

Excavations at the Royal Mint site 1986-1988

IAN GRAINGER
DUNCAN HAWKINS
with Paul Falcini and Peter Mills

THE ROYAL MINT site, some 2ha (5 acres) in extent, lies to the north-east of the Tower of London (Fig. 1). Documentary sources show the site was the location of a Black Death cemetery¹, a Cistercian abbey² and a Royal Navy Victualling Yard³.

The first excavations on the site were carried out by B. K. Davison in 1972⁴, when two small trial trenches were dug. The Museum of London's Department of Greater London Archaeology carried out preliminary test work in 1983 and more extensive trial work followed between June and August 1984⁵. In June 1986 large-scale excavations by the DGLA began, under the direction of Peter Mills. They continued until June 1988, uncovering evidence for all documented periods and for extensive Roman activity.

PRE-1349 PHASES

The earliest features found were a series of east-west cuts on average 2 × 1m (6 × 3ft) in north-south rows. They were found in all parts of the site and appear to have been dug in order to extract sand and gravel. Associated with these quarry pits were a number of linear features, perhaps drainage or boundary ditches. The finds from these features were mostly of Roman date.

The quarry features were sealed beneath silt deposits, into which were cut a number of undated pits. These features were in turn sealed in some areas by medieval levelling deposits of clay or broken roof tile, into which were cut burials which date to the documented Black Death cemetery of 1349.

THE BLACK DEATH CEMETERY: 1349

In 1349 an emergency burial ground for victims of the Black Death was established on the site. The plague cemetery, called the churchyard of the Holy

1. M. B. Honeybourne 'The Abbey of St Mary Graces, Tower Hill' *Trans London & Middlesex Archaeol Soc* 11 pt I (1952) 16-26.
2. A. W. Clapham 'On the topography of the Cistercian abbey of Tower Hill' *Archaeologia* 66 (1915) 353-64.
3. PRO Cal. State Pap. Dom. Eliz. I, vol. 6, 1601-1603 & Addenda 1547-65, p. 563.
4. Unpublished.
5. P. S. Mills 'The Royal Mint: First Results' *London Archaeol* 5 no. 3 (1985) 69-77.
6. Dugdale *Monasticon* Vol. V, 718.
7. A. W. Honeybourne *op. cit.* fn 1, 17.
8. P. Stott, *pers. comm.*

Trinity⁶, contained a chapel and was enclosed by a stone wall⁷. The archaeological evidence for this cemetery consisted of three mass burial trenches and 14 grave rows in two distinct areas (Fig. 2). These features were broadly contemporary; no intercutting occurred and no redeposited human bone was observed. The remains of 762 individuals were recovered from the trenches and graves. Of them, 230 appear to have been interred in coffins and 15 were accompanied by charcoal deposits. Among the few finds recovered were several sets of belt buckles and two coin hoards. Those coins so far examined suggest that the hoards were deposited some time after 1343⁸.

Coffins and finds appear to be evenly distributed between the trenches and graves, suggesting that the different burial methods were not determined by social considerations, but perhaps reflect fluctuating mortality rates during the pestilence. It is impossible

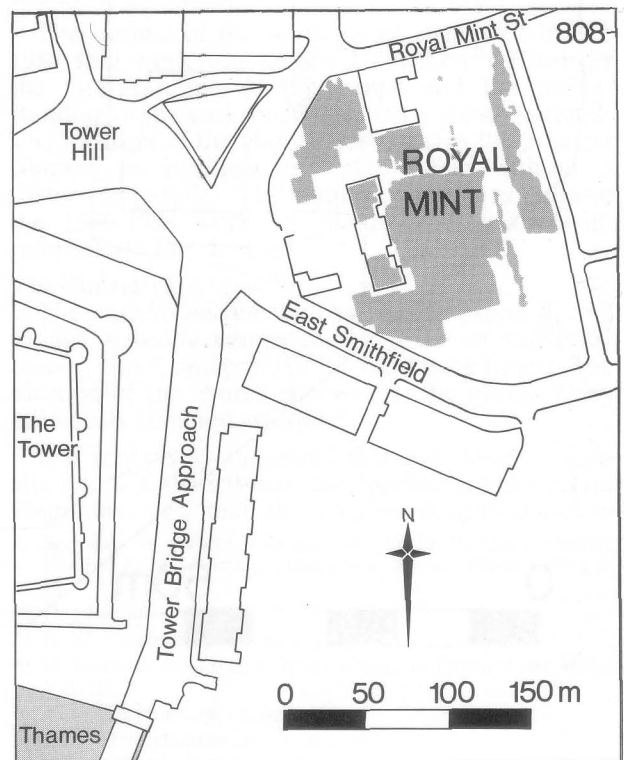


Fig. 1: site location plan, showing areas of excavation.

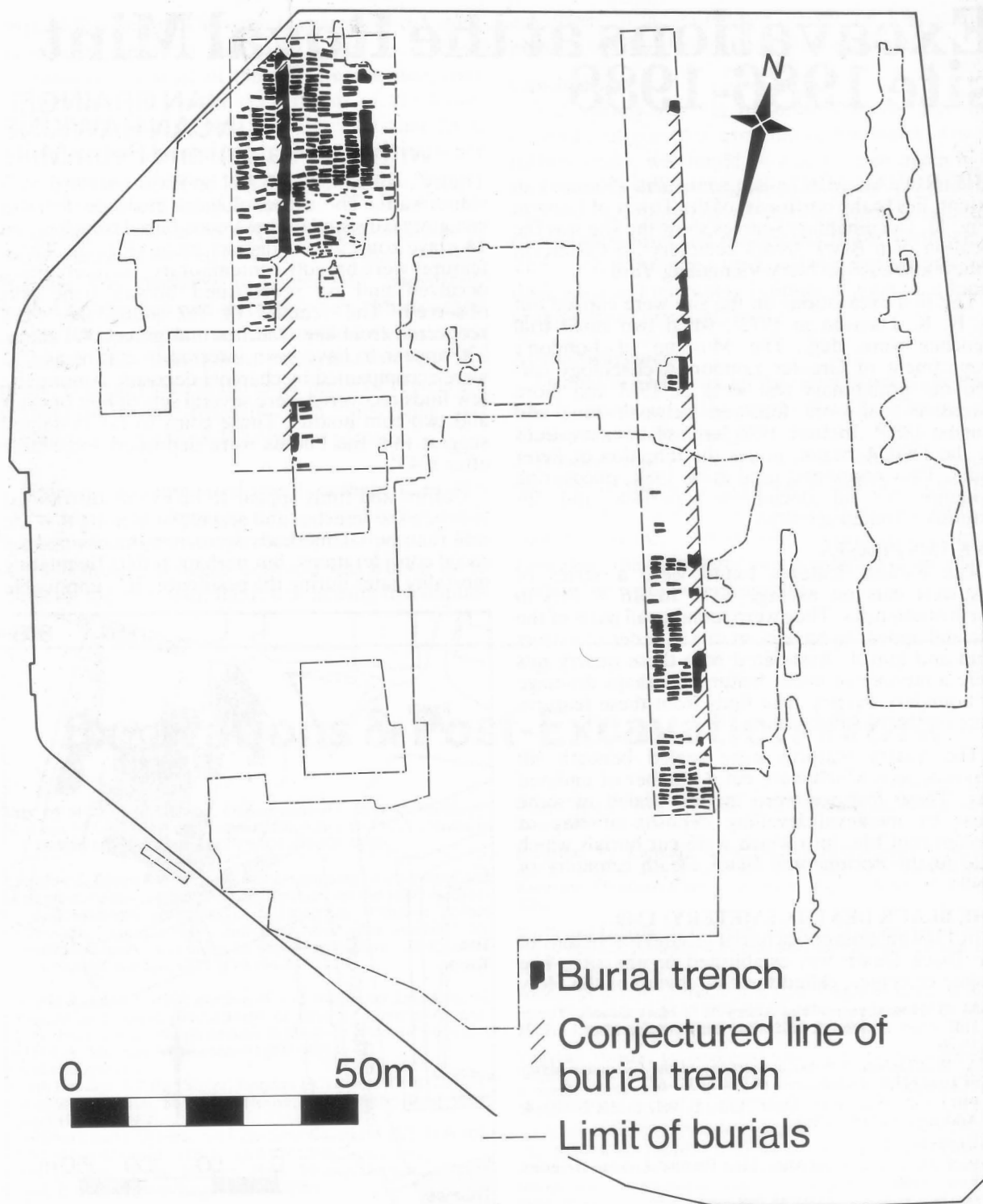


Fig. 2: plan of burials within the Black Death cemetery. Scale 1/1000.

to establish the sequence in which the trenches and graves were cut. One of the trenches and many of the graves remained open for some time before use. This, combined with systematic layout of the cemetery, indicates a high level of planning and preparation by the organisers of this burial ground.

The division of the cemetery into two areas may reflect the influence of earlier land boundaries. However, this division could indicate the deliberate zoning of the cemetery, perhaps representing some distinguishing factor between the two burial groups.

The trenches were filled from south to north, with only a small percentage of any trench in use at one time. The burials were carefully, though very densely, laid out. Each layer of burials in the trenches was sealed by a deposit of earth: in places the burial layers were up to five deep. Within the grave rows "individual" graves often contained more than one burial, usually of an adult and infant.

Almost all the burials were supine and orientated east-west, with the exception of some prone or crouched examples in the burial trenches. A small proportion of the burials recovered from the trenches were partly disarticulated prior to interment. The inclusion of charcoal deposits⁹ with some burials is noteworthy. It may reflect an uncommon burial rite, or perhaps an attempt to counter the side effects of putrefaction.

The burials represent a mixed population group with both sexes and all age groups being well represented. They provide a unique cross section of the mid 14th-century population of London, and form an important basis for demographic and skeletal research.

THE ABBEY OF ST MARY GRACES: 1350-1538

On March 20th 1350, the site was granted by Edward III to the Cistercian order as a foundation endowment for his new Royal Free Chapel of St



Fig. 3: burials within mass burial trench on the west of the cemetery (Photo: Museum of London)

Mary Graces on Tower Hill¹⁰. This became the Abbey of St Mary Graces, the last Cistercian foundation in England before the Dissolution. Originally founded for five monks and a warden, St Mary's was never a populous abbey and at the Dissolution was served by only ten monks and an abbot¹¹. However when surrendered it had a value of £547, making it the third richest Cistercian abbey in England after Furness and Fountains¹².

The construction of the abbey buildings was apparently a slow process, the work being hampered by lack of funds. However the abbey appears to have been basically complete by the late 1390s¹³. Antony Van Den Wingaerde's panorama of London (c 1543), shows the abbey church with a large central tower, but without transepts – a detail confirmed in excavation.

The 1986-88 excavations have revealed a monastic ground plan which differs somewhat from the classic Cistercian model. This may reflect the lateness of the foundation date and the abbey's location. St Mary's was the last Cistercian foundation in England by 70 years, and the only one near a city¹⁴. The plan of the abbey may also have been influenced by the layout of contemporary friaries and by the need to conform to property boundaries along Tower Hill and East Smithfield.

The outline of the south range suggested by the 1984 trial work was largely confirmed¹⁵. However the interpretation of this range and the understanding of the east range have been greatly altered. The location of the church was perhaps the greatest surprise, its position and plan being without a Cistercian parallel. The main provisional findings of the 1986-1988 work are summarised below with reference to Fig. 4.

The Church (1)

The eastern end of the church was exposed, and though severely truncated, evidence of the presbytery, choir, and parts of the nave were found. The location of the church was well to the north of any previously assumed position¹⁶.

It is tentatively suggested that the church originally had a T-shaped east end, perhaps modelled on Fountains, and that the chapels described below

9. See also W. White *The cemetery of St Nicolas Shambles* London & Middlesex Archaeol Soc. Special Paper (1988) p. 25.

10. Dugdale *Monasticon*.

11. A. W. Clapham *op. cit.* fn. 2, 353-6.

12. D. Knowles *Medieval Religious Houses in England and Wales* Vol. III.

13. A. W. Clapham *op. cit.* fn 2, 356.

14. M. B. Honeybourne *op. cit.* fn 1, 18.

15. P. S. Mills *op. cit.* fn 5.

16. A. W. Clapham *op. cit.* fn 2, 361.

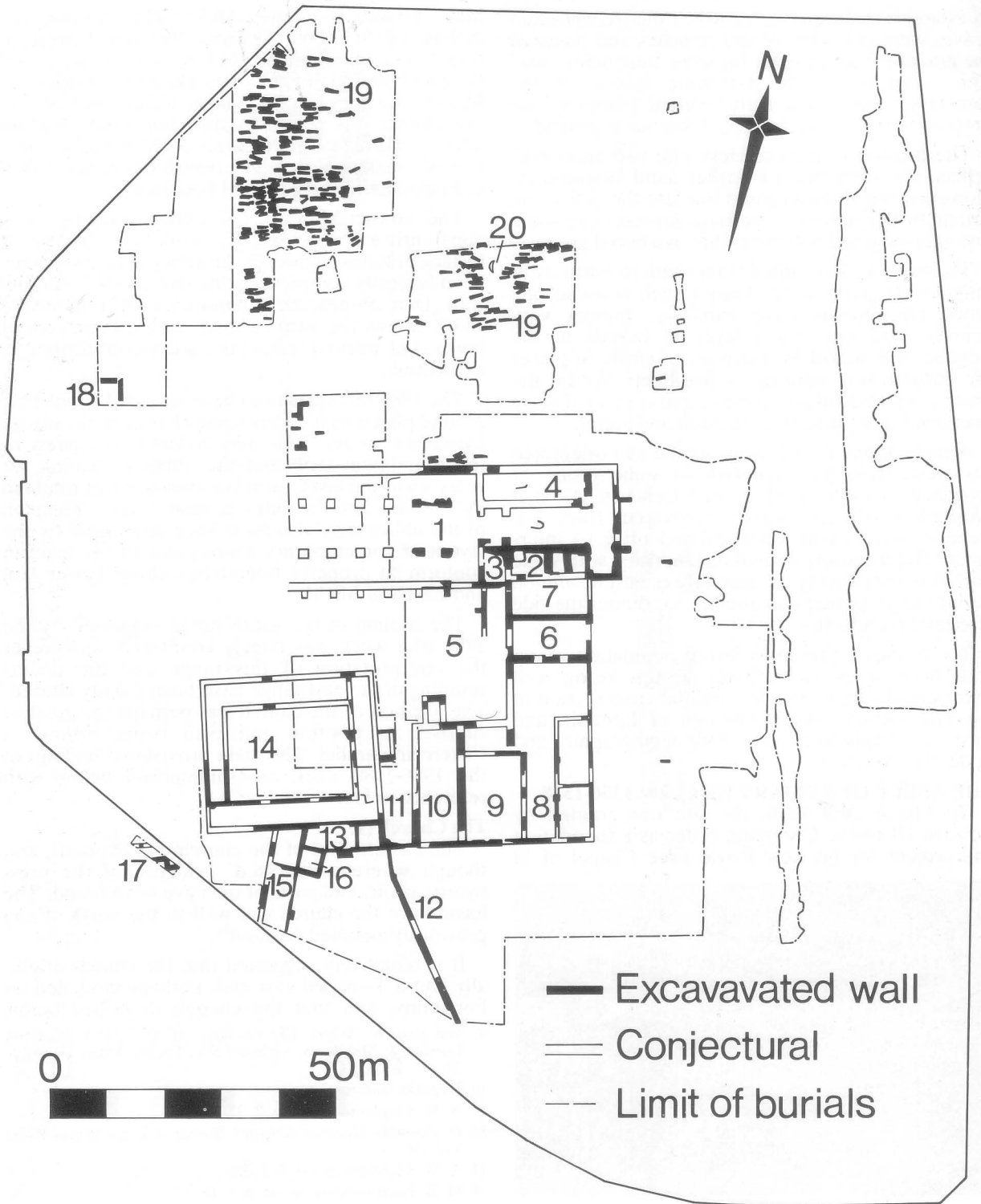


Fig. 4: plan of the Abbey of St Mary Graces and of burials within the associated churchyard (for numbers refer to text). Scale 1/1000.

were later additions to the north and south of the presbytery and choir. The shape of the church, as finally completed, was closer to those in Franciscan and Dominican friaries (for example the Franciscan friary at Walsingham founded in 1347) than to those from other Cistercian houses.

The church was completely detached from the documented cloisters (14), suggesting a second set of cloisters or a courtyard immediately to the south of the church at (5). There the remains of a possible east-west covered walkway and twelve burials were excavated.

Within the church and chapels were 133 burials, of which 61 had identifiable coffins. The remains of several large tombs in the choir and presbytery indicate some degree of social stratification within the mixed burial population.

Four large pier bases found to the west of the excavation may indicate the location of the documented tower. Extensive areas of tiled flooring were also found there. The re-use of tiles and localised patching probably reflected the disturbance caused by the frequent burials within the church.

The Chapels (2)

To the south of the church were a series of rooms and possible partitions. They have been interpreted as chapels, although two contained no burials and may have been the vestry¹⁷ or possibly a sacristy. In 1442 a chapel of St Anne is mentioned as lying on the south side of the church¹⁸, and the identities of some individuals buried in both it and the "chapel without the south choir door"¹⁹, are known. Eventually it may be possible to cross-reference these documented chapels and burials to the archaeological remains – in particular the largest chapel, which contained four burials, one in a chalk double vault.

A doorway found at (3) may be either the "south choir door" or one directly to the south of it.

The Lady Chapel (4) built by Sir Thomas Montgomery some time before 1489²⁰, is unique: no other examples are known from a Cistercian church. This chapel, the burial place of Sir Thomas, his two wives and several other notable individuals, was known from documentary sources to lie north of the church²¹, an area which was, unfortunately, heavily truncated by later basements. However, one brick vault containing two inhumations was found, 17. *Ibid.* 354.

18. *Ibid.* 356.

19. Sir A. Wagner *Heralds and Heraldry in the Middle Ages* (1956) 143-4.

20. Sir Nicolas Harris Nicolas *Testamenta Vetusta* (1826) Vol. II, 396.

21. Sir A. Wagner *op. cit.* fn 19, 143-4.

together with the more fragmentary remains of a second vault, and several other burials.

The Chapter House (6)

It was 15m (49ft) long by 8m (26ft) wide, and separated from the church by a small yard (7). Small areas of late monastic tiled floor survived, together with substantial fragments of the stone benches along the interior of the chapter house walls, which provided the seating for the monks at their daily meetings.

The Infirmary (8)

To the south of the chapter house was the infirmary, a building 30m (97ft) long by 14m (45ft) wide at its north end. No medieval floor levels survived, but a number of chalk walls perhaps forming internal divisions were excavated. They may have been pre-Dissolution modifications representing individual rooms for sick and elderly monks. Part of the eastern wall of the infirmary survived to a height of 2.30m (7ft 6in) above the medieval ground surface. The infirmary was separated from the probable dormitory by the infirmary yard to the west (9).

The Dormitory? (10)

A building 22m (72ft) long by 10m (33ft) wide has been provisionally identified as the dormitory or dorter block. The building was in approximately the correct position for a Cistercian dormitory, being adjacent to the reredorter (6). Owing to the presence of later basements, only a small area of medieval floors survived, though part of the south wall stood to a height of 2.25m (7ft).

The Reredorter (11)

This latrine block stood over the great drain (12). Modifications to the drain during the post-medieval period destroyed the monastic floor levels, though joist sockets in the east wall indicated an earlier wooden floor above the drain. The course of the

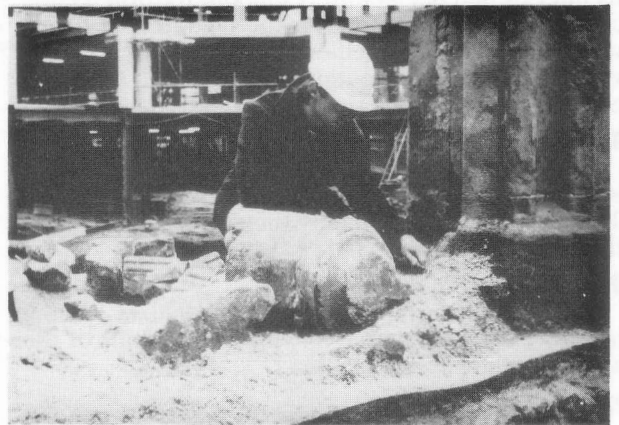


Fig. 5: excavation of architectural fragment by south doorway of Church. (Photo: Museum of London)

drain itself could be followed south toward the Thames over a distance of 28m (91ft). It was, however, scarcely the largest of monastic main drains, having a vault only 0.40m (1ft 3in) high.

The Warming Room (13)

Late medieval floor levels within the warming room did survive, most notably a much worn tile floor, which had been repaired with bricks. At the east end of the room a cellar 4m (13ft) wide by 1.30m (4ft) deep had been inserted, possibly before the Dissolution. Three doorways, which had Purbeck marble tomb slabs as their thresholds, gave access to the frater and cloisters. The base of an external chimney also survived on the south side of this building.

The Cloisters (14)

Most of the south walkway, together with parts of the north east and west walkways, and substantial portions of the cloister garth were excavated. The south walkway was the best preserved, rammed chalk and mortar being used to provide either a floor or the foundation for one. No evidence for tiled flooring was found, nor were any burials detected within the walkways or garth.

The Frater (15)

The acute angle at which the frater or refectory extended southwards from the cloister probably reflects a need to conform to existing property boundaries on the East Smithfield street frontage. Though badly damaged by a later basement to the north, at the southern limit of excavation an area of tiled floor covering the entire width of the frater survived. This was probably of late 15th-century date, but re-used 14th-century decorated tiles, in a rough chequer-board pattern.

Small Store Room? (16)

The identification of this building is uncertain, as its interior had been entirely dug out to form a large cess pit, probably soon after the Dissolution. Thus, whilst no stratified medieval deposits remained, a vast quantity of environmental material from the early post-medieval period was recovered.

The Kitchen? (17)

To the south-west of the cloisters a number of isolated medieval wall fragments were observed. They were in approximately the correct position for the kitchen in a Cistercian House.

The Gatehouse? (18)

The corner of a medieval building to the north-west of the church may have been part of the abbey gatehouse.

The Churchyard Burials (19)

Associated with the abbey was a large churchyard, overlying part of the earlier Black Death cemetery and containing two distinct phases of burial. These burials, representing a mixed population, took place over a long period of time. Many of the late graves cut into earlier burials and large quantities of redeposited bone were recovered. Also associated with these late phases were a number of charnel pits. No specifically monastic burials were identified.

The first phase, represented by 253 burials, consisted of infilling and partially extending the pattern of grave rows established during the Black Death. One hundred and nine of the burials were accompanied by coffins, and one charcoal deposit was observed.

The second phase comprised 57 burials which did not respect the earlier grave row cemetery pattern. Of them, 22 were interred in coffins and one was buried with a charcoal deposit. Intercutting and grave nucleation occurred in both phases, and few finds were recovered.

Churchyard Cross (20)

A base of chalk blocks, possibly for a churchyard cross, was found 35m (114 ft) north of the abbey church.

THE DISSOLUTION AND VICTUALLING YARD: 1538-1748

In 1538-9 St Mary Graces was surrendered to the Crown, and in 1542-3 the abbey buildings were granted to Sir Arthur Darcy²², who, according to Stow, "clean pulled" the monastery²³ down. A considerable number of demolition layers were found throughout the monastic complex, apparently 16th century in date.

It was clear, however, that the south range remained virtually intact. Though partial attempts to demolish the infirmary and frater were identified, they were never completed. Only the church was levelled, with little more than robber trenches surviving to indicate its outline. Within the church extensive desecration of the graves and monuments was obvious.

It appears, therefore, that Darcy left most of the claustral buildings standing. Indeed he seems to have used them as a house for the rest of his life, dying there in 1560²⁴. The site was then sold back to the Crown, and by 1565 had become one of the Royal Navy's first supply depots or Victualling Yards²⁵.

22. *V.C.H. London* 1 (1909).

23. John Stow *Survey of London* Everyman Edition (1987) 114.

24. *Ibid.* 116.

25. PRO E211/160 Ancient Deeds Ser DD & Cal. State Pap. Dom. Eliz. I, vol. 6, 1601-3 addenda 1547-65, p. 563.

26. PRO Cal. State Pap. Dom. Chas. I, vol. 16, p. 279 & PRO MR 106.

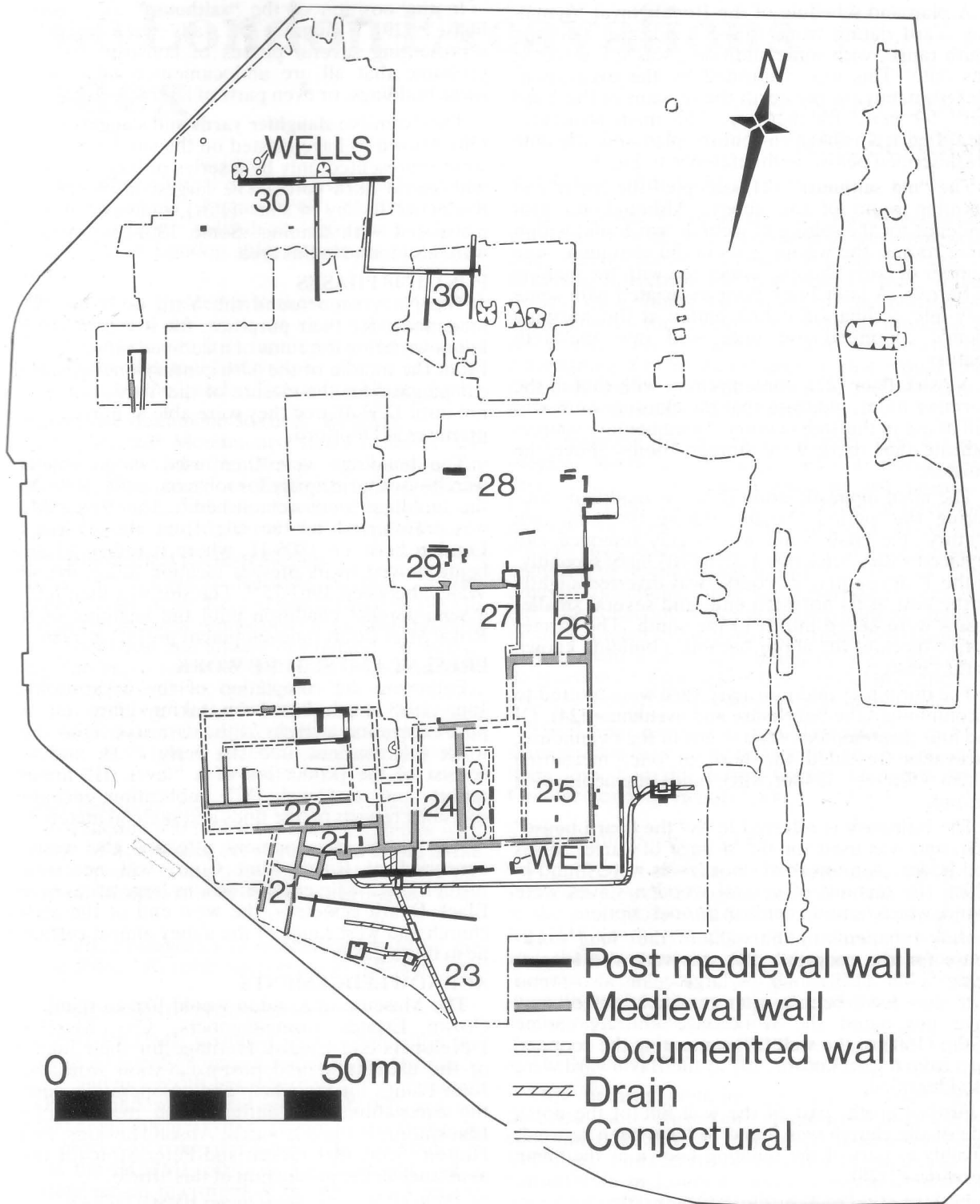


Fig. 6: plan of Royal Navy Victualling Yard (for numbers refer to text). Scale 1/1000.

A plan and schedule of the Royal Naval Victualing Yard dating from 1634-5²⁶ indicates that the south range, with some additions, was still intact at this date. This was confirmed by the excavation. Unfortunately, to the north the remains of the Yard were far more fragmentary. The main structures identified from the 17th-century plan and schedule are described below, with reference to Fig. 6.

The “old salthouse” (21) occupied the frater and warming room of the abbey. Although no firm evidence for the salting of victuals was found within these rooms, the warming room did contain a large number of barrel hoops, associated with the making of barrels. A later brick floor associated with some very late occupation debris hinted at the warming room’s continued use until well into the 18th century.

A brick floor (22), contemporary with that in the warming room, indicates that the cloisters were also still in use in the 18th century. Documentary sources indicate that there were storage rooms above the cloisters.

The main monastic drain (23) was modified twice during this period. Firstly, during the late 16th century, the chalk vault was largely removed and replaced with a brick one 1.35m (4ft) high; secondly, in the 18th century, its course was diverted slightly to the east at its northern end, and several smaller drains were keyed into it to the south. The former latrine block of the abbey became a building known as the “pastery”.

The dormitory and infirmary yard were altered to accommodate the **bakehouse and ovenhouse** (24). Of the four documented bread ovens in the ovenhouse, excavation revealed the base of one, measuring 3.80m (12ft) by 2.40m (8ft), and fragments of a second.

The infirmary is referred to as “the board house” (25), and was used for the storage of barrel staves and hoops. A number of floor levels were found in which the remains of several wooden staves were found, which tends to confirm this description.

Only fragments of the walls of the “long workhouse for the coopers” (26) survived, the longest being 5.40m (17ft) long. A large cellar also found here may have been a later modification, or may have post-dated the workhouse entirely. Some 4.90m (16ft) of the wall (27) separating the coopers’ yard from a yard known only as the Bavin yard were also identified.

Further north, part of the wall line of the north side of the church was found to have been re-used, possibly as part of the building known as the “long storehouse” (28).

27. PRO Cal. State Pap. Dom. Eliz. I, 1595-7 p. 121.

28. PRO Cal. State Pap. Dom. Vol. II 1634-35 p. 384.

In the position of the “salthouse” and “cutting house” (29) a number of walls were discerned, representing several phases of construction. It is probable that all are undocumented additions to these buildings, or even parts of later structures.

The extensive **slaughter yards and slaughter house** (30), known to have existed on the site from 1595²⁷, were represented only by a series of large pits lined with cattle horn cores. The largest horn core pit, 8.40m (27ft) by 4.80m (15ft), may have been associated with tanning. Some 18th-century walls were also found in this area.

POST-1748 PHASES

The Navy soon found the Yard on Tower Hill inadequate for their purposes, for it was “likely to fall down being the ruins of a decayed monastery”²⁸. From the middle of the 17th century onwards, they campaigned for the closure of the Yard, but it was not until 1739-48 that they were able to move to new premises at Deptford.

The buildings were then used as government warehouses, principally for tobacco, until 1805 when the buildings were demolished²⁹. The Royal Mint was transferred to the site from the Tower of London between 1806-11, where it remained until being moved to its present location in Llantrisant, Wales, between 1967-75³⁰. The site was then left in a semi-derelict condition until the beginning of the Royal Mint Court redevelopment project in 1986.

PRESENT AND FUTURE WORK

Following the completion of the excavation in June 1988 work has been taking place on the post-excavation analysis of the data recovered. This work will continue into the early 1990s and will consist of the production of a “level III” archive report and a “level IV” publication including specialist reports on the finds and skeletal material.

Any future development affecting the western courtyard of Royal Mint Court will necessitate further large scale excavations, as large areas of the Black Death cemetery, the west end of the abbey church and west range of the abbey almost certainly lie in this area.

ACKNOWLEDGEMENTS

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29. *The Royal Mint: An Outline History HMSO* (1977) 12.

30. *Ibid.* 17.