



MoLAS 2000

MUSEUM OF LONDON

Archaeology Service

molas 2000

annual review for 1999

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The duties and powers of the Board of the Museum of London

'... it shall be the duty of the Board:

'to secure that those objects are exhibited to the public and made available to persons seeking to inspect them in connection with study or research;

'generally to promote understanding and appreciation of historic and contemporary London and of its society and culture, both by means of their collections and by such other means as they consider appropriate.

'... the Board may:

'provide archaeological services and undertake archaeological investigations and research in connection with land in London, publish information concerning such investigations and research and promote the provision of such services and the undertaking of such investigations and research and the publishing of such information ...

'In this section, **London** includes all Greater London and the surrounding region'

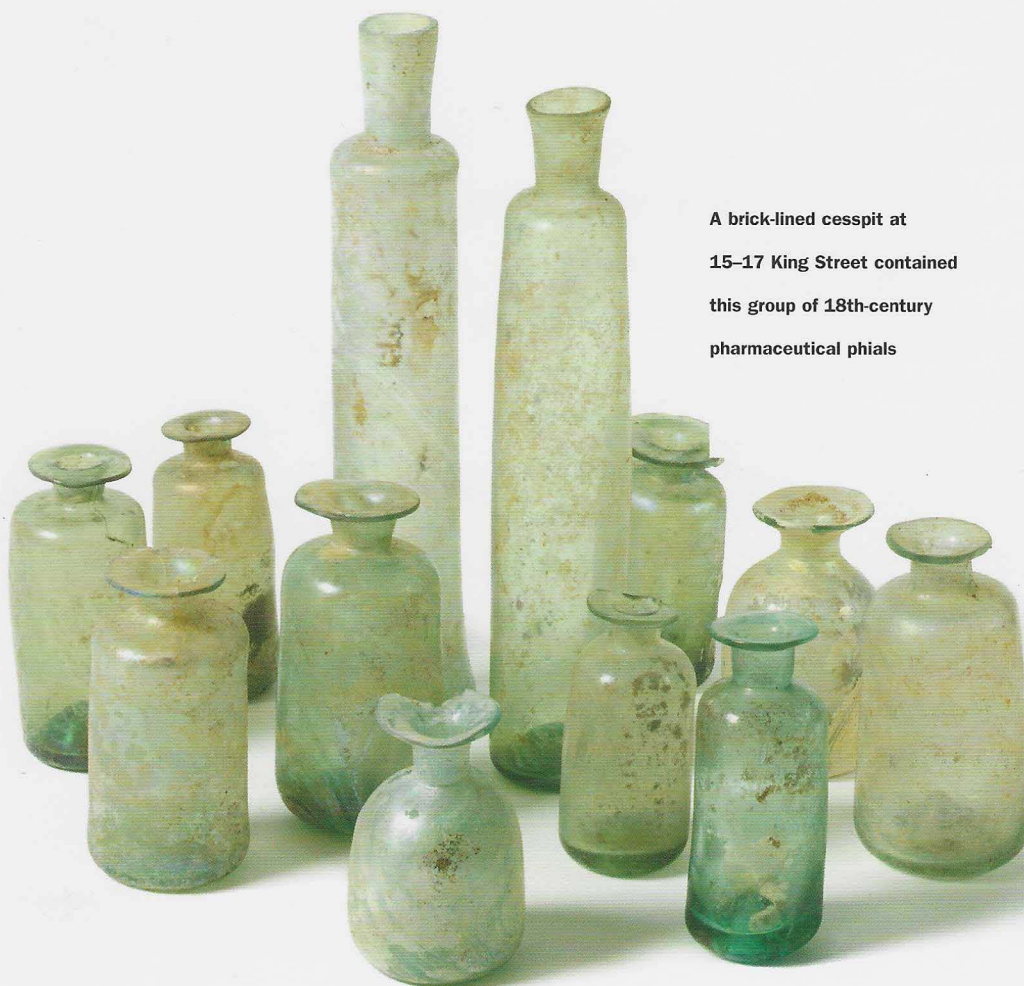
Museum of London Act 1986

foreword

1999 was a spectacular year for London archaeology. The continued high level of development, and the availability of sites never before investigated, continued to present outstanding archaeological opportunities. Many of these resulted in important finds which the Museum of London was able, with the support and understanding of its clients, to bring to the public. It is therefore my pleasure first to thank our clients, without whom archaeology in the capital would barely exist, and also our staff whose hard work brings the past to light and to life for us all.

Simon Thurley

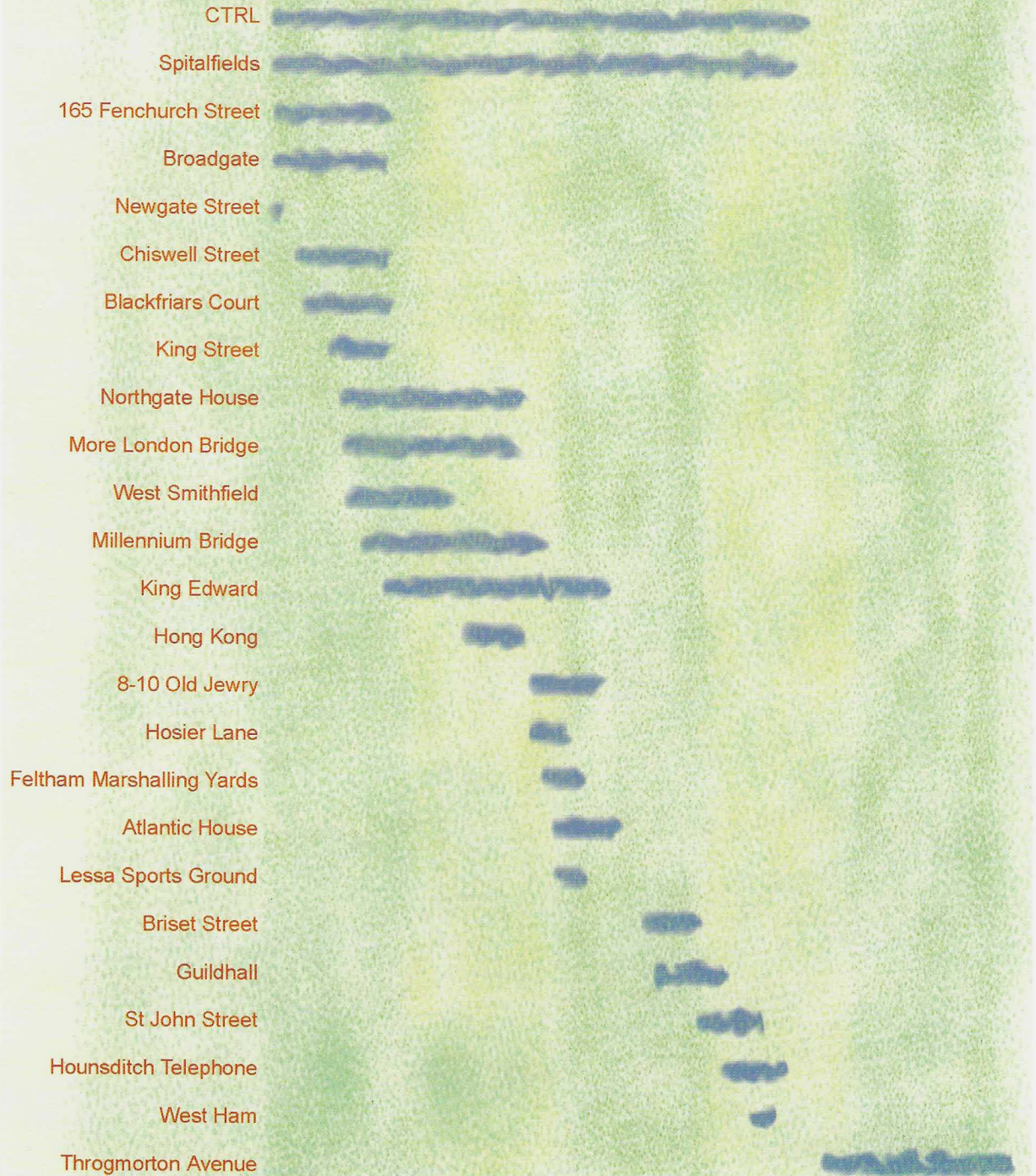
Director, Museum of London



**A brick-lined cesspit at
15–17 King Street contained
this group of 18th-century
pharmaceutical phials**

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Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr



introduction

1999 was exceptional not just for the sheer scale of archaeological work, but for a sequence of remarkable finds that rightly generated extraordinary public interest.

At the start of the year MoLAS employed just over 120 staff; the steady rise in construction activity in London through the year meant that by mid-summer, MoLAS had increased to over 200 staff, with 160 in the field alone. By the close of the year we had worked on over 300 projects, and carried out work not only in England but as far afield as Romania and Hong Kong. Our specialist focus on Greater London saw dramatic leaps in knowledge of the region, both through new fieldwork and through post-excavation research. In all, we provided development-related consultancy advice and archaeological services to 336 clients, and worked with hundreds of architects, planning consultants, engineers and other construction and heritage professionals.

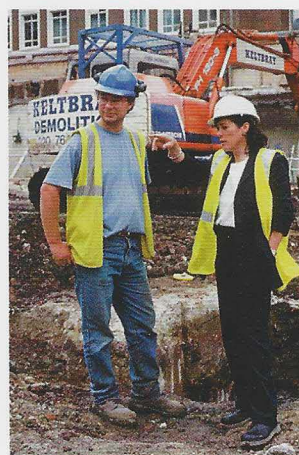
Throughout the year some truly exceptional discoveries were made, many of which were reported widely in the press. Yet, if 1999 stood out for one reason alone, then it would be not so much for the discoveries themselves, as for the exceptional opportunities for us and our clients to *share* these discoveries with the public. Temporary on-site displays and exhibitions, like the Spitalfields Archaeology Centre, established important new links with local communities, eager to learn not only about their own unfolding heritage, but also about the proposed developments and the clients who were sponsoring the archaeological work. Several times during the year, long queues formed at the Museum to view the latest clue in a compelling archaeological mystery. What was particularly rewarding – and refreshing – for MoLAS staff was the positive comment and direct feedback from the public; it was truly gratifying for us, and for our clients, to be able to really see the heritage value of our projects being realised.

This year we have chosen, therefore, to use *MoLAS 2000* to recreate the discoveries and challenges of our year as they happened, presenting the review of our work in a diary format. The focus, as ever, is very much on our archaeological project work. (The *Review* does not, for example, mention developments in our use of Geographic

Information Systems, or even our own major development project, planning for the construction of our new office base. This will be on the site of the Museum's *London Archaeological Archive and Research Centre*, just on the edge of the City).

The *Review* does, though, describe highlights of a very busy, very successful and very rewarding year. It also provides the opportunity to express our gratitude to our supporters. Our clients – too many to mention here – are listed on page 56, and deserve our particular appreciation. We are also extremely grateful to our major archaeological client, English Heritage, who has continued to guide and support the major the Greater London Publication Programme, and to our many other sponsors and colleagues – in government departments, in universities, regional and local societies and trusts such as the City of London Archaeological Trust. Finally, our rapid response to the demands of developer-sponsored archaeology has required dedication and enthusiasm from all MoLAS staff, and I am grateful to them, and also to colleagues in the Museum of London Specialist Services who have worked on our projects, for their very hard work and commitment.

Taryn Nixon
Managing Director, MoLAS



**Taryn Nixon discussing
Plantation House with
Senior Archaeologist
Phil Treveil**

Surveyor

Survey is an essential part of MoLAS' work.

It allows us to examine in great detail the relationship of archaeological activities on neighbouring sites which might have been excavated many years apart. We implement and maintain control networks and project grids, including those on the Ordnance Survey National Grid and project specific co-ordinate systems. Our surveyors are called upon to provide the rapid capture of digital data on site, using GPS and Total Stations interfaced with dataloggers and pencomputers to produce real time results and large-scale landscape and environment surveys. Standing building recording requires other up-to-date techniques including state-of-the-art reflectorless instruments.

Standing building recording

The MoLAS Standing Buildings Team has extensive knowledge and experience of interpreting and recording historic buildings and their settings across a range of time periods. MoLAS employs experts in architectural history, photography, surveying, geophysical investigation and illustration. The team also has access to further advice from the Museum of London Specialist Services on building techniques and materials, including brick, worked stone, timber and paint. The overall range of work carried out by MoLAS varies from photographic surveys of 19th-century buildings to detailed recording of structures such as the Roman and medieval city wall or St Paul's Cathedral.

Senior Archaeologist

MoLAS senior archaeologists are responsible for running all the stages of archaeological assessment and excavation. Often the first stage of an archaeological project involves a desk-based assessment. This is usually followed by a field evaluation, designed to assess the extent and quality of the archaeological strata present. MoLAS routinely carries out 90 or so evaluations a year on a wide variety of sites all across the country. When a project requires excavation, MoLAS has a vast amount of expertise, normally carrying out more than 100 excavations a year. Our senior archaeologists have many years of experience excavating sites ranging from the complex urban to large rural landscapes and national infrastructure projects.



Photography

MoLAS photographers produce high quality studio and location images in a variety of conventional formats, together with state of the art digital photography and image enhancement. Archaeological photography ranges from site work required for publications, lectures and public exhibitions to studio work photographing artefacts from complete ceramic vessels to tiny worked flints. The skills required to produce high quality images in the technically demanding area of archaeological research are readily transferable to a wide range of photographic disciplines. This allows MoLAS to carry out contract photography for external clients and includes the recording of modern and historic buildings, and underwater photography.

Geoarchaeologist

MoLAS regularly carries out geoarchaeological projects which may be part of archaeological excavations or completely independent. Geoarchaeology covers all aspects of interpreting archaeological and natural sediments and is often implemented by augering rather than large-scale excavation. We work with external palaeoenvironmental and sedimentological specialists and can report on sediments from almost any situation. In London our research projects vary widely and have included interpreting the Roman 'dark earth', mapping past migrations of the Thames, or reconstructing the development of London's waterfronts. The realisation of the results of this work can take the form of important MoLAS publications such as that on the palaeoenvironment of the Jubilee Line.

Archaeologist

MoLAS archaeologists combine skill and experience. They are responsible for much of the excavation and recording on our evaluations and excavations. MoLAS has developed techniques of excavation and recording which are set out in the Museum of London Archaeological Site Manual that are recognised as the industry standard in the profession, now being adopted in many other countries. Our excavators are also involved in other aspects of our work such as Standing Building Recording. MoLAS also works in a number of other specialist areas such as forensic investigations with the Metropolitan Police.



Digital graphics

Archaeological site survey information is processed using AutoCAD. The basic information is either converted from the digital data captured on site, or individual plans are digitised by the geomatics section. MoLAS produces maps and site plans and isometric or axonometric reconstructions. The site plans form the basis for most analysis of data. Geomatics staff also provide drawings for architects, engineers, English Heritage and others when advice is required on the location or extent of archaeological deposits and the possible impact upon them of proposed developments. Detailed information from borehole surveys is also used to provide contour models both of individual sites and wider landscapes.

Author

Once the senior archaeologists have finished their excavations the long task of post-excavation begins. The basic work involves checking all the records made on site to provide a site sequence and entering the data into our ORACLE database. An assessment of all the evidence is then produced and its potential is addressed. Where this demonstrates that the site archive contains material which can contribute to local, regional or national research objectives, a programme for analysis is constructed. This entails progressive amalgamation of elements of the site sequence until a series of phases are identified and, together with the finds, environmental and any documentary reports, an integrated publication text can be produced.

Publication

MoLAS has an in-house Design and Production team, and publishes its own Monograph Series and Archaeology Studies Series, taking projects from concept and design through typesetting and pre-press work to print buying. We also produce smaller articles for local and national archaeological journals. Some publications relate to developer-funded work arising through the planning process; others are synthetic post-excavation projects addressing backlog archives, and form part of the current Greater London publication programme funded by English Heritage. We have promoted an integrated approach to analysis and publication, where all data is brought together in one single narrative.



IT

MoLAS has its own IT department which plays an essential role in the successful operation of all aspects of our activities. MoLAS runs a Microsoft Windows NT Server-based network with about 100 workstations. We also use Apple Macintoshes for Desk Top Publishing and high-end Digital Photography work. One of MoLAS' most important IT developments has been our Oracle database system, developed and designed specifically for archaeological data with separate tables for all types of field, finds and environmental data. Once digital drawings have been produced in AutoCad, they can be linked to the ORACLE tables via a Geographical Information System. This gives ease of access to spatial and non-spatial data from a computer terminal and also enhances our ability to analyse sets of data which would otherwise be too large to handle.

Project Manager

MoLAS' organisation creates many project teams, each headed by a project manager. This means that staff may work for many different project managers and in many different teams during the course of a year. The project manager co-ordinates and organises the work within a project team and ensures that the work is done to budget and to timetable. They are also responsible for ensuring that the high standards which MoLAS prides itself upon are maintained and improved. The project manager is responsible for both the on-site and off-site work in their projects. MoLAS also employs two members of its team who programme the work of all its excavation and post-excavation staff.

Illustration

MoLAS has expert, in-house illustrators who provide illustrations for a variety of different purposes. They play a major role in our publication programme providing plans of sites, finds and reconstructions and they also have extensive experience of preparing displays, exhibitions and showcases from single panel display boards for site hoardings to permanent exhibitions. Their work uses both the most up-to-date computer graphics and traditional drawing methods. Computer graphics are used to produce many of the site plans whilst traditional methods are used for illustrating all manner of objects including flintwork, pottery, building materials, textiles, leather, glass, metal, bone and antler finds. Objects can range in size from microscopic seeds to timber ships and stone buildings.



j a n u a r y

Our excavation at **Spitalfields Market** (LIFFE and Spitalfields Development Group) was one of the

Tower Hamlets

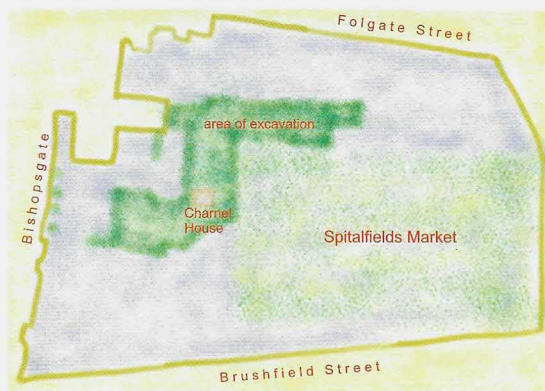
largest we had ever carried out. The site is a major part of a Scheduled Ancient Monument and involved the excavation of a Roman cemetery, the medieval Priory and Hospital of St Mary Spital (founded in 1197 and dissolved in 1539), 16th- and 17th-century houses of minor members of the aristocracy, an artillery ground used by the Gunners of the Tower and the Honourable Artillery Company between 1538 and 1682, and housing dating to the late 17th and 18th centuries. The huge site (over 2 acres) was divided into areas which we progressively excavated.

MoLAS had been involved in design team meetings for years, advising on the archaeological implications of the evolving groundworks design, and consulting with English Heritage. We had already carried out substantial excavation and research nearby (*Excavations at the Priory and Hospital of St Mary Spital, London*, MoLAS monograph 1 – C Thomas, B Sloane & C Philpotts, 1997) and, more recently, had completed major excavations at 250 Bishopsgate and for the Spitalfields Residential Buildings; now further archaeological excavation was required in advance of the new building of 280 Bishopsgate and the underground ramp which, with a basement car park, forms a fundamental part of the new Spitalfields Market development.

By January many of the late 17th- and 18th-century houses of Steward Street and Fort Street in the first area (in the south-west part of the site: Area 10) had been excavated and the north-west corner of the Artillery Ground below had been uncovered. The brick wall which formed the boundary to the Artillery Ground survived below the modern ground level. The remains of the wall were found to be some 2.5m high. In it were niches, possibly for keeping bees. A brick structure with mortar and clay floors discovered within the Artillery Ground was probably a proving house – a building for testing firearms. A large ditch about 3.5m wide and about 1.5m deep and revetted on one side with timber stakes possibly dates from the mid-17th century. It bounded a rectangular enclosure, with one central, projecting, angled bastion. The ditch may have been a practice ditch dug just before or during the English Civil War. We know that Dutch engineers came to England to help in designing and building the new 'star-shaped' forts. Perhaps we have found archaeological evidence of this practice at last.



ABOVE MoLAS surveyor Dave Mackie preparing the 16th-century Artillery Ground wall for a full photographic survey
RIGHT Looking east over the Spitalfields excavation with the market and Christchurch, Spitalfields in the background



LEFT Plan of St Mary Spital showing the various areas of excavation

RIGHT Detail from the 16th-century 'Copperplate' map showing the Artillery Ground, with archaeological evidence in the form of musket balls and lead shot



Another part of the Spitalfields redevelopment at **288 Bishopsgate** (Mercury Asset Management No. 1 Ltd) began in November 1998 and finished in January 1999. Here part of a 12th-century water system was found along with ditches relating to St Mary Spital. Beneath these levels were Roman ditches and a timber-lined well containing seven mostly complete flagons dating to c AD 120. Cutting through the medieval levels was a brick cesspit containing ceramic and glass vessels. Inside one of the glass vessels was a gold ring, dated to the late 17th/early 18th century.



Archaeologist Rosie Joynson lifts a flagon from a Roman well found at 288 Bishopsgate

Excavations reported upon last year (MoLAS 99), at **168 Fenchurch Street**

(Marks and Spencer plc) in the area of the Roman forum (Londinium's administrative centre), uncovered masonry remains and robber trenches (from which all the masonry was removed) of the inner and outer wall foundations of the southern and eastern porticoes of the forum. Important evidence was found in the form of an unusual buttressed foundation, of very large ragstone cobbles, parallel and close to the inner wall of the eastern portico; it is now thought to be of late Roman date. It would therefore belong to a structure that replaced the forum after its demolition c AD 300. The forum floors had not survived in this area, but contemporary construction layers were found in an external trench inside the south wall along Fenchurch Street.

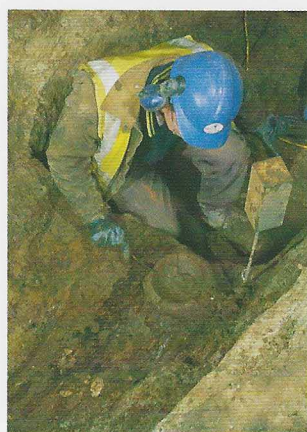
City



Roman artefacts from 168 Fenchurch Street included a selection of 1st-century glass tableware and three glass gaming-pieces which may have originally belonged to a set

Boudican fire debris from AD 60/1 was found up to about 0.8m deep, consisting mainly of mudbrick from a substantial demolished building fronting on to the north side of the predecessor of Fenchurch Street. The evidence suggests that this building consisted of a long east-west range, two 5m rooms deep, with a 3m wide portico. The north wall and the main east-west internal partition were found, and a series of external metallings and ditches further north. The east wall may survive next to the outer foundation of the forum. The building contained burnt grain deposits, which were also found in 1976. A series of superimposed floor slabs below the mudbrick building suggests it was built on earlier structures. A large quantity of pottery was recovered, and some metalwork, including several coins and brooches, most notably a large disc brooch with the pin still attached.

The latest structure on the site was the chalk foundation of the tower of St Dionis Backchurch. This medieval church (late 11th/early 12th century) was rebuilt by Wren and demolished in the 1870s.



ABOVE Val Griggs excavating a collapsed mud-brick wall destroyed in the Boudican fire at 168 Fenchurch Street

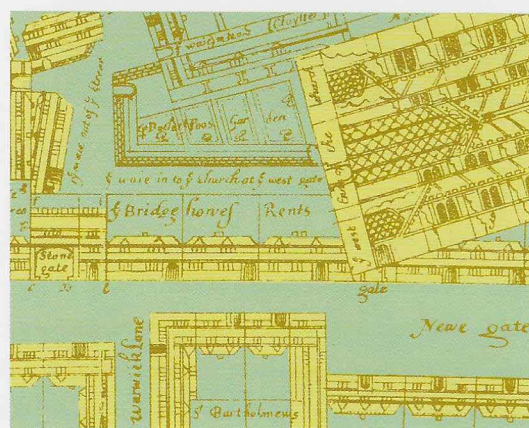
LEFT Careful excavation of the sequence at 168 Fenchurch Street has revealed evidence of everyday life in the early Roman town

Excavations at the **Merrill Lynch Financial Centre, Giltspur Street, EC1**, also reported upon last year (MoLAS 99), continued in three different areas of the site. The multi-period archaeological story here, like on many urban sites, would be woven together from umpteen records and discrete excavation areas, dictated largely by the construction programme. Work on the proposed pile positions revealed portions of the brick foundations and backfilled cellars of the Giltspur Street Compter prison, which occupied the site from 1787 to 1854.

(Compters were city prisons for debtors and in the 1770s almost half the entire prison population were debtors). In the west yard the monitoring of piling operations recorded the infilled late medieval City ditch. A complete leather knife scabbard was found in the ditch silt.

Two piles at 104–105 Newgate Street revealed the northern side of an east-west linear ditch, laid out parallel with the original Roman street. This ditch could have been an early Roman boundary delineating the northern edge of the original street. It was, however, soon encroached upon by pits and other features. Post-Roman findings included a large Saxo-Norman rubbish pit and a substantial late medieval chalk foundation. This was perhaps part of a cellared building known as the 'Bridge House Rents', shown on the 1617 plan of Greyfriars. The 'grey friars' – the Franciscans – established a house (and later a church) in this area north of Newgate Street in the early 13th century, less than 20 years after the death of their founder, St Francis of Assisi.

Detail from the 1617 plan of Greyfriars



An evaluation of eight testpits at **8–10 Throgmorton Avenue, EC2** (ASDA Property Holdings plc/8–10 Throgmorton Avenue Ltd), revealed glimpses of Roman land management: extensive landfill deposits, at least 2m deep over much of the site, survived within a channel of the Walbrook stream. The timber planks which were found may have formed a trackway over marginal ground. There were also traces of possibly Roman clay and timber buildings.

“

During my day as a one of the supervisors on the Spitalfields excavation I have to coordinate the efforts of a team of up to 30 archaeologists engaged in the excavation and recording of medieval graves and the medieval charnel house. I am responsible for ensuring the archaeological excavation and recording are carried out to the required high standard and that we are making the right progress to complete the project. Some of my day is usually spent liaising with construction contractors on site to ensure we can work in a safe environment. As well spending time digging I also try and talk to every one of the archaeologists in my area and discuss their part of the site so I can get an overview of the sites progress and archaeological development.

”

David Bowsher



february

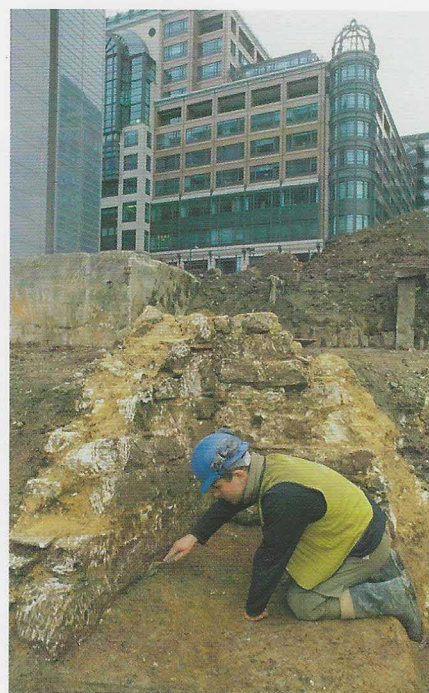
The amount of fieldwork increased substantially during February, with new sites beginning and the size of the team at **Spitalfields** increasing. Here, two new areas were opened while excavations in the first area uncovered a range of 15th-century tenements fronting on to a road to the west. The buildings had shallow chalk foundations which probably supported a timber superstructure. In one building, two stone artefacts with heraldic shields on the outside were interpreted as lamps. In all, at least five buildings were identified and it is possible that a further two lie to the east. To the west, another medieval structure was found, built of ragstone and tile. It had large amounts of burning on its floors and a pitched-tile hearth.

Tower Hamlets

Beneath these 15th-century buildings lay a number of burnt posts – clues to the 14th-century timber building which had burned down. Outside it lay medieval rubbish pits. A later 16th-century building had an eclectic floor made up of tiles from widely different periods: some were decorated 'Westminster' tiles dating to after 1225, others dated to after 1350. Nearby was a late 16th-century brick kiln in the Artillery Ground that may well have been used to make the bricks in the Artillery Ground wall.

Clearance of the later deposits in the area to the east (Area 2) uncovered the late 17th- and 18th-century cellars of the properties along Fort Street and Steward Street. Beneath these lay early 17th-century buildings along the north side of the Artillery Ground adjacent to its boundary wall, which again survived up to modern ground level. The wall abutted a major medieval building whose south wall also survived to modern ground level. This building occupied the position, predicted from documents, for the chapel and charnel house built by 1391, in the cemetery outside the church. It was dedicated to St Mary Magdalen and St Edmund the Bishop (archbishop of Canterbury 1233–40, who was speedily made a saint only six years after his death and at that time rivalled Thomas Becket as the most popular English saint). The chapel was founded by a pepperer – a dealer in pepper and spices, and therefore probably a wealthy City merchant – called William Eynesham. He states in his will that still survives his desire to be buried there. No traces of his tomb were found during the excavations so it is possible he was buried in the chapel above the charnel house.

One of the most challenging and information-rich aspects of the Spitalfields excavation was the large medieval burial ground. During February it became clear that the cemetery was even larger than had been thought, as burials were uncovered to the south of the expected cemetery limit.



ABOVE **Excavation of a cesspit behind a 15th-century tenement at Spitalfields**



MoLAS Archaeological Excavations

This progress report is Friday 26/5/00

Area 2

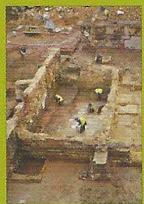
All the Area 2 work from the previous year has been completed. A total of four Roman artefacts were recovered in the area of the site in the previous year.

A total of 100 medieval artefacts were recovered in the area of the site in the previous year. The artefacts were recovered from a number of different locations in the area of the site. The artefacts were recovered from a number of different locations in the area of the site. The artefacts were recovered from a number of different locations in the area of the site.

Area 3

The work in Area 3 has been completed. The artefacts were recovered from a number of different locations in the area of the site. The artefacts were recovered from a number of different locations in the area of the site. The artefacts were recovered from a number of different locations in the area of the site.

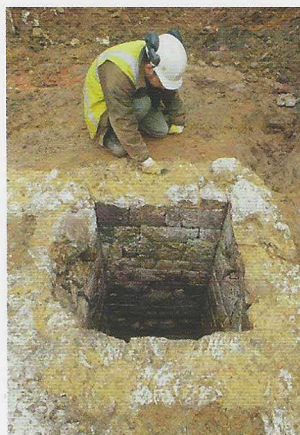
It also saw the work of the team in the area of the site. The artefacts were recovered from a number of different locations in the area of the site. The artefacts were recovered from a number of different locations in the area of the site. The artefacts were recovered from a number of different locations in the area of the site.



LEFT Members of the Drawing Office prepared display panels around Spitalfields Market to keep the public informed on the excavation's progress. These were regularly updated throughout the year

RIGHT Senior archaeologist Ken Pitt excavating a 13th/14th-century chalk and ashlar-lined well at Norton Folgate

FAR RIGHT general view looking north across the site



Further redevelopment at Broadgate on **Norton Folgate, E1** (Broadgate Plaza Ltd),

City

adjacent to the Liverpool Street Station tracks, revealed remains in the south part of the site that included a pitched-tile hearth associated with a Tudor brick structure. There were also medieval and later wells, quarry and rubbish pits, cesspits and wall foundations relating to the gardens of structures that fronted on to Norton Folgate which was, at that time, much narrower. A large vaulted drain of ragstone and tile running east-west across the site was excavated and identified as probably being the continuation of the great drain of St Mary Spital (excavated on the other side of Norton Folgate in 1988).

The site was known to be in the extramural Roman cemetery, and seven Roman burials, orientated both north-south and east-west, were found in the southern part of the site. Grave goods from these included shale beads, copper bracelets and a Roman coin. In addition, a complex sequence of Roman cut features was excavated in the southern part of the site, including chalk and flint foundations, gullies, postholes, pits and a substantial well. These may have been part of mausolea but structures nearby cannot be ruled out as we have found painted wall plaster and other evidence of buildings in the vicinity.



15th-century stone lamps with heraldic shields (Spitalfields)

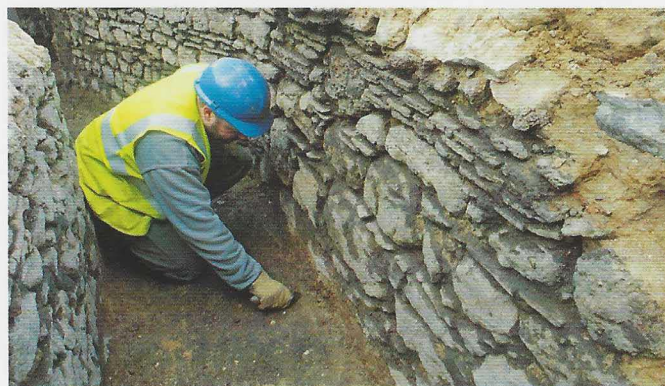
RIGHT Excavations at Norton Folgate resulted in the recovery of personal jewellery from late Roman burials found there, and included part of a jet bracelet and a group of 41 jet beads

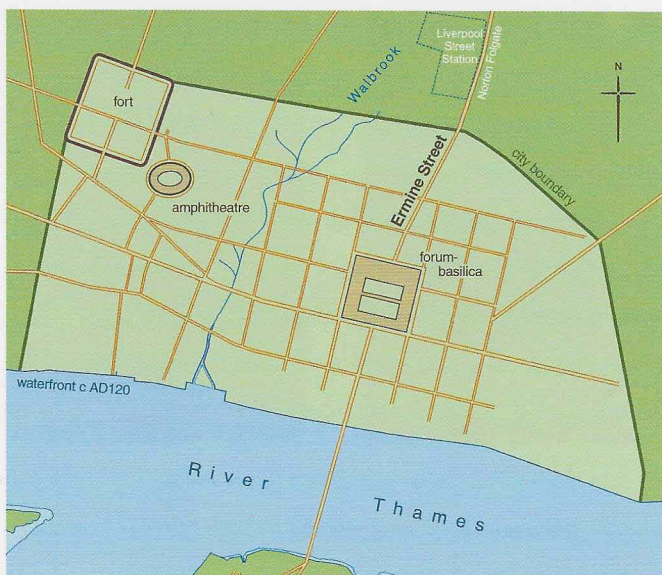


LEFT Archaeologists Dianne Walls and John Binns cleaning the floor of a 16th-century building at Spitalfields which was made from reused medieval tiles



RIGHT Richard Hewitt cleaning the Great Drain running southwest from St Mary Spital





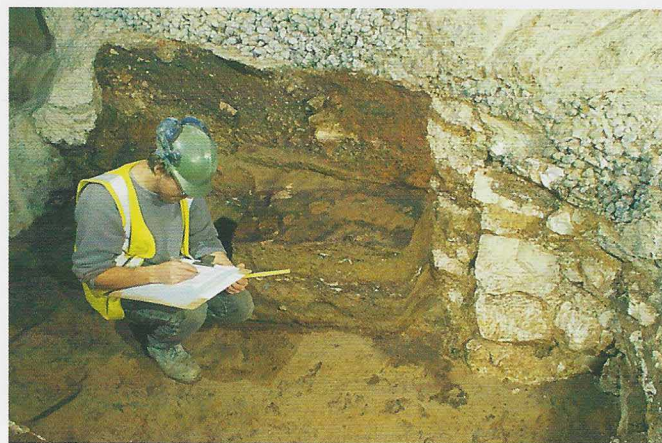
The excavations at Broadgate also helped to increase our knowledge and understanding of the topography and evolving landscapes of Roman London. A series of intercutting Roman and medieval ditches ran north-south through the site, cutting into the natural brickearth; although no gravel road surfacing was found, it seems likely that these were roadside drainage ditches alongside the important Roman road (Ermine Street) which ran under present-day Norton Folgate. The natural gradient on the site reflected the slope into the River Walbrook which flowed under the western side of Liverpool Street Station.

At **168 Fenchurch Street, EC3**, the excavation was completed this month. The pre-Boudican sequence was unexpectedly deep and complex, and showed that a considerable amount of activity took place between AD 50 and 60. Perhaps, after all, the earliest Roman settlement in London did start in the 40s with a military post; if so, this would answer one of London's most debated archaeological questions.

Several gullies, slots, hearths or fire pits were found, as well as scatters of postholes associated with metallated surfaces, and an east-west timber box drain. Below the mudbrick building found in the previous month was a series of alternating brickearth dumps and occupation horizons. The uppermost dump consisted of demolished mudbrick from an older building with deep mortared flint foundations: only part of one internal wall remained – but the eastern and southern walls had been recorded in 1976 as surviving up to the Boudican fire as part of the final mudbrick structure. The dumps contained a large quantity of pottery and other finds, including a small honestone, coins and bronze brooches.

On the Fenchurch Street frontage, parts of the south wall of the Roman forum survived, beneath the medieval robber trench fills. North of this, sequences of Boudican fire debris overlay metallated surfaces and brickearth dumps which may form part of the portico areas of the pre-fire buildings.

Archaeologist John Minkin recording foundations of St Dionis Backchurch



© The Daily Mail

Marcus et Spenserus

Even the Romans shopped at M&S

ARCHAEOLOGISTS have discovered a Roman shopping centre under the site of a new M&S store.

Love story uncovered in ancient cesspit

By PETER WALKER
Special Correspondent

Archaeologists have unearthed a poignant 18th-century love token – two days before St Valentine's Day. The timely find is the enamelled lid of an oval copper box, featuring the painted image of a couple kissing with the legend: "I Love Too Well To Kiss And Tell."

The token was found in a disused cesspit at a site in the City of London, along with a number of coins, leading experts to speculate that they were all abandoned in haste at the end of a doomed love affair which, judging by the lid's enigmatic message, may have been clandestine.

Archaeologists from the Museum of London have identified the lid as coming from a "patch box", used during the period to carry beauty spots. The stick-on spots were considered attractive adornments – and covered skin blemishes. The underside of the lid is inscribed with the remains of a mirror.

The box could have belonged to either a man or a woman, although only dandyish men of the period wore beauty spots.

The lid, which will be on display at the Museum of London over the St Valentine's Day weekend, was found in the remains of a brick-lined cesspit, which is one of slightly coloured being excavated at the site before charred black the construction of an office building.

Archaeologists think that the remains of the fire and luxury apartments. The remains of the fire and luxury apartments. The remains of the fire and luxury apartments.

Simon Thurley said: "This looks like the end of a tragic love story. A beautiful gift such as this ended up in a cesspit. It would be a beautiful and poignant discovery. It would be a beautiful and poignant discovery. It would be a beautiful and poignant discovery."

© The Birmingham Post

The enamelled lid of a patch box, recovered from an 18th- or 19th-century cesspit at Black Friars Court, Ludgate Circus. The lid is inscribed 'I love too well to kiss and tell' and may have been a lover's gift or token



Archaeological monitoring continued, meanwhile, at the new **Merrill Lynch Financial Centre, Giltspur Street, EC1**, where augering for the last of the new piles took place in the west yard, through the infilled medieval City ditch.

Meanwhile the site of **15–17 King Street** and **46 Gresham Street** (City and Provincial Properties Plc) began to show significant clues to understanding the end of the Roman period in London, and perhaps even an association with the nearby Saxo-Norman settlement at Guildhall Yard (MoLAS 94 & 95). Excavations revealed truncated Roman pits and a timber-lined well, probably Late Saxon. The well lay immediately north of a possibly contemporaneous wall of a sunken building. Cut across the upper levels of the well was a substantial chalk wall. Where the footing crossed the well a series of beech piles had been driven into its fills in an attempt to prevent the wall fracturing and subsiding.

The earliest activity in the second trench consisted of Roman pits sealed by two phases of clay and timber buildings probably dating to the late 1st century. The later building had two parallel brickearth clay walls with applied painted wall plaster facing. The plaster render was present on both sides of each of the walls indicating that it had at least three separate rooms. This later building was destroyed in a fire possibly during the early 2nd century.

Senior archaeologist Ian Blair excavating a Late Saxon timber-lined well at 15–17 King Street



The remains of two sunken buildings probably dating to the Late Saxon period were cut into the Roman sequence. The westernmost building was better preserved, with the impression of wattle on the west wall and a series of decayed timber joist voids for a floor, which may also have originally been made of horizontally laid wattle hurdles. To find a timber floor is unusual in cellared buildings of this date, but it appears to have been laid to bridge over a large Roman cesspit which was found beneath it. The south-west corner of the second sunken building was of slightly different construction, with timber baseplates and probably post and stave shuttering to the walls.

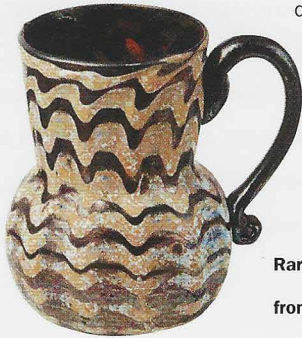
Following the backfilling and consolidation of these sunken buildings a large medieval masonry building was constructed. Its orientation reflected the alignment of Ironmonger Lane to the east of the site, a sign of the emerging medieval street pattern.

Recording a Roman tessellated floor and other features in an area of the 15–17 King Street site which was preserved *in situ*



Later structural features included the corner of a medieval chalk-lined cesspit and the remains of a possible brick-lined cellar which may have been destroyed in the Great Fire. This cellar was cut by a brick- and stone-lined cesspit which produced a large and

diverse group of finds of late 17th- to early 18th-century date, including a complete and extremely rare glass cup, possibly Spanish in origin.



Rare glass cup from King Street

With over 138 archaeologists employed on MoLAS sites across south-east England, excavations at another major site began this month, a **Northgate House, 20–28 Moorgate, EC2 (MEPC)**. The site lies in the Walbrook Valley and had potential for medieval and Roman deposits. Intriguingly, there was also a clue from observations in the 1930s by an astute archaeologist, Frank Cottrill, that Roman kiln wasters had been found nearby... The first excavation area revealed a series of timber-lined medieval industrial pits and quantities of metalworking slag.

Excavation of kiln at Northgate House



Following an evaluation in 1996, an excavation at **22–25 Chiswell Street, EC1** (CgMs on behalf of Helical Bar), about 400m north of the City wall, uncovered – as expected – medieval quarry pits and drainage ditches. But in addition, the foundation of a medieval structure was found beneath late medieval levelling layers, and these were in turn sealed by several post-medieval structures. The north-western area of the site revealed a large fire-brick flue *in situ*, the burnt area around it suggesting extremely high temperatures. Several phases of structure were found around this area, including a barrel-well containing four horse skulls. A post-medieval saw pit was excavated along the shopfront area of Bunhill Row, confirming the position of a timber yard suggested by map evidence.



Excavation of post-medieval wall and foundations at Chiswell Street

During the post-excavation work taking place all this time, new discoveries were being made ... indoors. Dendrochronological (tree-ring) dates were identified from timbers recovered from **Horseshoe Wharf** (Oakmayne Properties Ltd) reported upon last year (MoLAS 99). The revetment which supported Clink Street has been dated to 1174, which correlates well with the new revetments built at Bull Wharf (1181) on the northern bank of the Thames, and Westminster (1179–80), when there seems to have been a substantial rise in the level of the River Thames, perhaps caused by the building of the first stone London Bridge under Henry II.

MoLAS has carried out a massive amount of fieldwork and research on the South Bank over the last 30 years. In February we began an evaluation at **More London Bridge** (CIT Markborough) on **Tooley Street, SE1**, on the site of the new headquarters of the Greater London Authority, to determine the nature and extent of archaeological remains. Two trenches on the eastern perimeter of the site suggested that this low-lying part of the Southwark waterfront was not reclaimed until the 17th century. In one part of the site there was evidence for an early 18th-century knacker's yard, a typical legacy of Southwark's post-medieval industry: a large pit was filled with at least seven horse carcasses from which the skulls and limbs had been removed, and three sunken barrels contained several horse long bones. Underneath the reclamation deposits was a thick layer of alluvium; beneath that was an ancient soil rich in pottery, burnt flints and flint implements including scrapers. This could be material from the Late Iron Age farming settlement on what was Horsleydown Island, now part of Southwark.

Southwark

Closer to the waterfront, there was evidence of an early 19th-century warehouse building floored with a thick layer of tar. This, plus lumps of horsehair in the dumps below, was indicative of caulking of boat planking in the area. Timbers from what appeared to be a tidal mill were also found; the mill would have used the moat of the 15th-century Fastolf's Place as its reservoir. Fastolf's Place was built for Sir John Fastolf, a soldier made famous by Shakespeare's representation in *Henry VI Part I*.

Senior archaeologist Dick Bluer cleaning an 18th-century cobbled street surface in North Bermondsey



“

I work in the Geomatics department with a team of six others. We as a department are responsible for capture and manipulation of spatial data, either by site survey work or in the production of plans. My time is split about 60% on site and 40% in the office. Typically my working day starts at the office where I prepare for a site visit and collect equipment. Survey work on site varies depending on the project design; but we would always locate the site on the Ordnance Survey. Often I would be establishing site grid for the archaeologists to plan from or I could be digitally recording the archaeology on site by using hand held computers and an EDM. Once I have captured the data I am able to produce required plans including the site location. I would also need to digitise the plans made on site or create plots of from my digital data.

”

Jessica Cowley



m a r c h

The amount of fieldwork steadily increased during March, in parallel with a construction industry, building towards a level of activity not experienced since 1990.

At **Spitalfields** early medieval and Roman levels

were reached in Area 10, which was completed

by the end of the month. A second 13th-century timber building was found, as was a robbed-out wall which lay parallel to the precinct wall. Was this wall an earlier precinct boundary or perhaps the other side of a large open-ended building – a barn perhaps – built onto the precinct wall? The answers to questions like this may lie in the distribution of finds on either side of the known precinct boundary, which would tell of different activities. If so, we might expect to identify similar differences in activity on either side of the putative earlier precinct boundary.

Tower Hamlets

A total of 224 medieval skeletons were excavated in the first part of the medieval cemetery. All age ranges were represented, and there were burial pits with multiple burials up to four layers' deep. Were these epidemic pits or just a particular burial practice?

Knowing that the cemetery would contain thousands of burials, we had instituted a new method of recording the skeletal remains. Whereas once, skeletons were planned by hand, managing perhaps 3 per day, now they were being planned using pen computers allied to the surveying instrument so that two people could plan over 30 skeletons in a day, and produce instantaneous plots.

The remainder of this part of the site was covered with Roman graves, part of the known cemetery glimpsed only a month earlier on the west side of Bishopsgate, at Norton Folgate. A total of 50 inhumations were excavated, as well as other graves where no bone survived. Most were aligned east-west in neat rows, although three earlier graves were aligned north-south. Many contained grave goods: three contained small pots, one a pair of hobnailed boots and in another were found bracelets of shale and copper. There were also food offerings. Although coffins did not survive, lines of coffin nails did in many instances. Both children and adults were represented, and unusually – and potentially a major question for the post-excavation analysis – there was a high percentage of children.



BELOW The BBC programme 'Meet the Ancestors' filming preparations to lift the Roman stone sarcophagus

RIGHT Senior archaeologist Kieron Heard recording the sarcophagus prior to the removal of its lid



On the 12th, a plain stone sarcophagus was found. We knew from the accounts of the historian John Stow in his 'Survey of London' published in 1598 of stone sarcophagi being discovered at Spitalfields in 1576, with grave goods.

..Spittle field; which about the year 1576 was broken up for clay to make brick; in the digging whereof many earthen pots called urnae were found full of ashes and burnt bones of men, to wit, of the Romans that inhabited here;....There hath been found in the same field divers coffins of stone, containing the bones of men...



Since then however, only two stone sarcophagi had been found: one in 1877, which contained a lead coffin, and one in 1972 in Bow, east London. Remarkably, the Spitalfields sarcophagus had somehow survived being robbed or even, apparently, disturbed. Even more remarkably, when the stone lid was lifted, it was found to contain an intact decorated lead coffin.

Within the grave, but outside the coffin itself, were a group of artefacts: a unique glass phial with a jet stopper, a jet canister and jet and hair accessories. There were few stratigraphic clues as to the date of the burial; the grave goods, however, held real promise of identifying a date. The glass phial in particular suggested a late Roman date – not earlier than AD 350, so here was a burial from towards the very end of Roman London. On Health and Safety and conservation grounds it was decided not to open the coffin on site; instead a special cradle was constructed for the sarcophagus and it was lifted by machine, carried off site and transported by lorry to the Museum galleries.

The objects associated with the burial in the sarcophagus



Next to the sarcophagus were other impressive burials which had not survived the grave robbers. A Roman timber-lined mausoleum included a child's skeleton laid in chalk (thought to be intended to preserve the body). Associated with it were seven glass vessels. Large sarcophagus fragments were found, presumably from the wrecked mausoleum. An empty grave lay to the east of this structure, and another one to the west; they contained only a few pieces of human bone and fragments of limestone sarcophagi which had been removed by grave robbers.



Archaeological Project Manager Chris Thomas examining one of the surviving vault arches of the medieval charnel house at Spitalfields



LEFT Archaeologist John Binns excavating a child burial laid in chalk (Spitalfields)

In Area 2 there were several cesspits associated with the 18th-century houses, which characteristically produced large numbers of finds. One contained numerous cat skulls, possibly evidence of skinning. In the north-east corner of the Artillery Ground we discovered the Master Gunner's House, with its four rooms with tiled and/or brick floors, and evidence of timber panelling in one room. The eastern half of the postulated Civil War ditch was also excavated in Area 2; it could now be seen to form an enclosure about 45m x 25m.

Moving into Area 3, the overburden was cleared from the west side of Spitalfields Market and recording began. A roof was built, both for weather protection and to screen the skeletons from the public. As work progressed a number of buildings were uncovered, and the nature of the charnel house became clearer: it survived to about 2.5m above the contemporary ground level. Part of the vaulting of the backfilled cellar survived, and many other fragments were recovered from the demolition layers. The charnel house was used as a dwelling during the 16th and 17th centuries and was infilled in about 1700. The building had six south-facing windows, although one was removed during the 16th century to make way for a chimney. Six fireplaces and floors, one on top of another, were found. A later doorway on the site of the original doorway at the east end had been blocked.

In front of the charnel house lay two phases of a building originally constructed in the late 15th century as a gallery for the Mayor and Aldermen to listen to the sermons at the pulpit cross. There was a walled garden on its west and a cobbled yard on its east. For about 300 years this was one of the main public pulpits in London, and large crowds attended during Easter week.



The Mayor's ancestor

London Museum team finds tomb of Roman VIP

THE TOMB of possibly the richest and most important Roman Londoner, who was buried in the city, has been discovered in the City.

A team from the Museum has excavated a Roman tomb, which is believed to be the tomb of a Roman VIP.

The tomb is located in the City, near the Museum. It is a large, rectangular structure, made of stone, and is believed to be the tomb of a Roman VIP.

The tomb is located in the City, near the Museum. It is a large, rectangular structure, made of stone, and is believed to be the tomb of a Roman VIP.



Team's man in London: archaeologists examine the lead coffin before it is removed from the stone sarcophagus

© The Evening Standard

Media interest in the sarcophagus spread from London around the world

RIGHT General view of work

underway at Paternoster Square



The medieval charnel house and chapel at Spitalfields. Archaeologists are excavating a series of 16th- and 17th-century floors and demolition layers within the building. To the right are the foundations of the Lord Mayor's gallery



A glass night-light holder dating to the second half of the 19th century, found at Black Friars Court

RIGHT 14th-century quarry pits

at Black Friars Court, originally excavated to provide building material for the City wall

Another prestigious development underway

City

in 1999 was that at **Paternoster Square,**

EC4, to the north of St Paul's (Paternoster Associates). Although large parts of the archaeological sequence were destroyed in the 1960s, with only scant record, archaeological deposits still survive in places. An evaluation found medieval pits, one dated to 1270–1350, followed by further phases of pitting and the construction of a chalk-lined cesspit. The pits were inside the medieval precinct of St Paul's Cathedral and were probably situated in a garden or outlying backyard belonging to the various religious buildings in the precinct. One of these buildings was the College of Minor Canons founded by Richard II in 1394.

An excavation at **Black Friars Court, Ludgate Circus, EC4**

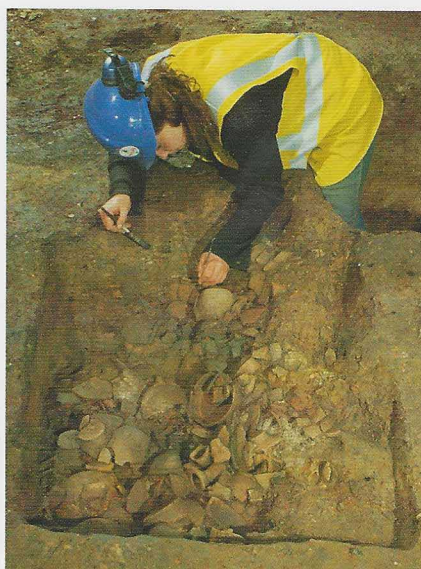
(Development Securities Limited/St George North London Ltd), on the east bank of the River Fleet, showed what major changes in land-use London has seen. There were large quarry pits (one up to about 30m across) which were probably backfilled in the 14th century when the entire City wall was extended west to enclose the area. It subsequently became a garden, after which a large number of brick-lined cesspits were built (both before and after the 1666 Great Fire).



This month saw the beginning of the main excavation in the west yard at the new **Merrill Lynch Financial Centre, Giltspur Street, EC1**. A large portion of the robbed-out brick foundations of the Giltspur Street Compter was revealed, showing the entire plan of cellars under the front range of the prison and two of the adjoining cell blocks. These blocks were the accommodation for male and female night charges (people arrested for fighting, drunkenness and prostitution). Part of the Commons side women debtors' cell block was also revealed. Within the prison were a number of cesspits and a series of brick-built culverts and drains containing, unsurprisingly, many rodent bones. Below the remains of the prison was a well-preserved series of 16th- to 17th-century, brick-built cellared buildings; their brick-lined cesspits yielded numerous wine bottles, chamber pots, tobacco pipes and delftware pottery.



Several Roman oil lamps were found during the excavations at Northgate House, Moorgate.



Archaeologist Lindy Casson excavating pottery wasters dumped in a pit near one of the 2nd-century kilns at Northgate House

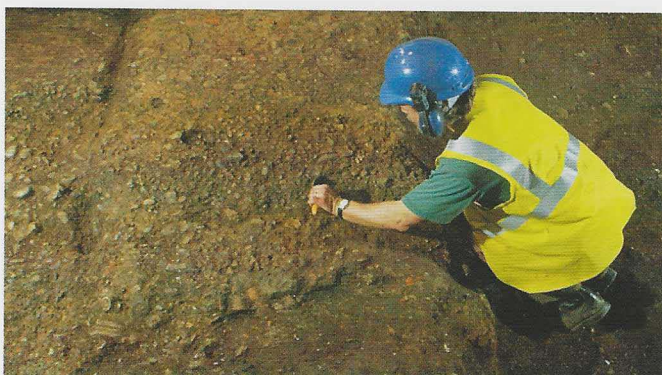
Continuing work at **Northgate House, Moorgate, EC2**, revealed substantial dumps into the Walbrook Valley throughout the Roman period which, in turn, were sealed by medieval dumps. A large north-south medieval ditch was excavated, and evidence found for medieval industrial activity including a flue, although if there were any structure associated with it this had already been truncated.

RIGHT Archaeologist Conrad Baker cleaning a medieval tile-lined hearth at West Smithfield

BELOW RIGHT Yvonne Battersby examining a 14th-century arched foundation (West Smithfield)

BELOW LEFT Archaeologist Phi Frickers excavating a Roman path at Northgate House

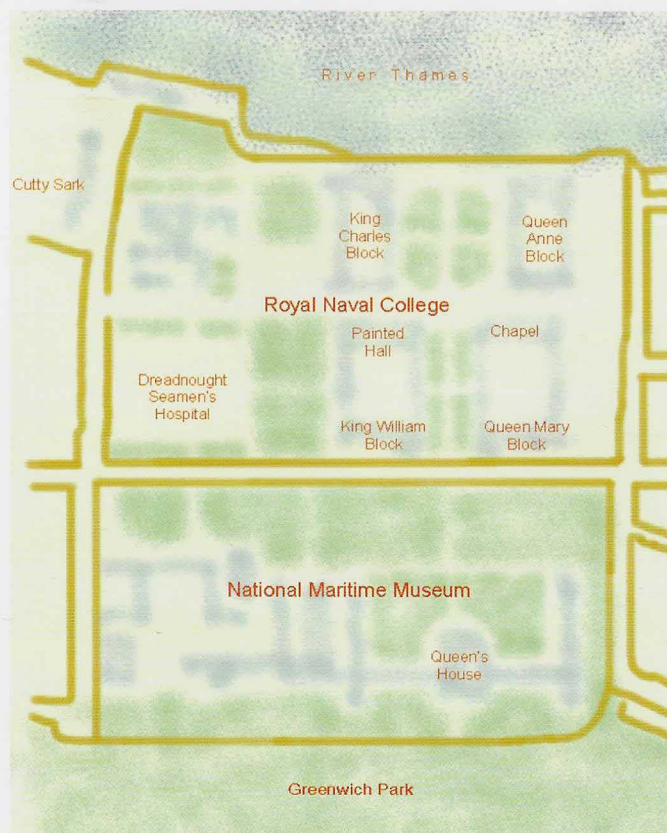
Excavation at **13-21 West Smithfield, EC1** (The Haberdashers' Company), was carried out in three areas, each adding a little to the picture of post-medieval Smithfield. The first (immediately behind buildings fronting on to West Smithfield) revealed two phases of buildings. Extensive chalk wall foundations of two 17th-century buildings were investigated. Within the northern building were the foundations of two circular structures, possibly kilns. The buildings also included two 3-4m deep chalk-lined structures, one of which was relined and used as a cesspit in the 18th century. The earlier phase of chalk foundations formed part of a 16th-century building, with floors and an oven surviving. The second area located extensive dumping over large medieval quarry pits. In the third area, to the north, late medieval chalk wall foundations associated with a building to the north of Greyhound Alley and associated yard surfaces were revealed.



MoLAS carried out extensive watching briefs and recording work in

Greenwich

Greenwich throughout the year. No remains of the medieval period were encountered, but a brick wall recorded in a service trench along **College Approach** (Dannatt Johnson Architects, on behalf of Greenwich University) was thought to be of Tudor date and probably associated with the Palace of Placentia, where Henry VIII and his daughters Mary and Elizabeth were born. Plaster floors encountered below the courtyard of the Queen Anne Quarter in the (old) Royal Naval College are also thought to be associated with the palace, and complement MoLAS work carried out just to the west in 1995. Fragmentary structural remains to the west and north-west of the Dreadnought Seamen's Hospital (Dannatt Johnson Architects, on behalf of Greenwich University) may have been associated with the 16th-century 'Kings Barne'. Outbuildings associated with the palace, dating to the 17th century, were recorded near the Queen Mary Quarter (DTZ, Debenham Thorpe on behalf of the Greenwich Foundation) – a house known to have existed since at least 1653. Work for the National Maritime Museum, near the east entrance, found early 17th-century walling that formed the northern retaining wall of the Woolwich to Deptford road that actually passed through the Queen's House, built opposite the palace between 1616 and 1635.



There was limited further excavation at the medieval moated manor house site of

Kent

Parsonage Farm, Watery Lane, Westwell, just north of Ashford, in advance of construction of the **Channel Tunnel Rail Link** (Union Railways (South) Ltd). The major part of this work was carried out last year (MoLAS 99).

Most of the moated enclosure comprised a mound of natural brickearth, extended artificially at the edges. The brickearth had been removed to the north, either during construction of the moat there or by later ploughing and erosion.

A stream flowing down the eastern side of the site was embanked on its west side at some time before the construction of the moated manor house. A substantial ditch, possibly a mill-lead or mill-race, ran parallel to this bank about 4m to the west. This ditch contained little except a smashed pottery vessel dated 1050–1150. The stream edge was further embanked and part of the moated area was levelled up with brickearth, in preparation for construction of the hall of the manor. A fore-building was later added to the hall: its end wall was set directly on a masonry revetment and platform forming the moat edge. This platform may have represented a foundation at the edge of the moat for an earlier feature, perhaps a bridge.

The edge of the enclosure was reinforced on the east side with wattle hurdles, bushes and trees. The rubble found previously on the outer edge of the moat here did not continue across the bottom of the moat. In both the eastern and southern arms of the moat, its inner edge was reinforced with tiles and stones, presumably derived from demolition of the manor house in about 1300. At a later date a crossing was built across the southern arm of the moat, to the east of the former fore-building.

In 1999 MoLAS worked on a number of sites in central Greenwich. Many of these were small-scale but, when put together, they help tell the fascinating story of the development of Greenwich. This plan shows the location of the main areas mentioned in the text

a p r i l

By April MoLAS was employing 141 full-time professional staff in the field alone.

On Wednesday 14th the sarcophagus from **Spitalfields** was opened in the Museum of London, inside a protective tent erected to contain any lead dust. All those involved wore protective clothing, while invited specialists, colleagues and members of the Museum's Board observed on monitors. The opening was filmed for two documentary television programmes to be screened later in the year. Once the lead levels had been checked, and the lid of the coffin removed, it was revealed that this was the burial of a young woman in her early 20s. Subsequently, DNA analysis and strontium isotope analysis suggested that she came from southern Europe. Her complete skeleton was surrounded by wet silt, and within it a bed of leaves was clearly visible, placed as a pillow on which to rest her head. Archaeologists and conservators worked quickly, through the night, as the silt threatened to dry out, and as the work progressed, three areas of textile were found: a silk damask, fine gold thread and wool. The gold thread may have decorated a silk garment worn by the young woman. Another glass phial was found between the woman's coffin and the sarcophagus.

On site at Spitalfields, meanwhile, there was another remarkable discovery – in the cellar at the west end of the Master Gunner's House: two complete glass bottles were found, containing liquid ... which later analysis and tastings by Christies and Sothebys experts suggested was Madeira.

Tower Hamlets



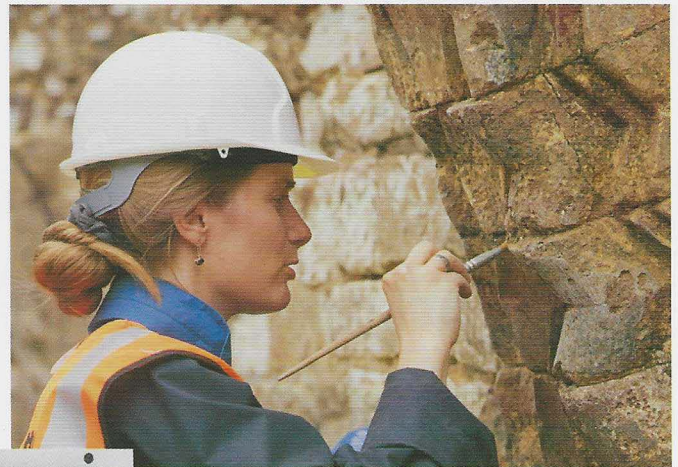
ABOVE Conservators cleaning the decoration of rope and scallop shells on the lead lid of the coffin prior to its display





The public thronging to see the bones of the Roman woman from Spitalfields soon after the opening of the coffin

BELOW MoLAS archaeologists and Museum of London conservators and specialists looking into the Roman lead coffin for the first time



ABOVE Liz Barham, a MoLSS conservator, cleaning medieval paint on a vaulting rib in the chancel house

The Roman yuppie

Luxury life of the woman who lived and died in Londinium

By BILL MOSS AND JANE KELLY

DEFT had been in her early 20s, just under six feet tall, a slender of one of the most prosperous families in Britain, with silver tending to her every whim.

© The Daily Mail



Museum lifts the lid on a First Lady of London

By PETER CREMER

A FEMALE skeleton from the Roman period, excavated in 1992, has been identified as the first lady of London, the first of her kind to be found in the city.



© The Evening Standard

In the chancel house we uncovered the chalk floor, laid after the dissolution of St Mary Spital in 1539. The central vaulting rib was now fully revealed showing that while it formed part of the original build of the structure, it had characteristic chevron moulding indicating that it derived from a late 12th-century building and had been reused here. Patches of red, black and pink paint were still visible on the vaulting.

Other Roman burials were found, beneath an area badly disturbed by 1920s' underground toilets, including one inhumation lined with chalk and containing a glass vessel. An adjacent crouched burial at first was thought to be a Roman burial practice but is actually a person paralysed from the waist down and so could be medieval in date.

Initial machine clearance in the north-west corner of the site (Area 4) began revealing shallow basements from early 18th-century houses overlying 17th-century stone-walled buildings.

On 21 April the Spitalfields Archaeology Centre was opened by the Rt Hon Alan Howarth MP, Arts Minister. This innovative and highly popular visitor centre was an important collaboration between MoLAS and the developers (the Spitalfields Development Group and LIFFE). Its aim was to provide direct access to information on the excavations to the local community and visiting public, as well as to provide a context for the development, and it was immediately apparent that it would generated an almost unprecedented level of interaction and public interest.



At the **Merrill Lynch Financial Centre,**

City

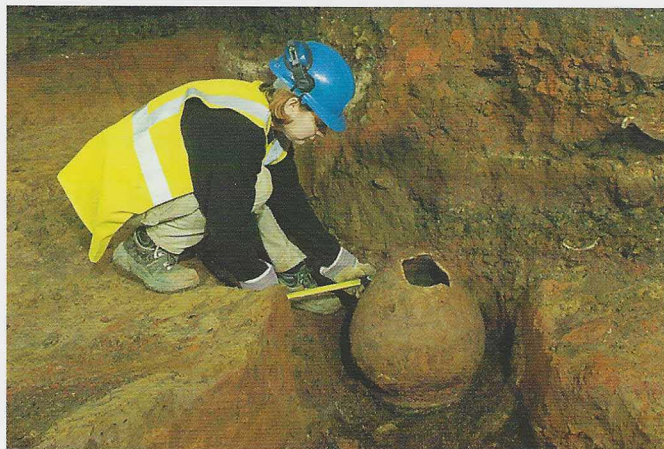
Giltspur Street, EC1, the truncated remains

of a substantial north–south chalk cellar wall, was thought to be the back wall of a range of cellared buildings that were built along Giltspur Street after the City ditch was infilled; the deliberate infilling took place in 1500–33 with dumps of soil mixed with cess and domestic rubbish.

The excavations at **Northgate House, Moorgate, EC2,** were proving to be of major importance. A series of Roman pits and two circular Roman pottery kilns, about 1.60m in diameter, were found. The heating chamber of one was partially filled with concrete from a 1930s' pile, which just clipped the edge of the kiln. Large quantities of pottery were recovered from associated pits. Two of the pits contained several intact or nearly intact vessels and wasters from the kilns. Both kilns were archaeomagnetically dated to AD 100–20 and AD 100–60 respectively for the last firing, dates which are corroborated by an initial examination of the pottery. A large, upturned, intact Roman pot blocked the flue of one of the kilns. To the west of the kilns was a gravel surface which may have been a path leading specifically to the kilns from a known road. A series of brickearth surfaces cut by postholes and a large number of stakeholes appeared to represent potters workshops, possibly for making and drying the pots.

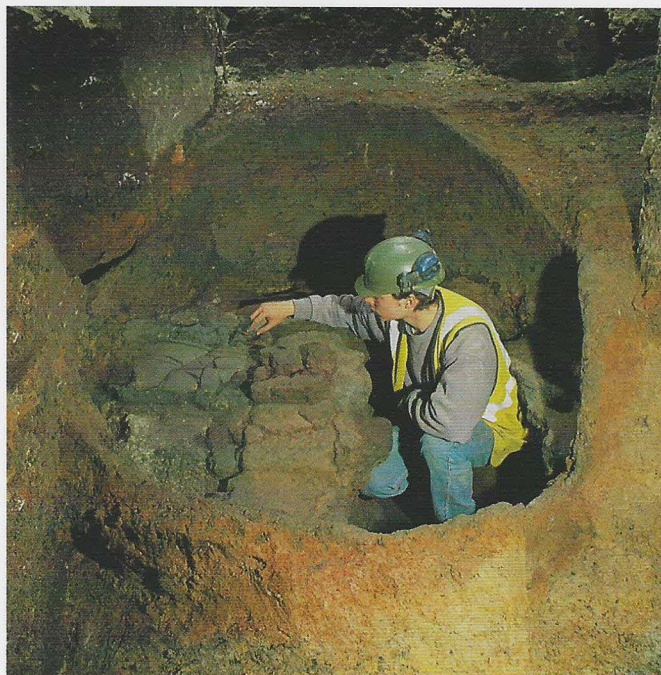
One of the kilns was cut into by a later, keyhole kiln more than 2.60m long with a heating chamber divided in two. The other kiln was cut into by a large feature subsequently filled with peat and sealed by dumps containing large quantities of pot. The dumps were cut by two smaller (0.60m square) kilns, which could only have made much smaller vessels. An archaeomagnetic date for one was AD 225–45.

Lesley O'Neil cleaning a large upturned amphora blocking the flue from one of the kilns at Northgate House



The natural ground level sloped off sharply to the east into a tributary of the Walbrook stream, which flowed approximately north–south. The Romans had terraced the area before building a wooden structure that projected into the stream. A cobbled surface was associated with the timber structure. A series of large posts was connected using horizontal planks. Whether these were for stabilising the ground, or whether they represent something more substantial, has not yet been determined.

Archaeologist Matt Williams revealing the sub-structure of one of the pottery kilns at Northgate House



Elsewhere in the City an excavation was carried out at **Atlantic House** (The Prudential Assurance Company Ltd). The site lies on the western bank of the Fleet, north of **Holborn Viaduct, EC1,** within the known limits of the western Roman cemetery, although no Roman deposits were found during the field evaluation. As excavation began across the site, evidence was recovered for extensive land reclamation that began shortly after the 11th-century Norman Conquest, although most of the layers dated from the 12th century onwards. Several cesspits were also excavated, one containing a complete 13th-century flagon.

As the excavations progressed, traces of Roman activity became clear: there had been extensive dumping in the 1st century to raise the ground level - presumably to allow use of the banks of the Fleet. Also revealed was a north–south aligned ditch – which possibly marked a boundary, early Roman quarry pits and, importantly, Roman cremations.

Excavations were conducted on both sides of the River Thames on Peter's Hill and in Bankside Gardens in

advance of the construction works for the **London Millennium Bridge** (London Borough of Southwark). This eagerly awaited footbridge linked St Paul's Cathedral and Bankside in spring 2000. The areas were fully excavated to the depth of the pile caps. Further trenches were dug covering the locations of the piles, leaving the remaining archaeology *in situ*.

The Southwark excavation revealed a series of well-preserved timber revetments and river walls dating from the 14th century up to the 1930s. Large fragments of a barge of a type illustrated in 18th-century riverscapes were discovered, reused in a revetment and associated dumps. Behind the revetments a vertical sequence of drains was recorded, including a hollowed-out log, a plank drain and arched brick culverts, testimony to centuries of water management.

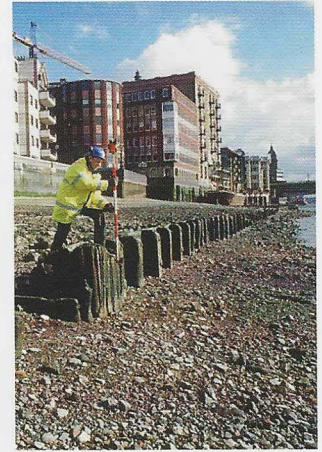
Excavations on the City bank uncovered a sequence of 13th- and 14th-century timber revetments and reclamation dumps, each one advancing in stages into the river, over a distance of 20m. A narrow inlet, that appeared to have originated with at least the earliest revetment phase, was retained and extended with each advance. In the mid-14th century the timber structures were replaced by a substantial masonry river wall which also lined the inlet. In the 15th century a dock was created with the addition of a wall built into the Thames. Eventually the narrow inlet became redundant and was filled with river silts and dumped material. It subsequently evolved into a lane, Boss Alley. Part of the City bridge abutment overlay the site of Trig Lane, excavated 1974-6; this provided a rare and welcome opportunity to assess the condition after reburial of previously exposed waterfront remains, which included similar medieval structures and revetments that gradually pushed the Thames waterfront to the south.

Finds from both sides of the Thames included fine medieval metalwork, metal cloth seals, large quantities of leather shoes, scabbards, clothing and accessories (some highly decorated), imported and domestic pottery and decorative tiles.

Bridging the Thames



The head of a 14th-century lead toy to go on a stick puppet



ABOVE Recording a Victorian barge bed on the Thames foreshore

RIGHT Massive oak base-plate for a 15th-century dock wall

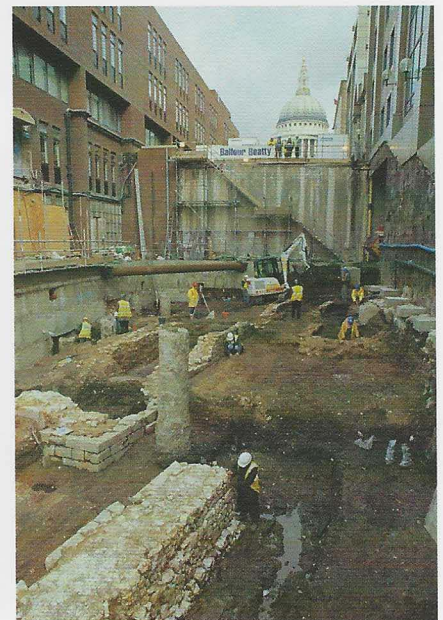


BELOW Ornate medieval horse harness pendant



BELOW LEFT MoLAS archaeologists maintaining a watching brief on foreshore during demolition of Bankside Power Station jetty

BELOW View of the City site looking up Boss Alley towards St Pauls



Following the field evaluation in
February at **More London Bridge,**

Tooley Street, SE1, the new Greater London Authority Headquarters,
the decision had been taken to excavate. Initial discoveries consisted
of post-medieval buildings that continued in date up to the 19th
century.

Southwark



LEFT **View across More London
Bridge towards Guy's Hospital**

ABOVE **Horse skeletons from an
18th-century pit (associated with
the tanning industry)**

An evaluation was carried out at the
East Marshalling Yards, Feltham,

Hounslow

Hounslow (The British Land Company Plc) to determine the nature or
extent of past human intervention and – in particular – to assess
whether the important prehistoric landscapes uncovered in the area
of Heathrow airport extended that far east.

Meanwhile in Greenwich, the
continuing watching brief at the

Greenwich

Dreadnought Hospital located burnt and worked prehistoric flints.
These were scattered pieces and cannot yet confirm a prehistoric
presence in the area. However, just to the south-east of the Pepys
Building in the (old) Royal Naval College (Rick Mather Architects, on
behalf of the Greenwich Foundation), in the sands beneath subsoils
containing Roman pottery, there were a number of cut features that
possibly indicate some activity here before the Roman period.

LEFT TOP **General view (looking east) of excavations at
More London Bridge revealing post-medieval buildings**

LEFT CENTRE **Dan Waterfall recording timbers which may
be part of a wheel-pit for a 16th-century tidal mill**

LEFT **Senior Archaeologist Dick Bluer recording a row
of driven stakes crossing a prehistoric stream which
flowed into the Thames (More London Bridge)**



A watching brief at the **Queen's House** (National Maritime Museum) provided much information on its foundations as well as revealing the original layout of the 'horseshoe stairs' at the north end. The Queen's House was designed by Inigo Jones for James I's wife Anne of Denmark (d. 1619), between the Palace of Placentia and Greenwich Park. It was later given to Charles I's wife Henrietta Maria, who made many visits to view the work in progress. It was the first Palladian-style villa in England and must have been seen then as startlingly original. During renovation work at the house, MoLAS was commissioned by English Heritage to undertake an extensive survey of the fabric of the original cellars. Research is continuing but this has already resulted in a greater understanding of its architectural importance and use throughout the 17th–19th centuries.

Traces of the eastern side of Friars Road, laid out in 1663, were revealed just to the north of the 19th-century Neptune Hall of the National Maritime Museum, complementing excavation of extensive stretches of its western side recorded in 1997. Late 17th- and early 18th-century foundations of the Greenwich Hospital buildings were also examined. The hospital was designed by Wren and his young assistant Hawksmoor on the site of the Palace of Placentia, demolished under Charles II; the hospital later became the Royal Naval College. On the south side of the Dreadnought Hospital, remains of 17th-century date were found: the retaining walls of Turnpin Lane and traces of houses known to have been in the area, including a school of 1677. There was extensive evidence for early 18th-century buildings near the Pepys Building, possibly part of a brewery on the site. Brick-lined culverts running south and east of this area were identified as 'beer pipes' from early plans. The foundations of the Dreadnought Hospital, built in 1763–9 as the infirmary to Greenwich Hospital, were also found with the original layout of its courtyard.



Excavation of a Romano-British brick clamp at Downs Road, Gravesend

On the **Channel Tunnel Rail Link** west of **Downs Road, Gravesend, Kent**, to the north

Kent

of the Hazells Road farm buildings, several Iron Age pits were revealed, one of which produced a rare imported Iron Age brooch from the La Tène culture dated to 400 BC. The most interesting pit in this group contained a large quantity of animal bone, among which a Late Bronze Age flint barbed and tanged arrowhead was found. Slightly to the west of the pit complex, a Romano-British brick clamp measuring 13m x 10m was uncovered. Archaeomagnetic dating placed it in the early–mid 3rd century AD.



Less than 100m to the east, archaeological features relating to agricultural practice dating from the Roman to the medieval period were uncovered. One of the most significant finds in this area was a flint cobbled road with wheel ruts, dating back to the Roman period, and continuing in use into the medieval period. Its alignment suggests a precursor to modern Downs Road, just to the east. East of the cobbled road, and perhaps the most significant feature on the site, were the remains of a 3rd-century AD Romano-British twin-celled chalk-built malting oven ('corn dryer'), measuring 7.30m x 4.87m, with a furnace on its south side. Two other malting ovens, constructed from clay, were archaeomagnetically dated to the 13th century. It seems likely that this area was a focus of agricultural activity from the prehistoric period onwards. The presence of the brick clamp suggests that a Romano-British villa lies in the area, possibly on the site of Hazells Farm.

Reflectorless EDM recording of basement vaults of the Queen's House, Greenwich



m a y

During May the MoLAS workload increased largely because of the opening of new areas at

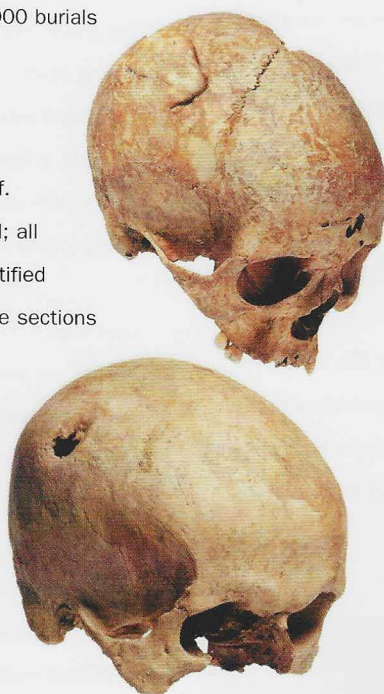
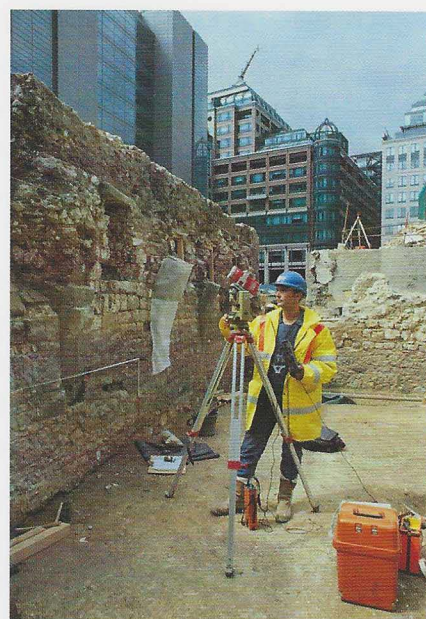
Spitalfields. By now there were 73 archaeologists and a team of 13 finds and environmental specialists from MoLSS, the Museum of London Specialist Services, on Spitalfields alone. The *Meet the Ancestors* crew from the BBC continued to film for a programme about the medieval cemetery; they chose to focus on a badly crippled adult interred in the late 13th century in a burial pit containing 22 skeletons. Other skeletons excavated included one injured by an axe or sword and one with two holes cut into its skull indicating that it had been trepanned: a surgical practice thought to be a cure for epilepsy. The man had survived the operation. One pit outside the cemetery contained a decayed but complete medieval window shutter reused as its base. Four more Roman skeletons were also dug.

In all areas of the site so far, an excavation total of 1000 burials was reached this month.

Recording the charnel house involved the skills and technologies of field, photography and geomatics staff. Much of the structure was hand-drawn and interpreted; all the faces of the building were photographed using rectified photography with precisely surveyed targets; and some sections were recorded using a reflectorless EDM (electronic distance measurement). This technique allows the recording of tall buildings where it is difficult to get a prism to reflect the beam back to the EDM. This would later enable the production of two- and three-dimensional drawings and photographic images of the standing building, as well as reconstructions based both on the *ex situ* stonework recovered and on other examples of charnel houses.

Medieval burials dug in Area 3 included a cluster of child burials around the pulpit cross and a tomb containing the skeleton of an adult with a papal bulla. A bulla is a large round lead seal that was attached by a thread to a document granted to an individual by the pope (in this case Pope Gregory XI, 1370–8) often as a dispensation for their charitable works. These were very impressive documents in medieval Europe, and seem to have been produced in huge numbers in the second half of the 14th century, as many seals of this date have been found in burials in London, including forgeries.

Tower Hamlets



The 16th- and 17th-century buildings in Area 4, some with cellars, were found fronting on to an earlier, narrower street which later became Spital Square. Excavation around the east end of the church found the rebuilt east wall and the robbed-out remains of its south and east walls. Next to it was a yard and the cellar of a 17th-century brick and stone house containing a double fireplace. Within the former area of the church, bedding trenches indicated that the area was used as a garden after the priory was dissolved.

Machine clearance in the area north of the Market (Area 5) also commenced in May, uncovering the 18th-century houses along Spital Square and the 17th-century houses alongside the narrower street beneath. A large quantity of delftware wall tiles in one building may once have decorated it. At the eastern end of the site lay high natural brickearth, the quarrying on either side of which created an earth bank around the medieval priory.

A papal bulla issued by
Pope Gregory XI
(1370–78) (obverse
and reverse)

OPPOSITE The interior of
the charnel house being
surveyed by Nick Soothill

BELOW The careful recording
of medieval skeletons at Spitalfields



General view of the final phase of
excavation at Northgate House

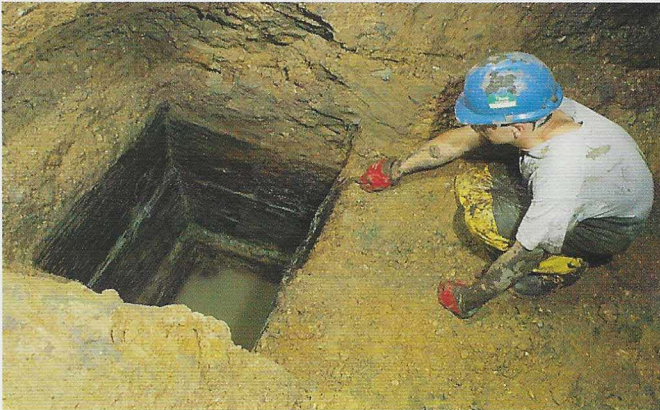


An evaluation at 62–64 Queen Street and
9–10 College Hill, EC4 (Starlight Investments

Ltd), encountered the fills of a possible palaeochannel at the base of the sequence. Later activity had removed or truncated many of the deposits, but there were medieval and early post-medieval features on the site, including pits, a masonry-lined well, and brick and chalk foundations.

The final phase of work at Northgate House, Moorgate, EC2, took place north of the main kiln complex discovered in April. This area consisted mainly of external dumping with some fragmentary gravel yard surfaces cut by two timber wells. One was square, while the base of the other was formed by a large barrel. This well was rich in Roman finds including several intact or mostly intact pots, presumably originating from the main kilns to the south, and leather and wooden objects.

Roman timber-lined well at
Northgate House being excavated
by archaeologist Jo Abrams



At the **Merrill Lynch Financial Centre, Giltspur Street, EC1**, work within the southern portion of the new basement concentrated on the excavation of the 13th- to 15th-century waterlogged silts of the City ditch. These deposits were very rich in finds, particularly leather (such as shoes, scabbards and belts). As the ditch silted up, a timber-revetted channel was dug into the silts. Work within the northern part of the new basement revealed a series of post-medieval cellars. Within one was an early 19th-century brick-built water tank, possibly for storing oysters, lined with reused 18th-century tin-glazed wall tiles. Many of the tiles were blue and white delftware, but there were a few examples of very rare Liverpool block-printed tiles dating from 1756–7.

Michaela Basford cleaning a Late Saxon wattle-lined pit at the Merrill Lynch Financial Centre site

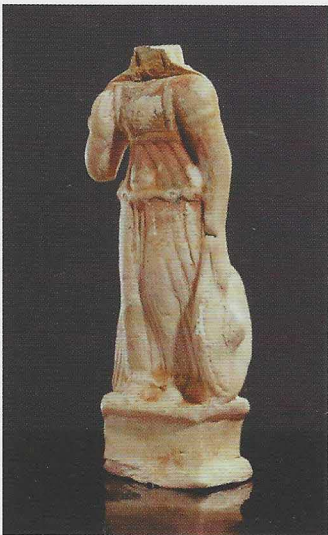


The continuing excavation at **Atlantic House, Holborn Viaduct, EC1**, uncovered a large area of surviving Roman burials: a total of 19 inhumations and 29 cremations, 22 of which were in urns. These are among the first burials to have been archaeologically recorded to the west of the River Fleet, although it was known that the cemetery area had extended across the river. The inhumations and cremations were mostly interred at the same time as each other – there was no evidence that any period favoured one rite. The cemetery spanned the entire Roman period, with the majority of the material dating to the 2nd century. Extremely rare and exciting finds were two extraordinarily well-preserved timber coffins which dated from the late 1st to early 2nd century and contained male skeletons. The waterlogged nature of the ground had preserved the timbers.



LEFT Liz Goodman and Norena Shopland of MoLSS lifting 18th-century tin-glazed wall tiles from a 19th-century water tank

Watching brief work within the existing double basement revealed more of the infilled early Roman stream channel recorded earlier in the year as well as an early Roman barrel-lined well packed with pottery, mostly Verulamium Region White ware flagons – a widely distributed ware made AD 50–160 at potteries in the area of St Albans. Other finds from the well included a delicate, pipeclay figurine of the goddess Minerva, only the second example of this type of figurine known from London.

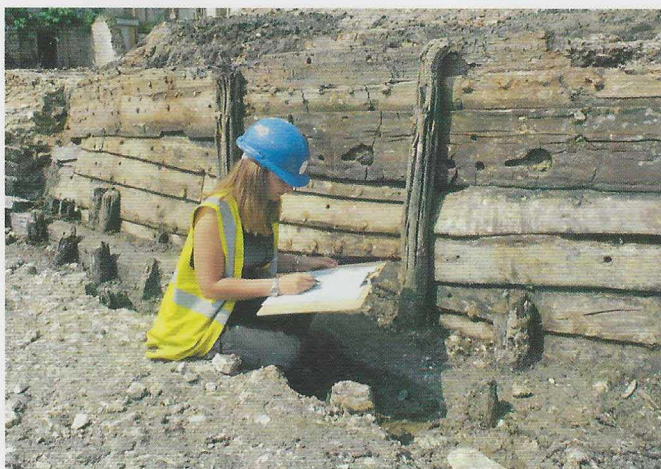
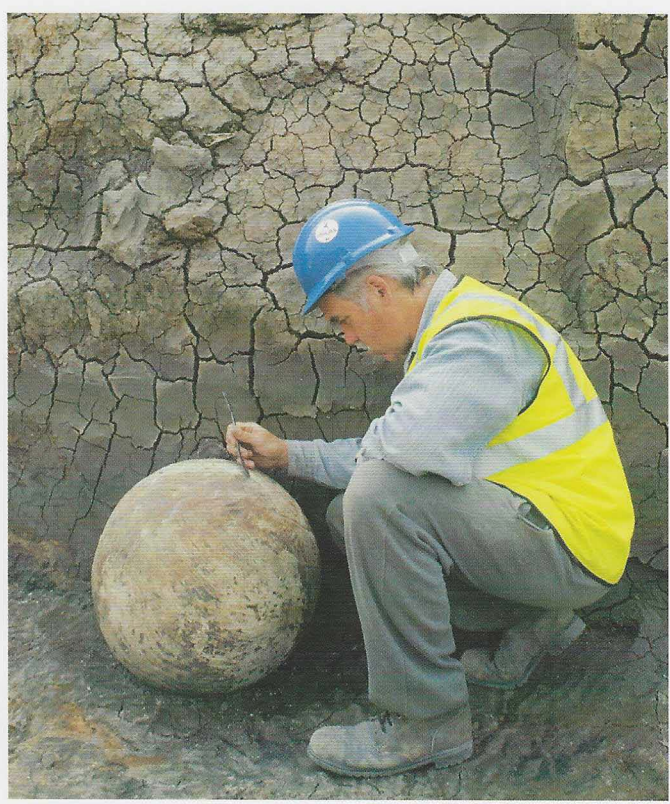
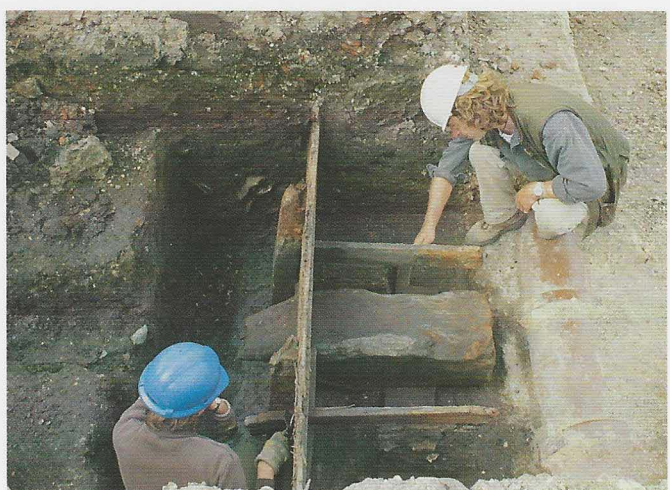


Senior Archaeologist Sadie Watson recording one of the burials at Atlantic House

At the **More London Bridge** **Southwark**

development in Southwark, **Tooley**

Street, SE1, a series of Tudor fish ponds was excavated. Most of the ponds were unlined, but on the western part of the site there were three linear chalk-lined ponds over 10m long and 1.50m deep. Behind the walls of one of these ponds an amazing discovery was made: the broken-up remains of a 13th- to 14th-century clinker-built galley, which would have been rowed by six men. The ship with its oar ports is the first example found in Britain on land, as it were, rather than in shipwrecks. The oak ship timbers were 5.5m long and over 1m high. One of the most important features of the ship was the survival of the top plank or 'gunwale', which was of beech. This particular timber contained three oar ports and cut-outs for the benches where the oarsmen sat. The ship showed signs of being repaired many times and at some point had been rebuilt with the addition of the 'gunwale' timber. It was possibly sold to a local mariner who cheaply repaired the ship until it decayed and was then reused as a revetment for one of the ponds. The extraordinarily rich – and well preserved – assemblage of artefacts recovered from the Tudor ponds included pieces of armour, chainmail, knight's spurs, bowling balls, leather saddle bags and about 500 leather shoes. The assemblage as a whole was as though everyday life in post-medieval Southwark had been captured and then revealed. And among the finds was a banana skin, the earliest to be recovered in this country, and an object which swiftly captured the public's imagination in widespread media coverage.



ABOVE **Archaeologist Hannah Padley** recording timbers of a 13th-century rowing galley reused as lining for a fish pond

RIGHT **A lead tankard from the excavations at London Bridge**



TOP **Neville Constantine and Caroline Chissell** excavating a timber-lined tanning pit and associated drain
ABOVE **A bombard shot made of Portland Stone** found in marshy ground opposite the Tower of London, and possibly fired as a practice shot from it in Tudor times

© The Daily Telegraph

Galley surfaces in Tudor fish ponds

Tudor banana skin trips up historians

By Nigel Reynolds, Arts Correspondent

THE discovery of the skin of Britain's oldest banana – about 500 years old and probably consumed during the reign of Henry VIII – has puzzled archaeologists because the exotic fruit was not commonly imported until the 18th century.

Staff from the Museum of London excavating a medieval site to the south of old London Bridge recently were

from a Tudor rubbish pit. It was found at the same level as other artefacts from around the 1480s and appears to be the remains of a late 15th or early 16th-century banana.

"This makes it the first heard about," said Simon Thorley, the director of the museum where the skin went on display yesterday.

accepted that bananas weren't imported to this country for about another 300 years, so it is an extraordinary find.

The six-inch-long blackened skin, peeled back into three segments, was ground.

The Southwark excavation has yielded some of the best domestic Tudor finds in the

ging out fish ponds abandoned and filled with a vast amount of Tudor detritus, including the banana skin.

"The banana is a real puzzle," Mr Thorley said. "Was one had managed to grow? Or have we got something here that was much more widely available? It may just be a freak find, or it may be that for the first time we have dis-

j u n e

During June MoLAS reached the peak of its work for the year, employing over 200 staff, 158 of whom were working in the field.

There were 108 staff at **Spitalfields** – the largest number to have worked at one time on a single

site in London, where remarkable discoveries continued. Two more Roman graves were excavated, one with another fine glass phial buried at the feet. The medieval burial pits were, by this time, becoming deeper and larger as they progressed eastwards, with substantial numbers of children buried in between the adults.

Tower Hamlets

In order to finish excavating the charnel house it was necessary to construct a conveyor belt to get the spoil out. During excavation, an area of charnel consisting of skulls, long bones and pelvises was found next to the stairs at the eastern end of the building. One skeleton was found to have a lead knee brace; another was that of a priest, buried with a pewter chalice and paten representing his Communion set. In the same area were four skeletons buried with their belt buckles. A second papal bulla, lying in the right palm of an individual, dated to the papacy of Innocent VI (1352–62).



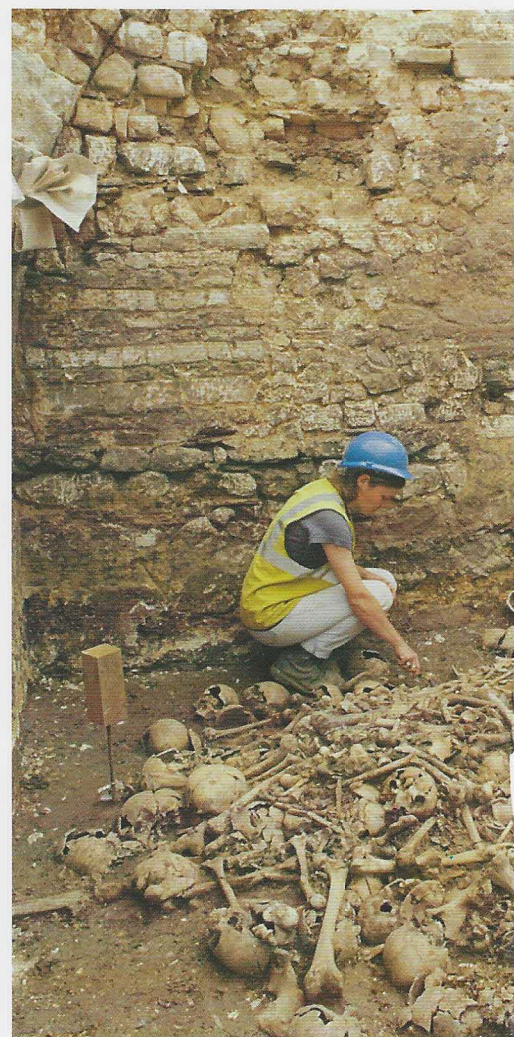
Immediately to the east of the church lay a stone building which had been partially truncated by the stone and brick cellar found in May. Outside this cellar the walls survived to a greater height and appeared to have an internal face laid in a chequer-board pattern of chalk and flint. It was added on to the east end of the 13th-century church and may have been the Lady Chapel.

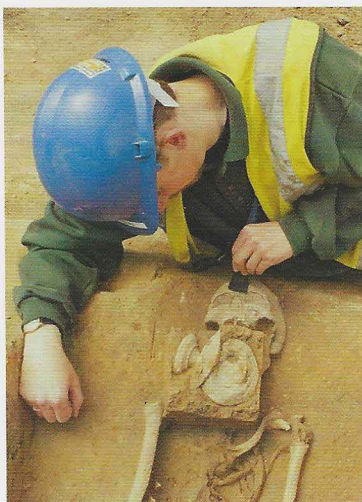
The ranges of the 16th- and 17th-century buildings with associated yards and gardens in Area 4 became clearer. The buildings were floored in plain tiles or brick, while the yards were laid in gravel.

The corresponding houses to the east in Area 5 contained brick-built cellars of numerous phases. One cesspit contained a gold ring with an inscription dating it to 1674. The southern end of a horncore-lined channel which was originally found in the Spitalfields Residential site was overlaid by a series of timber planks (presumably originally forming a floor over the channel) which had collapsed into it.



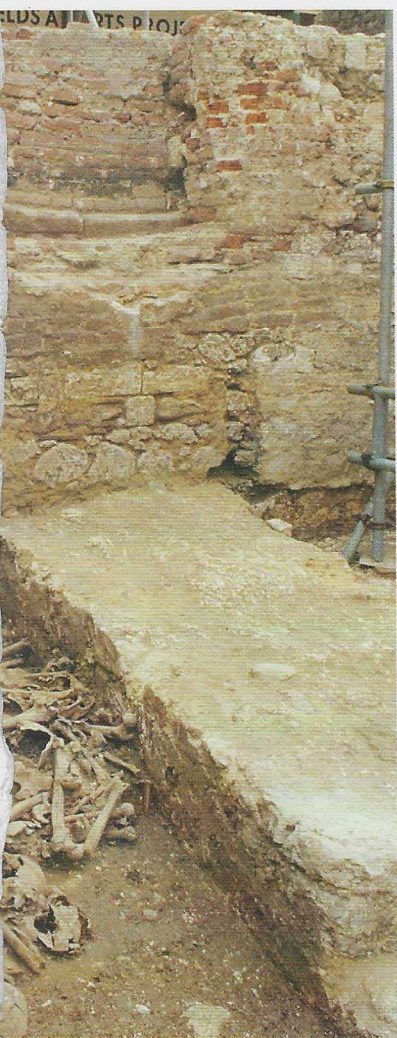
Archaeologist Val Griggs excavating a Roman grave containing another glass phial





Simon Holmes carefully cleaning the pewter chalice and paten buried with a priest at Spitalfields

BELOW Archaeologist Alison Telfer excavating human bones which had been stored in the charnel house



The furthest afield for MoLAS in 1999

was on the South China coast. MoLAS

had previously provided consultancy and training services for work

on the **West Rail project (Environmental Resources Management**

for Kowloon Canton Railway Corporation) and in 1999 provided a

team to carry out an evaluation of the area of the future **Kam Tin**

railway depot in the Kam Tin Valley, Hong Kong. A team of seven

staff worked with a Cantonese team of one archaeologist and six

students, introducing evaluation methodology new to the region and

acquiring skills in ceramic sequences from Hong Kong colleagues.

The earliest strata at the valley floor sites

were alluvial, consistent with the floodplain

of a meandering river. The earliest pottery

recovered from the alluvium was of Late

Bronze Age date (c 1500–221 BC). Later

elements of this sequence contained pottery

dating from the Northern and Southern Song

dynasties (AD 960–1125 and 1126–1279).

All the pottery had been redeposited, but

nonetheless indicated activity and perhaps

occupation in the Kam Tin Valley during

those periods. The sequence continued for

over 10m beneath the levels observed in

the evaluation trenches, and hand augering

below this did no more than examine the

latest levels. These deposits were overlaid

by features indicative of agricultural

activity during the Song to Yuan dynasties

(AD 960–1279 and 1280–1367). There was

no clear evidence for activity during the Ming

dynasty (AD 1368–1643), and the agricultural

features were sealed by subsoil containing

Qing dynasty (1644–1911) pottery and the

modern topsoil. Residues from bulk soil

samples are to be examined to attempt to

identify species associated with wet rice

agriculture. If it is possible to provide a date

for the introduction of this type of farming in

the valley it will provide important data to

supplement a somewhat meagre historical

record.

Hong Kong

MoLAS archaeologists

Lesley Dunwoodie and

Daniel Waterfall with Hong

Kong student Jimmy Lo

recording an evaluation

trench in the Kam Tin Valley



Work at the **Merrill Lynch Financial Centre, Giltspur Street, EC1**, concentrated on excavating the City ditch, and monitoring contractors' works which uncovered the rubble-filled cellars of the 1825 'Tudor style' Great Hall of Christ's Hospital school; the school was demolished during the 1907–9 redevelopment of the site, moving in 1902 to Horsham in West Sussex.

City

The excavation of the City ditch clearly showed that rather than a single ditch, the medieval ditch is actually made up of three. The earliest ditch was probably dug during the 11th century and backfilled when the area was reoccupied in the late 12th century. Broadly contemporary with the first phase of medieval ditch was another ditch, which ran southwards along the east side of Giltspur Street and into the 11th-century ditch. This second ditch appears to have been a drainage rather than a defensive ditch. The third and final phase of ditch is believed to be contemporary with the addition of the angle bastion to the City wall, and dates from the early 13th century. This phase of ditch remained in use until the mid 16th century, when it was infilled.

Following the evaluation in April, an excavation at **Feltham Marshalling Yards**

Hounslow

in Hounslow found the truncated remains of numerous postholes and small pits on the east side of the River Crane. There appeared to be three separate groups of activity on the site: a concentration of pits and postholes dating to 700–500 BC; a collection of postholes associated with three probable industrial features possibly dating to the Roman period; and an undated palisade (an enclosure) with several associated postholes. The discovery of Early Iron Age evidence here was rare and, interestingly the prehistoric material was found at the top of the slope, overlooking the Crane.

Senior Archaeologist Bob Cowie excavating the flue of a Middle-Saxon corn-drier at Feltham Marshalling Yards



Excavation at **London Bridge City, Tooley Street, SE1**, finished with a significant discovery in the form of a Roman revetment. A medieval chalk building with tiled hearths was also excavated.

Southwark



View of the double-ditch round barrow at Whitehill Road

On the **Channel Tunnel Rail Link at Whitehill Road**, adjacent to the disused

Kent

Gravesend Railway Line, north of Longfield, an interesting double ditch round barrow was located. The inner ditch was complete, measuring 11.40m in diameter, separated from the outer ditch by a 2m berm (raised bank). The outer ditch measured 17.30m in diameter but had been cut away on the western side by the 19th-century railway cutting. Within the barrow, on the southern side of the inner ditch, was the skeleton of a young woman in a crouched position. Around her neck



was strung an amber bead necklace, which represented the only dating evidence for the site. Similar burials elsewhere in the country have been dated to the Bronze Age, c 1800 BC.

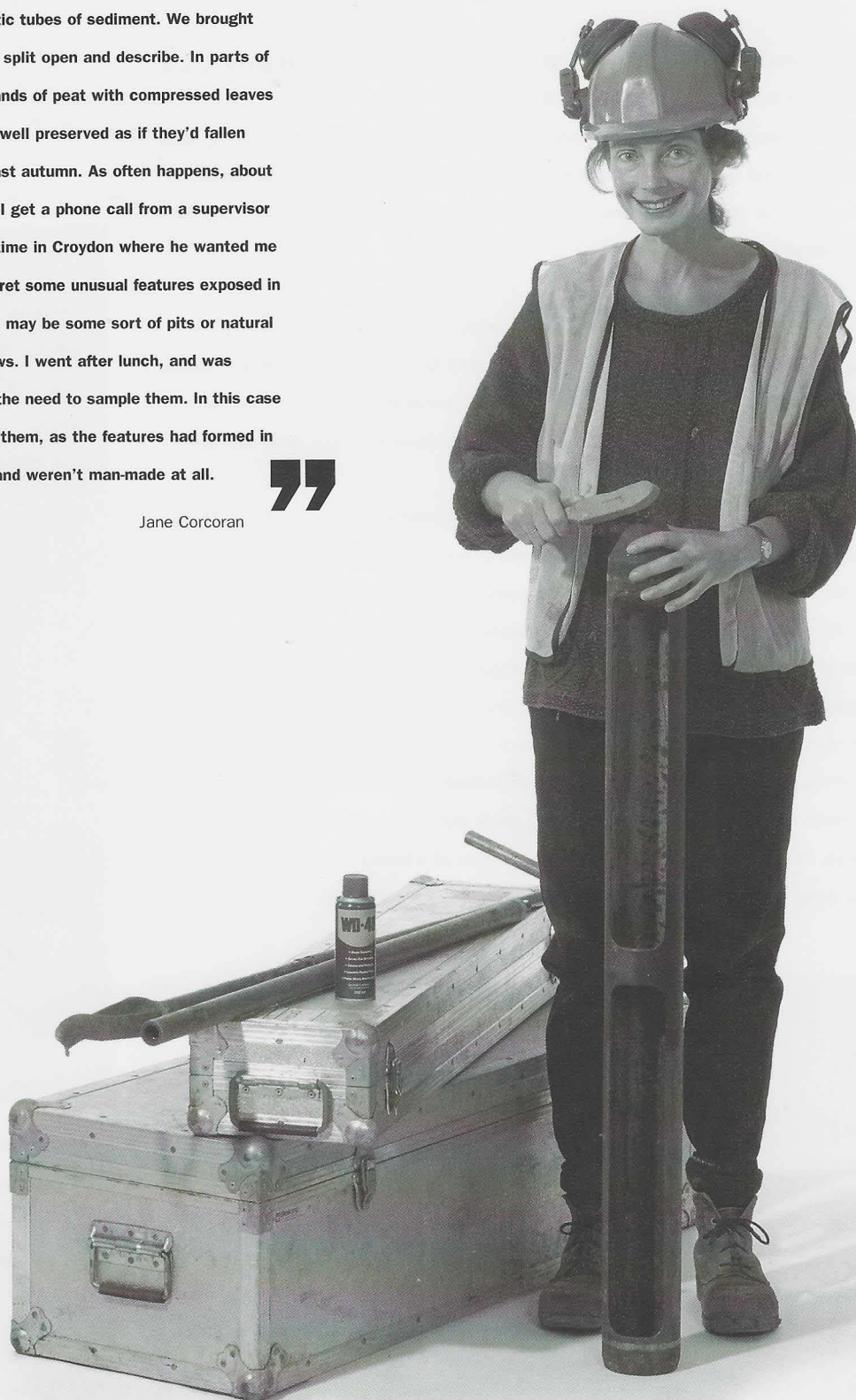


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My day usually starts in the office. Currently I am writing a report for a site by the river, where we had been out with the power auger, a few weeks ago. The archaeology was far too deep for it to be safe to dig with evaluation trenches so we sunk a line of boreholes through thick river mud, to cut out long plastic tubes of sediment. We brought them back to split open and describe. In parts of them were bands of peat with compressed leaves and twigs as well preserved as if they'd fallen from a tree last autumn. As often happens, about mid-morning, I get a phone call from a supervisor on site, this time in Croydon where he wanted me to help interpret some unusual features exposed in section. They may be some sort of pits or natural subsoil hollows. I went after lunch, and was prepared for the need to sample them. In this case I didn't need them, as the features had formed in the Ice Age and weren't man-made at all.

”

Jane Corcoran



j u l y

Over the summer MoLAS continued to have large-scale commitments and its largest excavation at

Tower Hamlets

Spitalfields still employed over 100 staff. Medieval burials were excavated at increasing rates there, with 3205 in total dug by the end of the month. A burial with two wounds to the head, possibly from a sword or axe, was recovered. Both wounds had healed, indicating that the person did not die immediately from the wounds.

Excavation in the charnel house was completed and scaffolding was built to make it safe. One pit dug during the lifetime of the cemetery was originally used for the disposal of kitchen refuse, and then used for burials while it was still open. Two more priest burials lay in the same row as that excavated last month. The chalices and patens were, however, more badly corroded.

Beneath the 16th- and 17th-century buildings in Area 4 lay a complex range of buildings which formed the canons' infirmary. There were at least three phases to this range. Later partition walls appear to have subdivided what seems to have originally been an L-shaped building dating to the early 15th century. Three of the later rooms contained hearths laid in pitched roof tiles. Of the original phase, the northern room had a rectangular arrangement of postholes around a hearth suggesting a large spit in a kitchen. To the south was an east-west building which was probably the canons' infirmary itself, and to the east was a third rectangular building with large hearths, outside which were pits filled with industrial pottery vessels and glass. The walls of these buildings were constructed from chalk and flint, and probably had timber superstructures. Beneath these buildings were the remains of a timber building next to the ditch that fed water into the reservoir, reported upon last year (MoLAS 99).



Aerial view of the 15th-century canon's infirmary and adjoining kitchen during excavation at Spitalfields



A view of the excavation of the medieval cemetery in Area 3 at Spitalfields. The scaffold roof protects the burials from exposure to the elements and public view



A carved animal's head, possibly from a doorway, found at Spitalfields

The Lady Chapel contained a robbed-out tomb, other graves and a heavily decayed wooden coffin. The well-preserved wall to the south of the Lady Chapel was probably a late medieval extension to the south aisle of the church. Limited excavation within the south-east corner of the dormitory range found a tile floor, although this was not the original floor. Further excavation in these areas was not carried out as they were to be preserved *in situ*.

Beneath the 16th- and 17th-century roads to the east were drains in timber and brick. The brick drain fed into a horncore-lined pit within a 17th-century brick barn or stable. In the houses to the east there were numerous phases of brick floors, and niches in the walls for candles. The next-door house and their common wall had large quantities of reused stone behind a brick facing. This was extremely high-quality stone, Perpendicular in style, dating to c 1400.

The Perpendicular style began in England in the early to mid 14th century and lasted for

about 200 years; the nave of Canterbury Cathedral is a characteristic example of Perpendicular at this time. The stone found at Spitalfields included column and window fragments, capitals and two unusual pieces. One is probably part of a capital and has red paint and gold leaf decoration, the other is the head of an animal that would have appeared on one side of a door. In the gardens behind the houses were bedding trenches for the growing of plants, and brick cesspits containing large quantities of finds, including north Italian imported pottery.

On the National Archaeology Days, 24 and 25 July, the site was opened to the public and staffed by members of MoLAS and MoLSS. The public were given guided tours of the site, saw the visitor centre and looked at displays of finds, environmental and osteological material. A total of 3550 people visited the site during those two days.

Brick walls and floors of a cellared house dating from about 1600. The niche may have been for candles (Spitalfields)



Part of a red and gold capital, dating to about 1400, found at Spitalfields



At **40–43 Bow Lane and 67–71 Watling**

City

Street, EC4 (Southern Properties Group), the

excavation of several pile positions was carried out prior to engineering work. Deposits had been truncated by basements down to Roman levels. Four trenches were investigated, revealing a sequence of several phases of clay and timber structures with associated occupation debris, sealed beneath a large layer of burnt material which was provisionally interpreted as representing the Hadrianic fire of London in the early 2nd century. One Roman ragstone wall was also found. In addition there were some medieval levelling deposits, pits and wall foundations, cutting into the Roman stratigraphy.

This month saw the completion of the first five phases of archaeological work within the west yard of the **Merrill Lynch Financial Centre, Giltspur Street, EC1**. More rubble-filled cellars of the Great Hall of Christ's Hospital were recorded, and excavation of the medieval City ditch produced large quantities of finds, including 14th-century pottery, a horse skeleton, fragments of stone mortars, lava quern stones, wooden bowls and platters. Leather finds from the ditch silts were numerous, including more shoes, offcuts, fragments of a belt and horse harness, a large portion of a tarpaulin or blanket and four more knife scabbards. Many of the timber piles found in the 15th-century channel, which replaced the ditch, were reused from a timber-framed building which had been damaged by fire.

On the east side of London, in the Borough of Havering, at the **Lessa**

Havering

Sports Ground, Rainham (Barratt Homes East London), an excavation was undertaken prior to the construction of a large housing development. The evaluation was reported upon last year (MoLAS 99). This provided an opportunity for MoLAS to look at another important prehistoric landscape, this time to the east of London. Such landscapes also have the potential for allowing us to understand the transitions between the prehistoric and Roman periods, and the Roman and Saxon periods (5th/6th centuries AD), about which so little is known. The archaeological remains consisted of features cutting natural gravels, the contemporary ground surface having been dug over by cultivation. Residual prehistoric Corded ware, and also pottery possibly dating to the Late Iron Age (1st century BC/1st century AD), were recovered. Corded ware pottery was made in many parts of Europe in the 3rd millennium BC, and its presence here could indicate

prehistoric activity disturbed by later land use. Roman and medieval field systems (some possibly starting in the Late Iron Age) were found, together with rubbish pits and postholes. The bulk of the finds was from the Roman/Saxon transition. One rubbish pit with Roman and Early Saxon pottery also contained a complete antler.



Archaeological evaluation
at Rainham

Members of the geomatics team carried out survey work in Romania.

Romania

Working with the Universitatea Babeş-Bolyai, Cluj, and the Winkelmann Institute of the Humboldt Universität zu Berlin, a survey was carried out on the Roman town of Sarmizegetusa in west Romania, founded by the Emperor Trajan (AD 98–117) after his conquest of Dacia. The aim was to provide a survey network of the town. This was of importance for a number of reasons. Firstly, it would help ensure that the work carried out by an international body of researchers over more than a century could be united and accurately related to each other in a single coordinate system. Secondly, any new work could be similarly articulated. Thirdly, it would provide measured surveys of the major public buildings within the city to act as a reference and check upon existing paper plans.



“

I'm currently working with a number of other people on the post excavation analysis of the Spitalfields excavations. We often get asked what happens after the site work has finished. The answer I usually give is that it wouldn't be much use to anyone if all we did was produce a list of the information we'd collected on site: around 30,000 context description sheets in 100 files, several thousand CAD drawings on computer, a few thousand digital photographs and last but not least, over 8500 human skeletons. My job is to go through the paper and computer records and sort them out into chronological order. Once we've come up with a basic story of what happened on the site over time, other specialists can do their work and put some life into the story by answering the interesting questions: how did the people buried in the cemetery live and die? What were they eating? What did the monastery buildings look like?

”

Nick Holder



august

MoLAS continued to be busy during August. At

Tower Hamlets

Spitalfields the excavation of burials continued at

a very high rate, with a total of over 4600 burials dug by the end of the month. The density of burials became greater as excavation proceeded eastwards and the roof covering was removed to allow the areas under the towers supporting it to be excavated. The remains of a fourth priest with chalice and paten were found in the north-west corner close to the church. A third burial with a papal bulla was excavated to the west of the charnel house, and a burial laid in charcoal was found at the north end of the area. Charcoal was probably used for preservation of the body and is quite common in early medieval burials, but this was the only one found at Spitalfields. Just to the south of this were two medieval lead coffins, indicating high-status burials. Both coffins had been squashed by the weight of soil from above. A new burial ritual on this site was also noted of burying skeletons in single stacks of up to eleven.

Area 4 was completed this month. Dividing the area was a 13th-century east-west aligned ditch about 2m deep and 4m wide. After the ditch was infilled, burials were interred there, but were not found north of the ditch, except immediately adjacent to the church. Thirteen Roman burials included one aligned north-south, and one buried with a decorated bone pin and pottery. These were cutting a number of early Roman ditches that formed field boundaries.

The remaining brick and stone buildings further east were removed, recovering more decorated stone including one with the top of a highly carved niche. Beneath the road layers were large pits and extensive layers of dumped material which had levelled up the ground in the mid 16th century. Beneath these were medieval burials and the large ditch (see above) which extended through from the west. The deposits in the gardens behind the buildings were cut by more bedding trenches, rubbish pits and barrel-wells.

MoLAS surveyors Kate Pollard and Duncan Lees preparing the charnel house for photographic survey



View looking south across the Spitalfields excavation – a 13th-century ditch crosses the foreground, with medieval burials and the charnel house to the south



Work at the **Merrill Lynch Financial Centre, Giltspur Street, EC1**, consisted of watching

brief work on two sewer headings, plus a third phase of evaluation at Greyfriars. Monitoring of the sewer heading along the Giltspur Street frontage revealed a further 6.7m of the medieval City ditch. This discovery confirmed that medieval Giltspur Street was a narrow lane, jammed between the western edge of the City ditch and the eastern end of the church of St Sepulchre (in existence by 1137, rebuilt mid 15th century and after the Great Fire). Monitoring of the sewer heading at 116–117 Newgate Street revealed a series of gravel bands, interpreted as part of the early Roman road through Newgate that led to Silchester and the west.

City

Work on the **Channel Tunnel Rail Link**

was carried out in the area of the

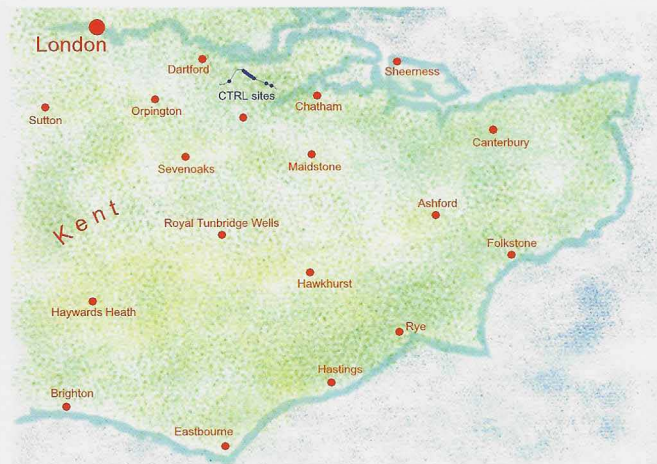
Henhurst Road Mainline Cut at Singlewell, and also at **Scotland Lane/Ashenbank Wood**. Here, a scrub area to the north of the haul road was cleared in order to locate St Thomas' Well which reputedly dates to the medieval period, although only the documented rebuilding, consisting of 18th-century brickwork, was seen. This well was known to have existed adjacent to a tree (the remains of which stand today) just south of the road. The well was located and was capped with a concrete slab.

Kent

Between June and August, a significant discovery was made at **Singlewell** when a number of large sarsen stones, possibly the remains of a Neolithic monument, were uncovered. Sarsen stone is a very hard sandstone which was used at the henge monuments of

Stonehenge and Avebury. Some of these Singlewell stones were associated with patches of burnt material that contained medieval pottery. Some stone monuments are known to have been destroyed by fire and water in the medieval period because they were pagan in origin.

Map showing the CTRL sites in Kent



Further afield, members of the geomatics

team carried out more survey work in

Romania, this time at Alba Iulia, a town founded by the Romans in the 2nd century AD, about 100km north-east of Sarmizegetusa. This work was again in association with the Universitatea Babeş-Bolyai, Cluj, and the Winkelmann Institut of the Humboldt Universität zu Berlin, as well as with Birkbeck College, University of London. The survey located the excavations and geophysical investigation on the

Romania

Excavation in progress at the Liber Pater Sanctuary, Alba Iulia Romania



site of Roman Appulum, the largest Roman town in Dacia. This survey followed on from the previous year's work on the site where a survey control network had been installed, monumented and documented to support the five-year-long project. As part-excavation and part-training project, MoLAS surveyors were also involved in teaching field-survey techniques.



September

Excavations began on a number of new sites in September, while the high level of work continued

Tower Hamlets

at **Spitalfields**. Overall a total of 6475 burials were excavated by the end of this month, which meant that 1800 were excavated in September alone. Two more Roman burials were found along with many hundreds more medieval burials, including some which even survived beneath the concrete foundations of Victorian buildings. The foundations themselves contained large quantities of human bone which had been disturbed during their construction. Interesting pathologies (evidence of disease) appeared in the skeletal assemblage, including 19 cases of tuberculosis and nine cases of syphilis, as well as a large number of fractures and dislocations.

Beneath the medieval cemetery lay a timber-lined Roman well. It contained large fragments of a mortarium (a mixing dish), amphorae (tall jars that often contained wine or oil) and samian pottery (superior tableware), all dating to the late 1st or early 2nd century. In addition the well contained a large number of fragments of painted wall plaster.

The burials on the eastern side of the precinct lay to the south of the ditch that ran east-west across the site, or cut into it. A fourth skeleton was found buried with a papal bulla. The ditch that ran through both areas joined another ditch aligned north-south at the base of the bank around the priory precinct. To the north of the cemetery lay the shallow foundations of a 15th-century rectangular building which would probably have been timber-framed. Around it were a large number of late medieval refuse or rubbish pits.

On Sunday 26 September the Spitalfields Archaeology Centre was closed. A phenomenal total of 27,071 people visited the centre during the 23 weeks that it was open. This shows how the public are interested and excited by seeing archaeology as it happens.



Work at the Merrill Lynch Financial Centre

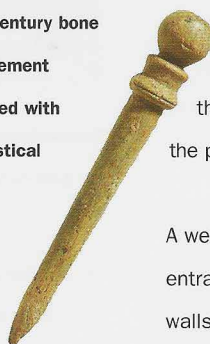
consisted of the evaluation of the area

adjoining the north-east corner of **114–115 Newgate Street, EC1**. This revealed the remains of the infilled, brick-built cellars of the lodge flanking the western entrance of Christ's Hospital and the 17th-century cellared buildings beneath.

City

Major redevelopment at the Guildhall began in 1987 and on this important site – where London's Guildhall has stood since at least the 13th century – a series of excavations has taken place, stretching over 12 years. London's Roman amphitheatre was identified for the first time in the first year of MoLAS's excavation. The latest works at **Guildhall Yard, EC2** (Corporation of London), were brought about by the installation of subsurface security bollards across the south entrance into the Yard from Gresham Street. These works should

RIGHT **A 13th- or 14th-century bone stylus – a writing implement usually found associated with scholastic or ecclesiastical establishments – was discovered during the Guildhall Yard excavation work**



represent the last of this long-running series of excavations. It was expected that, as well as supplementing information from the earlier excavations, important new clues might be recovered on the postulated southern entrance way into the amphitheatre.

A well-preserved sequence of metalled surfaces forming the main entrance way into the medieval Guildhall Yard was bounded by two walls which determined the full width of the entrance. The wall to the west formed a southward continuation of the precinct wall, which

formed the west side of Guildhall Yard from the 14th century. Parallel to this wall on the east side of the entrance was a cellared building which was probably destroyed in the Great Fire.

15th-century documentary sources and 16th-century maps show that there was along the east side of St Lawrence Jewry. The partial plan of two of the inner gateways was exposed in a second area to the north of the main trench. The earliest gateway, which may have been built as early as the 13th century, comprised two opposing piers which would originally have supported the arched superstructure of the gate. The front elevation and internal splays of the gate were neatly finished with dressed Caen stone.

This gateway was then largely

Recording the 14th- and 15th-century phases of the gateway into Guildhall Yard



demolished and a blocking wall built between the reduced piers of the early gate. It is assumed that this was in part necessitated by the continuous raising of the surface of the Guildhall Yard during the 14th century, and it was probably associated with rebuilding works during the 15th century. The gatehouse did, however, continue in use, albeit in a substantially rebuilt form.

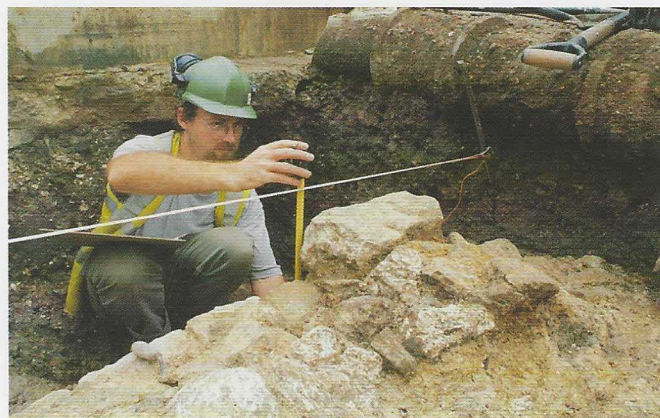


The earliest medieval deposits recorded in the main trench comprised a series of metallised surfaces, possibly of the 11th century, from a narrow (north–south) lane which predated the masonry buildings, and which was in essence the forerunner of the later Guildhall Yard.

One of the most intriguing aspects of the medieval gateway is that it lies directly over the projected ellipse of the arena wall, and in the area of the conjectured southern entrance into the amphitheatre. This is unlikely to have been just coincidence, and may suggest that the siting of the later gateway was dictated by the position of the amphitheatre entrance. In order to determine if there was a southern entrance into the amphitheatre, a narrow trench was dug to the top of the Roman amphitheatre bank. Cut into the lower levels of the dark earth deposits was a single inhumation on a north-west to south-east alignment. This burial must date to either the late Roman or Early Saxon period. Similar burials were found cut into the southern bank of the amphitheatre in 1993. The grave lay immediately to the west of a partially robbed (north–south) Roman masonry wall. Although the wall had been substantially truncated along its length by a modern sewer, its east face did survive. This wall seems to prove the existence of an entrance way on the south side of the amphitheatre, and it may represent one of two angled vaulted passages passing through and under the seating bank of the amphitheatre to the exterior. A stretch of Roman wall discovered in 1985 may be the remains of the wall that flanked the other side of the entrance way.

Out at Harold Hill, Havering, an earthwork survey carried out by members of the geomatics team recorded four transects across **Dagnam Park** moat (London Borough of Havering) and succeeded in gauging the depth of sediment build-up in it. An estimate was made of the quantity of silt present in the northern arm of the moat, from statistics generated by the three-dimensionally recorded survey data. The average silt thickness has been calculated to help guide the proposed conservation works in the moat habitat of the great crested newts.

Continuing work at **Singlewell** uncovered a burnt feature and two pits. The larger pit contained a quantity of Bronze Age pottery, while the other produced bone and worked flint, but no pottery, although it is assumed that it is also prehistoric in date.



Archaeologist John Minkin recording the east pier of the 14th-century phase of gateway into Guildhall Yard

An excavation at **6–9 Briset Street** and **12–13 St John's Square, Clerkenwell** in

Islington

Islington (Bee Bee Developments) lay within the precinct of the Priory of the Knights of St John of Jerusalem. This was the English headquarters of the Hospitallers, the military order of friars who rivalled the Templars in their eagerness to serve God with their swords. Founded in 1144, this priory provided money and recruits for the crusaders in the Holy Land. The land was given to them by a Norman knight – Jordan de Briset. Projection of the alignments of the inner precinct wall suggested that its south-west corner might lie on the eastern site perimeter, but a trench did not reveal it. However, there was a substantial medieval wall running east–west across the centre of the site, which survived in places to 1.1m above foundation level with an internal brickearth floor to its north. This building may be the Great Barn of the priory, known to be in this general vicinity. Its north wall was entirely removed during the construction of two 16th-century brick-built cellars whose facing incorporated some ashlar blocks probably derived from the barn.

General view of early 17th-century brick-built cellars and cesspits at 12–13 St John's Square



“

A typical day starts with a finds review. This involves examining all the artefacts from a particular project with the finds specialists and deciding which are to be illustrated. I take notes on each piece, especially on any important or diagnostic features which need to be emphasised in the drawings. Afterwards, I try to arrange a convenient time to visit the Museum to draw a Tudor leather glove in the conservation lab. A large amphora with painted inscription is awaiting drawing, so, after lunch, I take a trolley to collect it from the photography department, then I try to track down an image of a Hebridean four-horned sheep of which an illustration is needed for a forthcoming 'popular' volume. As I'm not sure what one of these looks like, I need a reference. Finally, at the end of the day I start drawing the Roman pottery from one of the City sites. Much of it is in the form of small sherds, but there are also several beautiful almost complete decorated vessels. There are quite a few boxes of this to be illustrated, plenty for tomorrow.

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Faith Pewtress



o c t o b e r

MoLAS continued to work on a wide variety of projects right across London, but this month

Tower Hamlets

work in **Spitalfields** began to draw to a close. All but the final area (Area 5) were completed in October, leaving only the cemetery to finish. Burial pits were found cutting into the ditch and to the south of it, and the ditch itself was fully excavated and sampled.

Large numbers of medieval skeletons were recorded. But one of the finest assemblages of finds came from a Roman burial and included glass objects and pottery. A circular vessel with copper fittings was also found, containing shale bracelets and a necklace of jet beads.

Preservation works were carried out. The charnel house was encased in bubble wrap to keep out frost while its future was decided. At the same time the walls of the church were encased in a weak concrete which would provide protection from the nearby piling but would also allow their re-excavation at some time in the future. A sewer diversion hole inside a truncated area of the church revealed little medieval stratigraphy but did contain the remains of two further Roman burials.

Archaeologist Val Griggs holding a 'Trier' pot recovered from a Roman burial at Spitalfields. A buttress of the medieval charnel house lies in the background



© The Sunday Express

Face of fourth century is unveiled

SCIENTISTS RECREATE THE FACE OF LONDON'S 1,700-YEAR-OLD 'TARA'

The Roman It girl

© The Eastern Daily Press

Meanwhile media interest in Spitalfields continued as the BBC programme 'Meet the Ancestors' worked on reconstructing the head of the woman from the sarcophagus

Work continued at the **Merrill Lynch Financial Centre, Newgate Street, EC1,**

City

with the recording of a sewer heading under the King Edward Street frontage. This revealed waterlain medieval ditch silts cut by an east-west drainage channel dug during the 15th or early 16th century. This channel was replaced in the late 16th century by a brick-built culvert.

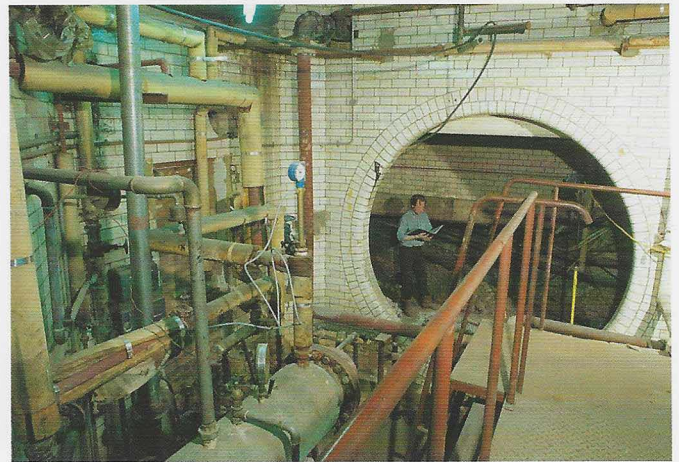
Two small trenches were also dug as potential pile positions at 114–115 Newgate Street. The first was dug inside the basement of the standing building and revealed a sequence of early Roman floors and brickearth levelling dumps, interleaved with layers of mud and organic rubbish. The second, dug to the north-east of the standing building, revealed a series of ditches or water channels, all aligned north-south, dating from the Roman, Saxo-Norman and late medieval periods. This suggests long-term water management connected with the adjoining natural stream channel known as the Western stream.



Levering the power auger out of the ground at Newgate Street

An excavation at Premier Place (the former telephone exchange), **Houndsditch, 21–22 Devonshire Square, EC3** (Buro 4 Project Services for 21–22 Devonshire Square General Partner Ltd), recovered a sequence of post-medieval and medieval features. The site lay outside the historic City walls and ditch on land used for gardens by Holy Trinity Priory Aldgate in the medieval period. This was the largest of the three Augustinian houses in London, founded in 1108 by Henry I's wife, Matilda of Scotland.

The Drill Hall, which started life as a rag market or 'clothes exchange' in the mid- 19th century, was recorded before demolition. Beneath this was a series of round red brick wells constructed during the 17th or 18th century, and 19th-century cellars on the Houndsditch frontage overlying Tudor cesspits. During the medieval period there were extensive quarry pits and a series of round pits. Also excavated was a medieval barrel-well consisting of a series of barrels placed end to end with the tops and bottoms knocked out.



Evaluating one of the test pits in the basement of St Barts

An evaluation of the **Horder Wing, St Bartholomew's Hospital, EC1** (NHS Royal Hospitals Trust), revealed Roman stratigraphy overlying the natural gravels. The Roman deposits were all external; the area lies within a Roman cemetery.

A more unusual piece of work was the year-long programme of

Hounslow

bimonthly visits to survey a portion of **Chiswick Eyot** (the Environment Agency), just upriver from Hammersmith Bridge, at threat from ongoing erosion accelerated by the presence of mitten crabs. These green crabs were introduced into Europe from Asia and can be a pest. The aim was to survey precisely the same 30m portion of the islet bank to provide data on the rate of erosion and the seasonality of the creatures and their burrowing activity. These data enable volume calculations to be made and three-dimensional images to be created to display the erosion occurring. This work has a non-archaeological basis but allows us to use the advanced technological methods that we have perfected on areas where archaeological deposits are under threat.

An excavation at **89–97 St John Street, Islington EC1** (The Order of St John), within the precincts of the Priory of St John of Jerusalem, took place south-east of the inner gatehouse. One trench was excavated in a part of the site which had not been disturbed by modern basements. Natural gravel was sealed by reworked soil horizons of medieval date, containing finds including a papal bulla of Innocent III (1198–1216). Innocent was one of the most powerful and ablest of medieval popes, who quarrelled with King John, excommunicated him, and put England under an interdict for six years – that is, a general strike of the clergy. But later they became allies and Innocent declared Magna Carta null and void.

Cutting the medieval soil horizons was an east–west ditch, which probably represents an early subdivision of the area. At the eastern end of the trench was an area of intensive pitting, probably dating to the 13th–15th centuries. Some of the pits were partially removed by the construction of the stone foundations and cellars of buildings fronting on to St John Street. These are likely to date from the late 15th or early 16th century when the priory began to lease some areas for development. One of the cellars may have been used as a garderobe pit (toilet), although it was subsequently extended and provided with a brick floor.

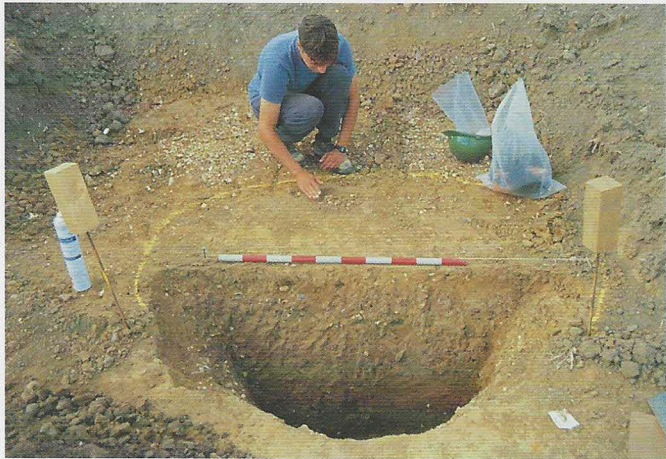
In the central and western parts of the trench any earlier remains which might have existed were removed in the 17th century by the construction of the brick-built foundations and cellars of a building fronting on to St John's Lane. Two brick-lined cesspits located in an open area to the east of the building were in use in the mid- to late 17th century. The cellars were modified and extended several times, and were still in use as late as the 1880s, when the building was demolished.



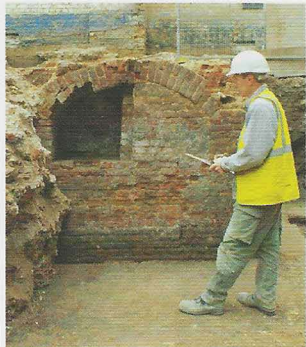
General view of medieval and later features on the site of the Priory of St John of Jerusalem



A watching brief and excavation at **Home Farm, Harmondsworth** (SITA), was carried out in the area of a feature found during a previous evaluation. The excavation suggested that ploughing had removed all but the deepest features, but numerous east–west aligned field drains, as well as some later north–south aligned ones, were found. Two postholes, a small pit and a possible plough mark, all undated, were also recorded.



TOP General view across the Home Farm site at Harmondsworth during the evaluation
ABOVE Archaeologist Matt Williams excavating a large middle Bronze age pit at Harmondsworth



Senior Archaeologist Kieron Heard recording part of a stone wall associated with the Great Barn of the Hospitaller priory of St John



“

It's very hard to describe a typical day as a MoLAS Project Manager – the only common factor seems to be the wide variety of projects and design teams that I come into contact with. At any one time I will probably be managing between 20–30 live projects, mostly in the City of London, all at different stages of the archaeological process. An example of a 'typical' 1999 day for me (picked at random from my diary) starts at 8.30am with a site visit to the Millennium Bridge excavations, to check on progress and discuss the temporary exhibition in the City of London Boy's School. Then back to the office to make some calls to the evaluation team in Hong Kong, as they recover from the heat at the end of their day. I then have half an hour to finish a desk-top assessment report and send it to the printers, before running off to look at evaluation pits in Bow Lane, with the client and their engineers. 11.30 is the regular site meeting at Northgate House. We discuss the programme and proposals for the excavation and sampling of the Roman pottery kilns. The afternoon quietens down a bit, with a chance to read a post-excavation assessment report, in between carrying out staff appraisals. As the phone stops ringing, I try to catch up on paperwork, including ordering finds assessment work from our colleagues at MoLSS. The day ends with a late call from an architect who wants to discuss the archaeological issues on a potential development site. And the next day in my diary – it's completely different...

”

Sophie Jackson

n o v e m b e r

Excavations at **Spitalfields** were finally completed

in November and as a result MoLAS's level of

fieldwork reduced. The last two weeks at the site involved excavating the second sewer diversion hole inside the church and excavating the last burials at the eastern end of the site, including one long trench in the middle of this area which was filled with more skeletons.

Work in the sewer hole in the church indicated that there were two periods of extension to the church. The first formed a new east wall which was subsequently cut down to foundation level and was cut into by later graves. The second east wall survived up to modern ground level and was preserved *in situ*. These formed extensions to the south aisle of the church. The latest extension seemed to be a chapel with only children buried in it. Beneath this chapel was the ditch previously recorded to the west. At the base of the sequence lay a Roman burial with an intact pot containing the complete skeleton of a chicken.

Tower Hamlets

At Spitalfields we finished with . . .

more than 8500 skeletons excavated

27,000 separate contexts recorded

5 miles of context sheets (if laid end to end!)

more than 3,000 accessioned finds

almost 600 fragments of moulded stone

over 500 boxes of pottery

An evaluation at **138–141 Middlesex Street, E1** (Freshwater Property Management), focused on two areas of research: Roman burials and the Elizabethan Boar's Head playhouse. The Boar's Head was an inn converted to a playhouse around 1598, and occupied by the Earl of Derby's men. It is a potentially important site for the history and development of the theatre. Two cellars were recorded in Trench 2, one constructed from chalk blocks and dating to the medieval period and one, to the west, possibly dating to the 17th century. Trench 3 had been largely truncated by modern and Victorian basements and services, although a brick wall, possibly dating to the 17th century, was found at the eastern end overlying a 16th-century brick wall. In the south-west part of the trench, a 17th-century L-shaped brick wall was recorded below the concrete floor of a Victorian light-well. Some of these brick walls could represent properties to the east and south of the entrances to the Boar's Head Yard from Whitechapel High Street and Middlesex Street.



Alison Telfer recording the medieval
and Tudor cellared buildings at
138–141 Middlesex Street

The fourth sewer heading that was being
tunnelled under the north side of

City

Newgate Street, EC1, was recorded at the **Merrill Lynch Financial Centre**. The northern portion of the heading was largely occupied by late 19th-century coal vaults which extend under the modern pavement. Below these vaults were traces of a 17th-century brick-lined cesspit. To the south of the vaults were the brick foundations marking the line of the early 19th-century street frontage. South of these foundations was a series of intercutting rubbish pits, mostly Roman in date, dug into a series of early Roman deposits. The only evidence of early Roman buildings consisted of a few postholes, a possible beam slot and various finely banded deposits which probably included successive floor surfaces.

On 2 November 1999 the Corporation of London's new **Guildhall Art Gallery** was opened by Her Majesty the Queen. Members of the MoLAS (and MoLSS) team responsible for the excavation of the site from 1992 to 1997 chatted to the Queen and the Duke of Edinburgh, and gave them a brief introduction to the importance of the site.

Continuing excavations at **Premier Place, Houndsditch, EC3**, uncovered 37 Roman burials, all with coffins and some buried in a chalk or lime mix. The burials were all aligned with the Roman city boundary, preserved as an alignment today in Houndsditch. It is probable that they were interred after the city boundary was fixed (c AD 120). None of the burials had grave goods of any sort. There were no cremations and there were graves emptied in Roman times as well as redeposited human bone. A possible interpretation is that there was a rededication of the cemetery in later Roman times to the new cults of Christianity or Mithras, and this was the occasion for clearing the earlier graves. All ages and sexes were represented in the cemetery. It seems entirely possible that the graves would have been marked to allow such tight spacing.

There were also quarry pits containing exclusively Roman finds, including disturbed burials. They mark a period after the graveyard went out of use and could be the last phase of Roman activity in the area, alternatively they could be a medieval phenomenon if the dirt used to backfill the quarries was exclusively reworked Roman deposits.

Further work in Greenwich included
records made of early 18th-century

Greenwich

walls uncovered in a private residence within **Vanbrugh Castle, Maze Hill** (built 1717–21) (Jenny Scarfe). The 'castle', formerly known as Bastille House, was designed in medieval style by Sir John Vanbrugh – the outstanding and totally untrained Baroque architect, playwright and one time prisoner at the Bastille – as a house for himself. Artefactual finds made in the area have included interesting 18th- and 19th-century assemblages. Numerous clay tobacco pipe fragments have extended our knowledge of the types and distribution of known Greenwich pipemakers.

**Excavating late Roman burials
at Premier Place, Houndsditch,
just outside the City wall**

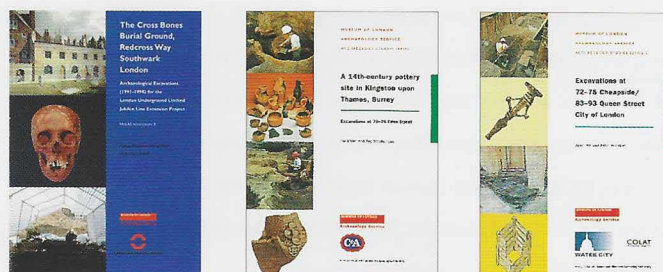


december

As the end of the year approached, MoLAS's fieldwork reduced and the long and painstaking process of post-excavation work began on many projects including that of Spitalfields. Some fieldwork was, however, carried out, including at **Greenwich** where buildings of 17th-century date were found near the south-east gate lodge (Gordon Fanshawe & Partners, Project Management, on behalf of Greenwich University). These were almost certainly the buildings known to have been occupied by the Office of Works during the construction of Greenwich Hospital.

Over the latter part of the year a Global Positioning System survey was carried out at the **River Darent**, which flows into the Thames north of Dartford, Kent (Environment Agency). The survey, in conjunction with the University of East London, aimed to provide a three-dimensional model of the bank profile and locate areas of archaeology protruding from the foreshore. This was a logistically complex and technologically innovative project due to the instability of banks within the Darent channel. A static Differential GPS (DGPS) survey was used as a control for the DGPS Stop-and-go survey that was carried out using both land and boat-based roving receivers.

As the multitude of post-excavation projects continued through the year, some 30 separate books and articles were published by MoLAS staff. The third in the MoLAS Monograph series was produced, describing the post-medieval Cross Bones burial ground at **Redcross Way**, Southwark (Jubilee Line Extension Project for **London Underground Limited**), where the poor and destitute lived a harsh life in overcrowded and insanitary conditions. Also, the first two books in the new Archaeology Studies Series were launched; the aim of this series is to present very accessible reports on small or medium-scale archaeological investigations in the London region, and these are being produced and distributed in collaboration with the major London societies. The first in this series was on the important 14th-century pottery kiln site at **Eden Street**, Kingston upon Thames, which has added significantly to our understanding of the medieval pottery industry. The second book describes the excavations at the junction of **Cheapside** and **Queen Street** in the City, which straddled the major Roman road running from the south side of the forum and was the commercial centre of Late Saxon and medieval London (**Wates City of London plc**).



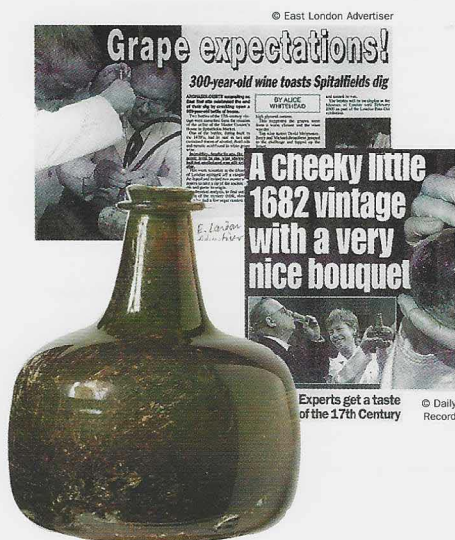
Archaeologist Chris Tripp excavating a 2nd-century collapsed lathe-and-plaster type wall found at 8-10 Throgmorton Avenue, which will appear in more detail in MoLAS 2001

Editing and final research on a highly important project that MoLAS has been working on for some years was carried out throughout 1999. This is the *London Assessment Document – The Archaeology of Greater London*, which aims to provide a synopsis of archaeological knowledge in London, up to 1996. It includes regional and thematic syntheses, and provides broad interpretations of the data and pointers to some of the remaining gaps in our knowledge. Importantly, the document will include period maps (readily updated in the MoLAS GIS system) and comprehensive site gazetteers. This document will be the starting point for those who seek to research London's past through its archaeological resource, and this year's work should ensure its long-awaited publication in 2000.

The final piece of fieldwork in 1999 was at **Plantation House** (Kvaerner Trollope & Colls for British Land) in the City, south of Fenchurch Street, EC3, where a watching brief on the new guide-wall trenches for the piles began. This major site in the City, to the south-east of the Roman forum, should provide MoLAS with one of its largest and most exciting projects in the year 2000 ...

BELOW **Demolition and clearance work in advance of archaeological excavations at Plantation House just to the southeast of the Roman forum**

BELOW LEFT **Senior Archaeologist Ken Pitt examining a section during excavation of guide-wall trenches at Plantation House**



Media coverage of the testing this month of the Madeira from the Master Gunner's House at Spitalfields (see page 24)



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“

With some 60 publication projects at varying stages of completion in MoLAS at the moment, my day can be a very busy one. The successful delivery of publications requires constant monitoring of production schedules, so my day starts with a look at these, checking that everything is okay with the design and typesetting work which is currently underway in the office, with the reprographics work in Photography, and any other of our monograph or studies series which are being proof read or indexed. I usually have a number of phone calls to make – getting cost estimates from printers, liaising with editors of journals to which MoLAS is submitting articles, discussing queries with external copy editors, or chasing an elusive client logo or reproduction permission. There are proofs to be checked, flyers to be dispatched, and, on a really good day, the delivery of a new MoLAS publication!

”

Tracy Wellman



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publications

P Askew with S Badham and S Humphrey **Excavations at 8 and 10–18 London Bridge Street** *London Archaeologist* 9 (Autumn 1999) pp39–46

J Bates and J Minkin **Lafone Street, Southwark – prehistoric farming and a medieval bridge** *London Archaeologist* 8 (Spring 1999) pp325–330

I Blair **Low Hall Manor, Walthamstow** *Current Archaeology* 162 (1999) pp226–229

J Bowsher **Recent Archaeological Work in Greenwich** *Journal of the Greenwich Historical Society* 2 (1999) pp32–42

J Bowsher **Saxon foreshore at Temple Place** *London Archaeologist* 9 (Winter 1999) pp82–89

M Brickley and A Miles with H Stainer **The Cross Bones Burial Ground, Redcross Way, Southwark, London: Archaeological Excavations for the London Underground Ltd Jubilee Line Extension Project** MoLAS Monograph 3 (Museum of London Archaeology Service 1999)

S Chew and J Pearce **A pottery assemblage from a 17th-century revetted channel at 12–26 Magdalen Street, Southwark** *London Archaeologist* 9 (Summer 1999) pp22–29

R Cowie **Elverton Street: The Horse Burial Ground of Tothill Fields** *Current Archaeology* 162 (1999) pp234–236

R Cowie with L Blackmore **Excavation & mitigation in Lundenwic: a case study** *London Archaeologist* 8 (Spring 1999) pp311–319

R Cowie and A Pipe **A medieval and Tudor horse burial ground: excavations at Elverton Street, Westminster** *Archaeological Journal* 155 (1999) pp226–251

I Grainger **Excavations at 11 Ironmonger Lane, London EC4** *London and Middlesex Archaeological Society* 49 (1998) pp67–80

J Hall and C Thomas **The new sarcophagus from Roman London** *Minerva* 10 (1999) pp25–28

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N Holder **Inscriptions, Writing & Literacy in Saxon London** *London and Middlesex Archaeological Society* 49 (1998) pp81–97

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P Rowsome and B Yule **The Arab and Crusader Sequence (area I14)** *Caesarea Papers* 2 (1999)

B Sloane **London's Monasteries** *Current Archaeology* 162 (1999) pp204–215

C Thomas **Laid to rest on pillow of bay leaves** *British Archaeology* 50 (1999) pp8–11

C Thomas **Westminster** *Current Archaeology* 162 (1999) pp218–222

C Thomas and N Holder **Spitalfields** *Current Archaeology* 162 (1999) pp211–214

C Thomas, T Nixon and D Malt (eds) **MoLAS 99: annual review for 1998** (Museum of London Archaeology Service 1999)

K Tyler **Archaeological Evidence for the Development of medieval Homerton: Excavations at Link Street, Hackney** *London and Middlesex Archaeological Society* 49 (1998) pp133–159

K Tyler **Excavations at the former Allied Brewery, 148–180 St John Street, London EC1** *London and Middlesex Archaeological Society* 49 (1998) pp107–132

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B Watson **From Bournemouth to Bermuda: Reflections on the 1999 EAA Conference** *Rescue News* 79 (1999)

B Watson **The Prehistoric Settlement of the Thames Valley** *PAST* 32 (1999) pp8–10.

B Watson **Living and working on English Medieval Bridges** *Medieval Life* 11 (1999) pp27–30.



The remains of two rowel spurs, dating from the 15th to 16th centuries, and found at More London Bridge. Only the star rowel remains from one, whilst the other includes intact buckle and hook fittings

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Excavations at More London Bridge led to the recovery of a remarkable assemblage of Tudor finds. Sixteenth-century security equipment included an iron padlock and two iron rotary keys



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