The Medieval Ceramic Building Material from the A4146 Stoke Hammond and Linslade Western Bypass, Buckinghamshire

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All the ceramic building material from the A4146 excavations was assessed by the author and Kate Steane (Vince & Steane 2006). This assessment concluded that on most sites the medieval and later ceramic building material had been brought to the site as a result of manuring and, in the case of field drains, the 19th-century improvement of some of the land.

The exceptions consist of the tile from Site E and perhaps also Site D (Trench 5 and the moat) where the tile appears to have come from structures on or close to the sites. Most of the tile came from Site E (70 fragments, total weight 7.880 Kg) with only 10 fragments from Site D Trench 5 (total weight 0.344Kg) and two from Site D moat (total weight 0.245 Kg).

Fabric

The tile from the A4146 excavations was assigned to a fabric series. Numerous fabrics were identified, but it was uncertain how many of these reflected the use of different sources of supply, how many were the result of changes in clay source over time and how many were the result of variability in the clay sources.

To examine these problems, samples of tiles were taken for chemical analysis (with three chosen for thin section in addition). The samples were chosen from all three medieval sites and covered as wide a range of visual appearance as possible. 28 samples were taken from Site E. Eight came from Site D, Trench 5 and two from Site 5 Moat. Where enough examples were present, six of each visual fabric were analysed. There was little overlap in visual fabric between Sites D and E but both of the Moat samples were of fabrics present in Trench 5.

The chemical analysis was carried out at Royal Holloway College, London, under the supervision of Dr J N Walsh. The results were compared with data from the medieval pottery and Iron Age and medieval fired clay from the A4146 sites. The full report is published online (Vince 2006) and only the conclusions are summarised here:

- Several of the visually-defined fabrics have distinct chemical signatures but only one, Fabric R, appears to be distinct, having lower frequencies of Rare Earth Elements than the remainder.
- Most of the groups are ill-defined and unlikely to be the result of the use of different sources of clay. They are more likely the result of the presence of tiles from the same batches of clay amongst the sampled tiles or the result of variations in the raw

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materials. One group only occurs at Site E (Fabric R) but the other groups occur on both sites D and E. There is nothing in the chemical composition to distinguish the two samples from the moat from the remainder.

- The closest match was with the sand-tempered pottery, followed by the local fired clay with a poor match with the shell-tempered ware.

We can conclude, therefore, that the tile from Sites D and E was probably obtained from one or more exposures of boulder clay composed mainly of materials of Jurassic and Cretaceous origin. The production is unlikely to have taken place on or close to the sites but probably utilised similar boulder clays. It is possible that the sand tempered pottery and the tiles come from the same or nearby sources.

Form

All the medieval tile from Sites D and E are flat roof tiles. Other forms are present on the sites, but all are likely to be modern. Only one tile was complete enough to measure its width, 153mm (Fabric S) whilst thickness was not recorded.

Thirty-one fragments had evidence for suspension. Where the fragment was large enough to determine, the tiles had two circular holes. The hole diameters ranged from 9mm to 15mm (mean 11.2mm SD 1.47mm). They were positioned between 12mm and 26mm from the top edge (mean 18.1mm SD 4.87mm). In four examples the two holes were both present (between 35mm and 51mm apart).

Use

None of the tiles had any evidence for the use of mortar/plaster to secure the tiles nor was there any evidence for sooting on the underside of the tiles.

Discussion

The pottery from both of these sites contains no definite pre-conquest types and only a handful of sherds dating to the later 13th century or later and this suggested that the tile probably belonged to the 12th or early 13th centuries, a period when the use of roof tile was spreading throughout England. Several different types of tile were being used in the country during this period, probably introduced from the continent as a result of the movement of craftsmen to work on major religious and aristocratic building schemes, the earliest of which probably pre-dated the anarchy (Armitage and others 1981). It was only in the second half of the century, however, that the use of flat roof tiles became common on other structures, both in towns and the countryside. It is to this later 12th/early 13th century phase that the Site D and E tile probably belongs.

It is likely that their use then spread to towns, where their use would have been encouraged to combat the threat of fire and would have then spread to the countryside. The spread of flat

roof tiles throughout rural England was patchy and slow and in some counties it was not until the 16th century that ceramic flat roof tiles were adopted (despite the much more rapid and widespread adoption of glazed roof tiles, Vince 1984). This part of Buckinghamshire clearly belongs to an early adopting area, since the pottery finds suggest occupation had virtually ceased by the mid 13th century.

Bibliography

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