

EXCAVATIONS IN THE NORMAN GATE TOWER BURY ST. EDMUNDS ABBEY

by P. L. DREWETT, B.SC. and IAN W. STUART, B.A., F.S.A., SCOT.

As part of their scheme for the consolidation of the Norman Gate Tower (St. James's Tower) at Bury St. Edmunds Abbey the Department of the Environment decided to cut a 1.2m-wide trench running north-south inside the gate tower and two small trenches on the south and north sides of the tower. The excavations were intended first to examine the structure and condition of the footings of the tower prior to the laying of a new paving, secondly to determine the line of the precinct wall and thirdly to obtain constructional details of the tower especially its fundamental relation with the wall. The fourth purpose was to obtain stratified pottery associated with a well-dated structure and the final task was to establish the level of the Norman roadway and any later modifications in order that the new paving stones could be laid at a correct level. The excavations were undertaken between 11-15 June and 28-30 November, 1973, firstly under the supervision of P. L. Drewett and subsequently under that of I. W. Stuart. The trenches were dug by the Department's staff from Thetford Priory. Mrs. Lysbeth Drewett helped her husband during his excavation and processed and drew the finds from it. The authors would like to thank particularly Mr. S. E. Rigold, now Principal Inspector of Ancient Monuments for England, for visiting the excavation and offering invaluable advice both on the excavation and the finds. I. W. Stuart would like to thank Mr. J. G. Hurst, V.-P.S.A., for advice on the pottery and Mr. R. T. Jones, B.Sc., for his report on the animal bones. This report deals simply with the excavations and is in no way a definitive work on the gate tower as a building. The following historical summary, based on the official Handbook by A. B. Whittingham (H.M.S.O. 1971), may help to make clear certain points revealed by excavations.

Historical Summary

Building of the first great stone church took place during the rule of Abbot Baldwin (1065-97). Although it is likely that the precinct of the abbey was defined in some way at that period, possibly by an earthwork or wooden fence, no historical or archaeological evidence is available to determine its extent. However, during the rule of Anselm (1120-48) a precinct wall was erected,

presumably in stone, and the Norman Tower is presumed to be part of it. The tower may have also been intended as the bell-tower of St. James's Church which Anselm founded instead of making a pilgrimage to St. James's, Compostella, although on architectural grounds the tower could be somewhat earlier. It survived numerous attacks on the abbey by the townsfolk during the next three hundred years or so and presumably owed its survival at the dissolution to the fact that it was the bell-tower of St. James's. The segmental tympanum in the west arch of the tower (Plate XX) was removed in 1789 to let hay-carts through. The plan of the tower reproduced in Plate XXI dates from the time of the Victorian restoration. The tower was placed in the guardianship of the Department of the Environment in 1972.

The original height of the precinct wall can be judged from the Norman wall-walk entrances to the tower. The wall is known to have been heightened as a result of the troubles of 1327. It was presumably demolished when the abbey was plundered at the dissolution. It can hardly have existed within the houses shown in an 18th-century reproduction (Plate XX). The outline of the wall cannot now be detected in the sides of the tower because the Victorian ashlar re-facing matches the original so well.

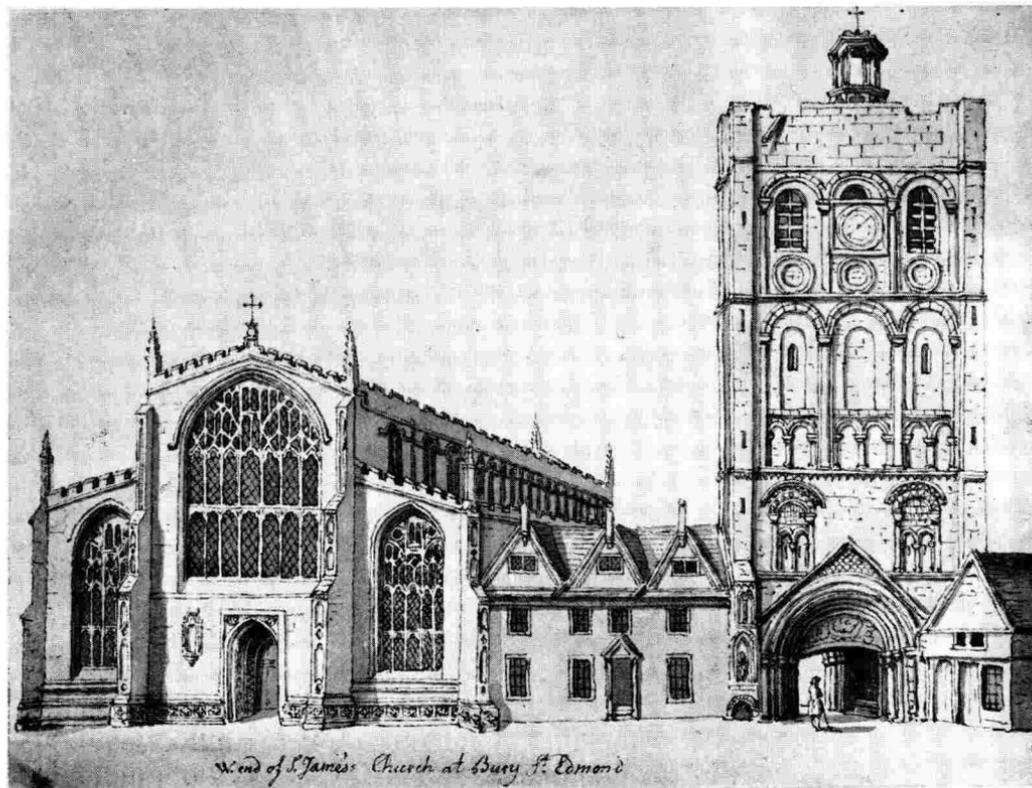
THE EXCAVATION OF JUNE 1973

The Tower (Figs. 68-69)

The solid geology under Bury St. Edmunds is chalk but under the abbey are superficial deposits of gravels and alluvium on the western side of the River Lark. The bedrock under the Norman Tower was found to be river gravel consisting of small well-rolled flint nodules in an orange sandy matrix. In the interior the foundations of the tower had been laid by digging a foundation trench through the pre-existing land surface (Fig. 69, layers 4 and 5) and 0.5m into the natural gravel. This gave a foundation 0.9m deep. The foundation trench was packed in with flint rubble and mortar. The 1.80m-wide walls of the tower were then built on this wide foundation. (The excavation of the following November was to show however that the foundation on the north side of the tower were even more massive.)

The pre-existing land surface through which the foundation trench was cut consisted of a thick layer of dark friable soil with some gravel. This presumably had built up over a very long period. However, little was found in this layer with the exception of two sherds of Thetford ware of 10th-11th-century date (nos. 5 and 6 in finds list) together with bones of sheep, cattle and dogs. The presence of a fragment of window glass from this stratigraphically pre-Norman layer is of some interest (glass 2 in finds list).

In the 11th or early 12th century a layer of gravel (Fig. 69,

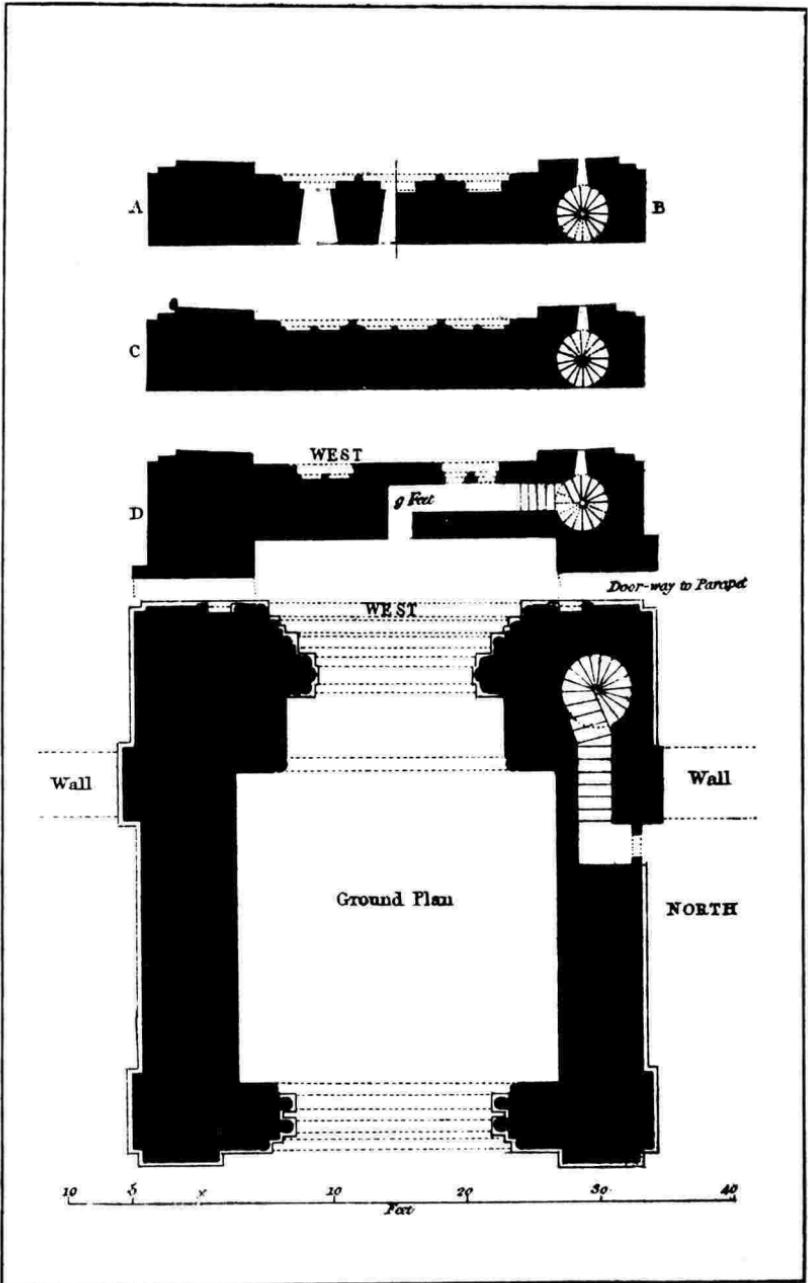


West end of St. James's Church at Bury St. Edmunds

St. James's Church and Norman Tower, by Grimm, c. 1780.

Colnaghi

PLATE XXI



Plan of the Norman Tower, published 1855.

layer 5) was packed over the old land surface. This may well have been a gravelled path leading up to the great west door of the new stone abbey church being constructed to the east in the late 11th century. Prior to the construction of the tower a layer of fine grey friable soil (layer 4) built up over this gravel roadway.

Following the construction of the tower in the second decade of the 12th century a new roadway of small gravel with orange sand (very similar to the natural gravel) was packed in between the walls of the tower (layer 3). This layer was either cut through by, or packed around, a large post-hole found half way between the north and south walls of the tower (Fig. 68, post-hole; Fig. 69, layer 12). As this post-hole is too far in the tower to be for a door post of any type it may well mark the position of a main scaffold support in use during the construction of the upper part of the tower. After this post had been removed a thick layer of large well-packed gravel was laid inside the tower (layer 2). At some stage after the construction of the tower and the laying of the gravel roadway a small well was sunk into the south-west corner of the tower. The well cut away part of the footings of the tower so is certainly post-tower in date. However, as only half of the top 1.40m of the well was excavated it cannot be accurately dated. The well was probably about 1m square when originally dug and the almost vertical north side of the well, together with a near vertical line of charcoal on the southern side (layer 33) suggests that it was timber-lined. The survival of some leather (leather 1 in finds list) suggests that the wooden lining may be surviving lower down the well. The well was probably back-filled in the early 16th century, presumably at the dissolution, although most of the pottery found is more in character with the 15th century. The bones from the well indicate a basic diet of mutton and beef together with chicken, fish and shellfish. The high proportion of bones generally discarded from the carcass of sheep and cattle (e.g., from head and feet), or used perhaps by poorer families, would be consistent with use by a gate-keeper or possibly men demolishing the abbey (see bone report below).

After the tower went out of use as a gatehouse, rubbish accumulated inside it (layer 1). A gully was cut from this layer (Fig. 68, gully) perhaps to help with drainage. In the 19th century a trench was dug against the south wall of the tower (layer 9) perhaps to examine the footings during the restoration of the tower. At the same time the area was paved with re-used 18th-century tomb stones and a Purbeck slab with the matrix of a bell-founder's brass, now very indistinct (put back after the excavation). The tomb stones were removed prior to the excavation and afterwards the area was repaved with Yorkshire slabs and granite sets to mark the roadway through the tower.

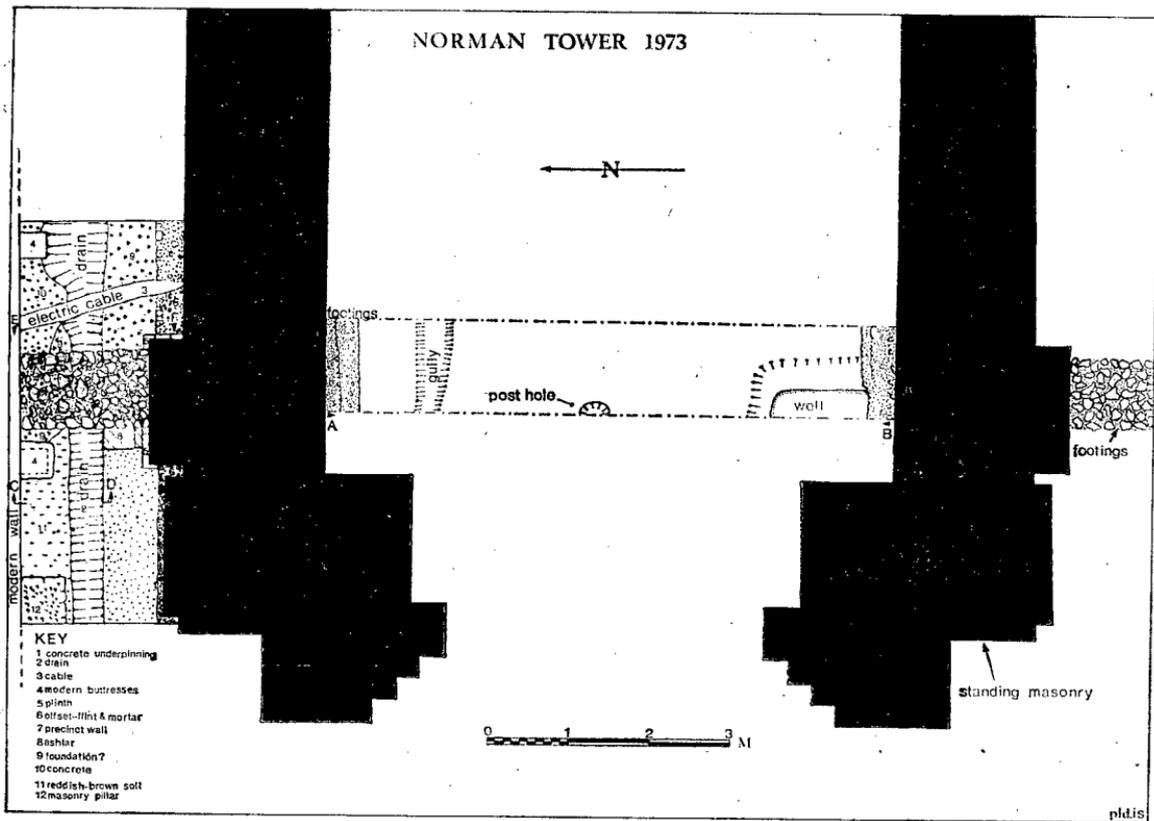


FIG. 68.—Bury St. Edmunds, Norman Tower, plan showing excavations, 1973.

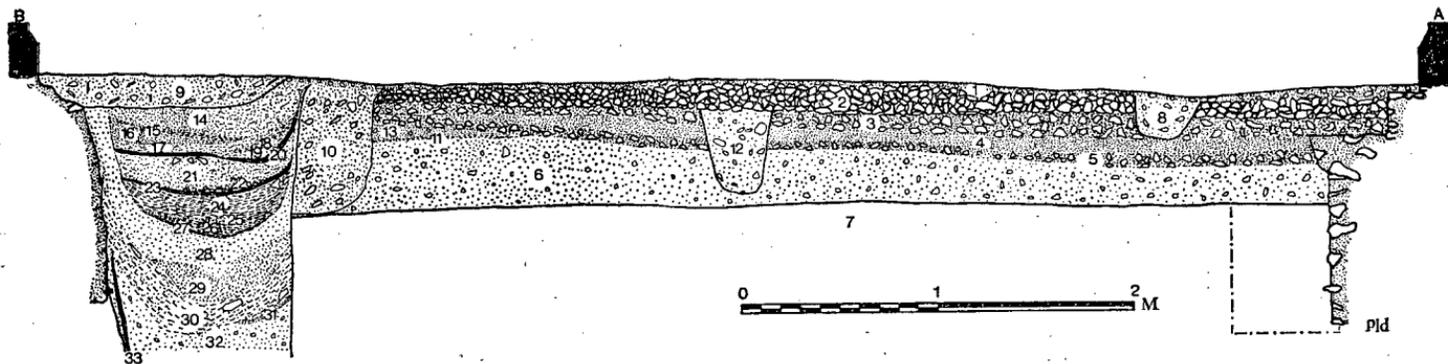


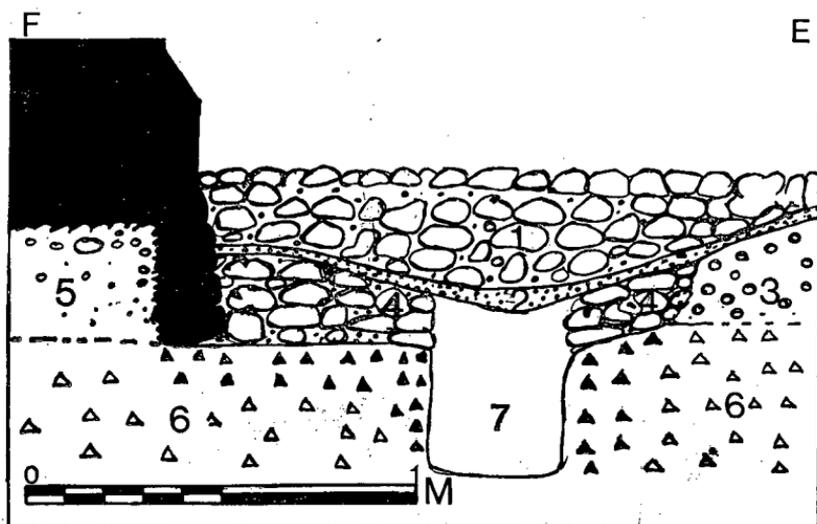
FIG. 69.—West section of trench across interior (B—A).

1. Loose gravelly rubble (19th century).
 2. Hard packed gravel (12th century).
 3. Hard packed gravel with yellow sand (12th century).
 4. Dark grey friable soil.
 5. Hard packed gravel with yellow sand (pre-12th-century roadway).
 6. Dark grey friable soil with some gravel (buried pre-12th century land surface).
 7. Natural gravel.
 8. Loose gravel with fine mortar (19th century ditch).
 9. Loose large gravel, mortar and tiles (19th century).
 10. Packed grey soil and flints (packing around top of well).
 11. Fine brown soil with chalk flecks.
 12. Fine brown/grey soil with large flints (post-hole).
 13. Dark grey friable soil.
- Well:*
14. Fine grey friable soil with charcoal flecks.
 15. Mortar.
 16. Light brown friable soil.
 17. Light grey soil with mortar.
 18. Mortar.
 19. Light brown soil with mortar.
 20. Charcoal.
 21. Fine grey soil with mortar.
 22. Gravel.
 23. Charcoal.
 24. Hard light brown mortar.
 25. Hard brown sandy mortar.
 26. Green/yellow mortar.
 27. Mortar.
 28. Clean yellow sand.
 29. Dark brown friable soil.
 30. Dark brown soil with mortar.
 31. Sandy soil.
 32. Dark brown friable soil.
 33. Charcoal.

THE EXCAVATION OF NOVEMBER 1973

The Precinct Wall (Figs. 68, 70-71)

The footings of the precinct wall both north and south of the tower were identified by P. L. Drewett and the top courses at the north side were shortly afterwards consolidated by the Department. In the following November I. W. Stuart continued the examination of the precinct wall and foundations on the north side, with the assistance of the same personnel. The working area was very confined and much of the stratification had been destroyed by the re-laying of the drainage system in the 19th century, during which a trench was driven through both the massive foundations of the tower and the surviving footings of the precinct wall. But, as the section E-F (Fig. 70) shows, the original structural sequence seems clear. The foundations of the gate-tower (Fig. 70, 6) were laid first and the precinct wall (Fig. 70, 4) was built on top of them. The interval between the construction of the tower and the precinct wall is unknown but it could have been very short.



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| 1. Courses consolidated by Dept. of Environment. | 4. Flint and mortar wall in rough courses, precinct wall core. |
| 2. D.o.E. mortar. | 5. Flint and mortar offset. |
| 3. Whitish, hard, concrete containing gravel and flint. | 6. Light fawn, hard, mortar and flint foundation. |
| | 7. Drain trench. |

FIG. 70.—West section (E—F) of trench, north side of Tower.

The foundations on the north side were much more extensive than those on the south. A solid mass of flint and light fawn mortar (Fig. 68, 9 and Fig. 70, 6) extended at least 1.60m to the north on the east side of the precinct wall. Over-laying this was a further mass of hard, whitish concrete and flint whose dating and function could not be determined. On the west side of the precinct wall the original foundation had been replaced by what appears to be 19th-century concrete under-pinning (Fig. 68, 1). The core of the precinct wall was built of lumps of flint laid in rough courses and bound with mortar and it had a facing of well-cut ashlar, two blocks of which survive on the west face (Fig. 68, 8). Another architectural feature that could not be explained was the block or pillar of rough masonry and brick which butted on to the revetment wall (Fig. 68, 12). The 60-cm strip between the drain trench and

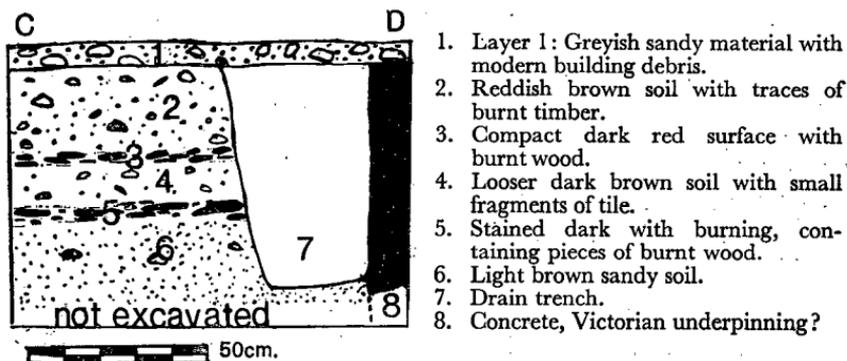


FIG. 71.—East section (C—D) of trench, north side of Tower.

the revetment wall (Fig. 68, 11) produced traces of burnt timber and some artifacts and animal bone. Some stratification was evident (Fig. 71). Below layer 1, which was a greyish sandy material 5–8 cm deep and full of modern building debris, layer 2 (reddish brown soil with traces of burnt timber in it) produced the 'Boy-Bishop' token (1A in the finds list), the sherd of East Anglian redware (pottery 1A), two fragments of window glass (glass 1A and 2A) and most of the animal bone. Layer 3 was a compact dark red surface with significant traces of burnt wood. Layer 4 was of looser, dark brown soil with some small roof-tile fragments in it. Below this, layer 5 was stained dark with burning and contained a number of small pieces of burnt timber. Finally, layer 6, a light brown sandy soil contained one burnt rim of glazed ware (pottery 2A) probably East Anglian redware again, a fragment of tile (tile 1) and a few very small fragments of bronze (bronze 1A).

The area was too small for any sensible conclusions to be drawn. All the dateable material is, at the latest, 16th-century—which suggests debris from the dissolution or immediate post-dissolution period. The animal bones are all from domesticated and common species and their presence has probably been accurately explained above by P. L. Drewett. All the deposits could however be simply backfilling thrown down after the construction of the east-west revetment wall which is probably of 19th-century date. If the material is an undisturbed survival from the original period of deposition then it is possible that it is somehow related to the clearing and levelling of the site before the houses in Plate XX were erected.

No stratification, apart from the foundations and walls noted above, survived on the east side of the precinct wall except where part of the original cutting of the drainage trench could be seen at the east end of the excavation. In this a mandible of a cow was the only find.

THE FINDS JUNE 1973

Pottery

Layer 1

1. Body sherd of hard red ware with mottled brown internal glaze, 18th–19th century.
2. Body sherd with base of handle of hard red ware with thick black glaze. Tyg ? 18th century.
3. Body sherd of salt glaze stone ware, 19th century.
4. Rim of white porcelain plate, 19th century.

Layer 6

5. Body sherd of fast-thrown, sandy, dark grey fabric with applied strip with thumb impressed ornament and band of stamped decoration. Saxo-Norman Thetford-type Ware. Probably 10th–11th century. Fig. 72.
6. Body sherd of fabric similar to 5.

Well

7. Rim of lobed cup. Fine off-white ware with Tudor green internal and external glaze. Early 16th century. Fig. 72.
- 8–15. Three rim sherds and five body sherds of hard sandy red ware jug with cream painted band beneath rim and curvilinear decoration on body. Pale yellow glaze externally. Late 15th–early 16th century. Fig. 72.
16. Base of hard red ware cooking pot with grey surfaces. Fig. 72.
17. Seven body sherds of hard grey ware cooking pots.
18. Body sherd of hard red ware jug.

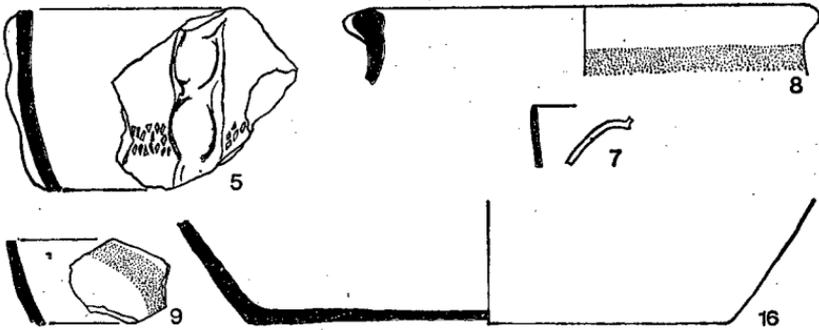


FIG. 72.—Pottery (June 1973), Scale $\frac{1}{2}$.

Clay pipes

Layer 1

1. Two stems of clay pipes with bore diameters of 1.5 mm and 1.75 mm. 19th century (?).

Glass

Layer 1

1. Two fragments of green window glass 1 mm and 2 mm thick. Probably medieval.

Layer 6

2. Fragment of heavily crystallized green window glass 4 mm thick. Possibly Saxo-Norman.

Bronze

Layer 1

1. Pointed bronze object. Possibly an arm from a clock. 18th–19th century.

Well

2. Large thimble. Possibly for leather working.
3. Riveted bronze plate, 44 x 15 mm. Three rivets on centre line, two of which are still in position.
- 4–6. Bronze pins.
7. Lace end.

Iron

Well

- 1–15. Heavily corroded nails.

Leather

Well

1. Fragment of poorly preserved leather, 65 x 34 mm.

Daub

Layer 6

1-2. Fragments of partly fired daub with wattle marks. The clay contains some chalk filler.

Coin

Layer 1

1. George I half-penny, 1719.

Animal bones

Animal bones were found in layers 1 and 6 and in the fill of the well. The bones from layer 1 were collected but will not be described in this report as most are very recent in origin and certainly post-18th-century. Likewise the archaeological significance of the animal bones from layer 6 is slight as although certainly early or pre-12th century in date they may be residual from previous occupation. However out of the 22 bones found the following animals were represented:

Layer 6

Sheep: 1 molar tooth, 1 fragment of scapula, 1 vertebra.

Cattle: 1 talus, 2 fragments of radii.

Dog: 1 fragment of maxilla.

An important group of animal bones was however obtained from the fill in the top of the well. On pottery evidence this is likely to have been filled in the 15th or early 16th century. As only half of the top 1.40 m of the well was excavated the sample is in no way complete. However, 103 bones were found together with 46 oyster shells and 2 mussel shells. Of the 103 animal bones, 72 were mammal bones, 14 bird bones and 17 fish bones. The identifiable bird bones consisted of a few medium-sized leg bones from domestic chickens. The fish bones consisted entirely of ribs and dermal fin rays. Of the 72 mammal bones 39 were identifiable:

Sheep: 1 base of occipital, 1 molar tooth, 5 vertebrae, 4 radii, 3 metapodia, 1 tibia, 2 phalanges, 12 sheep size rib fragments.

Cattle: 1 metapodial, 1 radius, 1 femur (?), 5 cattle size rib fragments.

Cat: 1 mandible fragment, 1 humerus.

A fair proportion of these bones are those generally discarded during preparation of the carcass, e.g. skull, phalanges and metapodials. However the 5 sheep vertebrae had all been cut indicating preparation as lamb chops. Although chicken, fish and oysters were eaten this assemblage generally indicates the poorer cuts of meat.