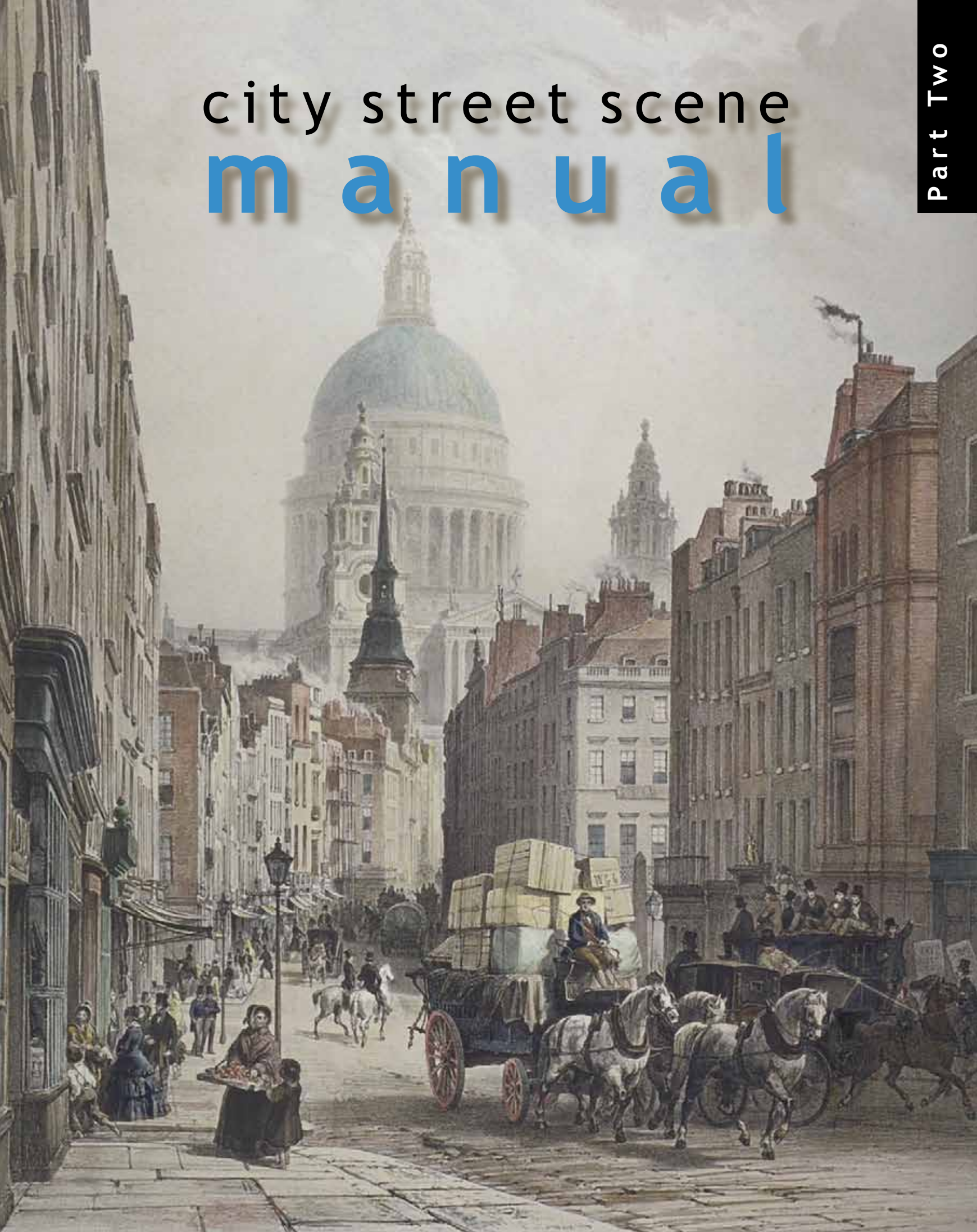


city street scene
manual





Part Two





The City Streets

Historical Evolution

The evolution of the City over the past 2000 years has resulted in an area of unique qualities, complexity and character. The history of the City has a considerable influence on the streets of today, not only in terms of their physical form but also in relation to their ambience.

The first known settlement of London was by the Romans in c. AD 50, following the conquest in AD 43. Early development centred on the river crossing and expanded to the two areas of high ground, Cornhill and Ludgate Hill, overlooking the tidal river valleys of the Walbrook and the Fleet. Expansion in the late first and early second century reflected the importance of the Roman town as a trading, commercial and residential centre.

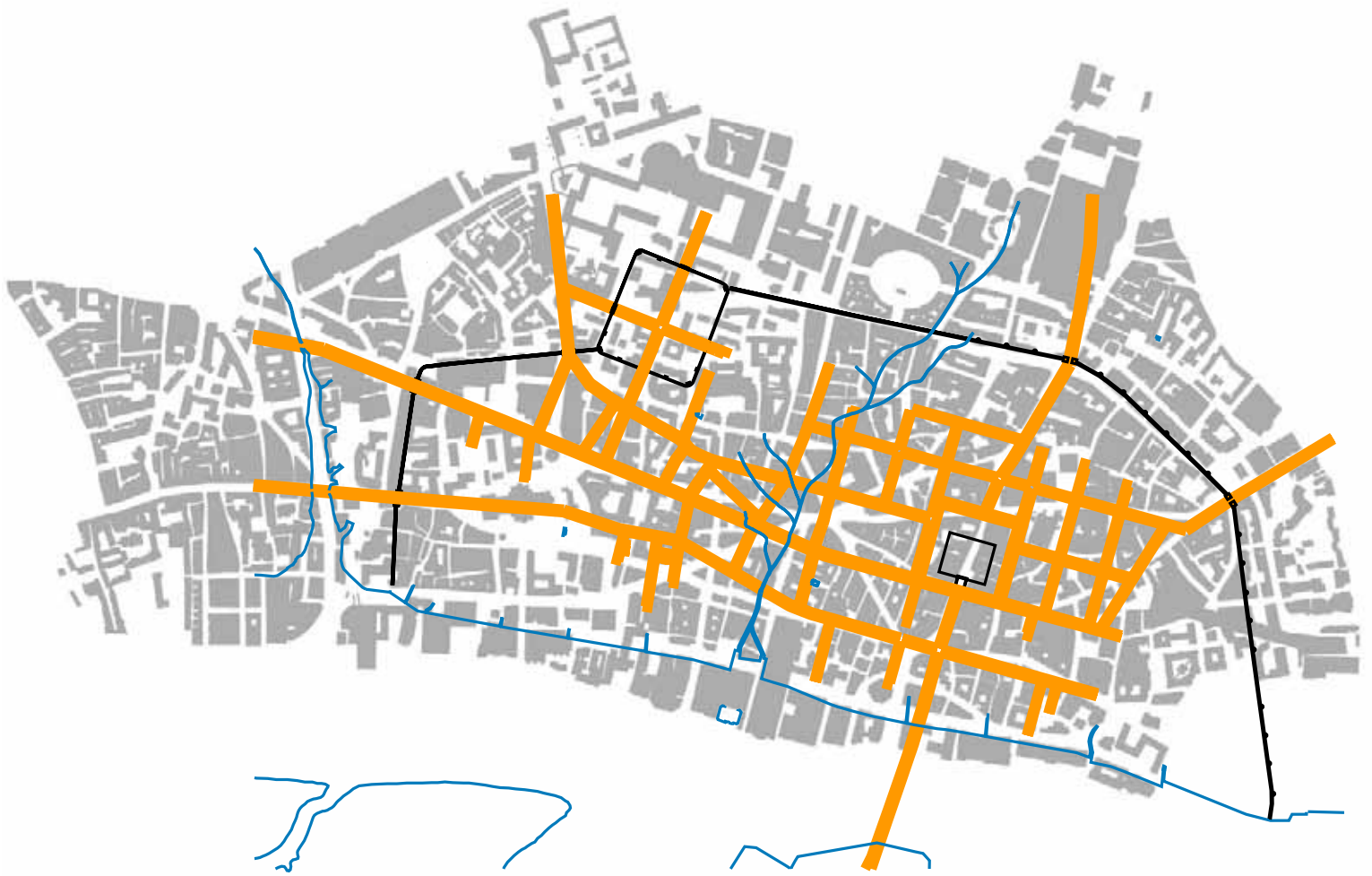


Reconstruction of the Roman town, AD60 MOLAS

The Roman road pattern was centred on the river crossing close to the present London Bridge and is partly evident in the existing street pattern. A grid of streets was established between the river crossing and the forum, around two main roads, one east-west in the position of Lombard Street and Fenchurch Street, and one north-south in the position of Fish Street Hill. A second east-west road follows present day Eastcheap and Cannon Street. Other roads follow the lines of Bishopsgate, Cheapside and Newgate Street.

Reconstruction of the Roman town, AD60 MOLAS





Roman London overlaid on modern City street plan based on data provided by MOLAS

The town was initially defined by a bank and ditch defence which was replaced by a masonry wall and ditch enclosing an enlarged area in the early 3rd century. The wall included gates at Bishopsgate, Newgate Street and Aldgate, with pedestrian, postern gates at Moorgate, Aldersgate and Tower Hill. The river was defended by a wall in the late 3rd century, which approximately followed the line of Upper and Lower Thames Street.

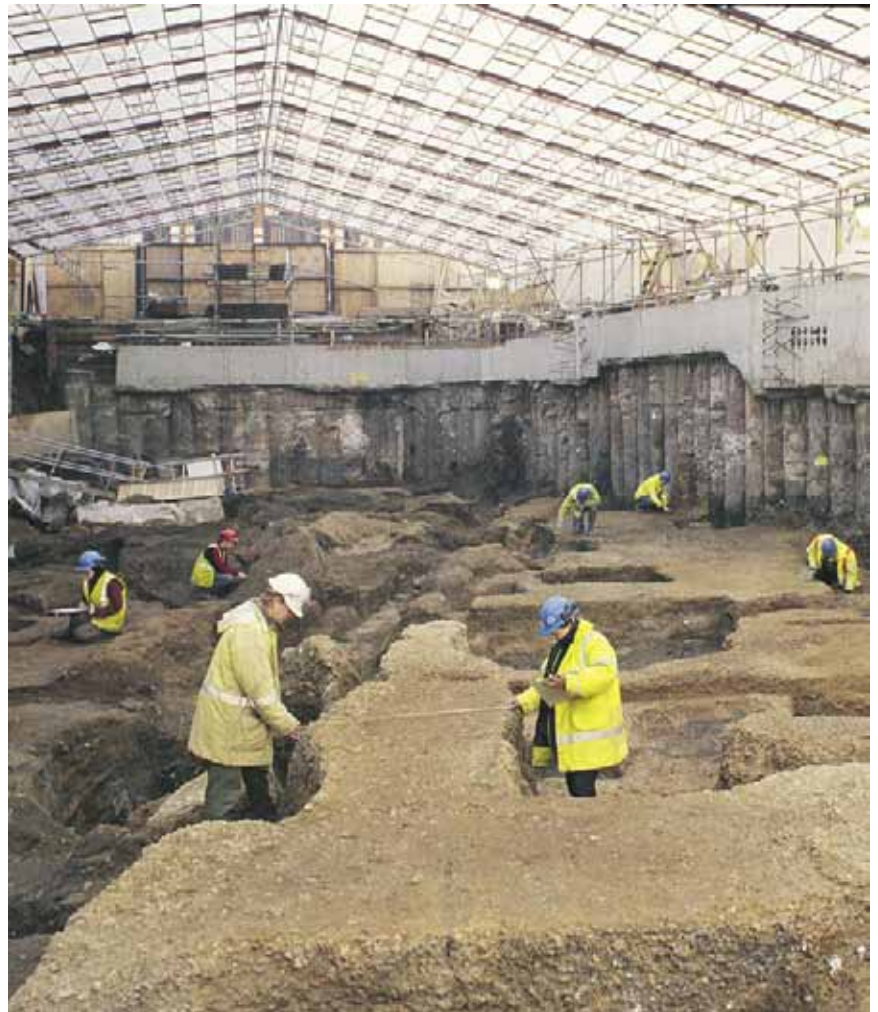
From the late third century, there was a change in the Roman town and an apparent decline in its importance for trade, until the withdrawal of Roman administration in Britain in 410. Although some late Saxon and medieval streets were laid to Roman alignments, it is unlikely that any streets remained in continuous use in the post-Roman and earliest medieval period, during most of which the City was largely unoccupied. However, one significant feature surviving into the post-Roman period is the City wall.

Although St. Paul's Cathedral was founded in 604, the Saxon settlement of Lundenwic was to the west of the Roman town in the area of Strand and Covent Garden. King Alfred founded a settlement in the walled city following Danish raids, restoring it and abandoning Lundenwic. Landing points were established at Queenhithe and Billingsgate and a network of streets constructed between Queenhithe and Cheapside. These streets are recognisable today. The new town grew in commercial prosperity and influence, based on river trade and activity.



1st century Roman road, 1 Poultry MOLAS

Streets and markets established at this time continued into the medieval period. Markets were held in Cheapside, Poultry, Leadenhall Street, Cornhill and Newgate Street, with specialised markets and trades in specific areas, including Bread Street, Milk Street, Wood Street and Ironmonger Lane. Upper and Lower Thames Street gave access to wharfs, quays and warehouses by the river. Waterfronts south of the Roman quays were built and extended into the river, with successive land reclamation following and extending property boundaries. A network of lanes and routes south of Thames Street extended the street pattern between the river and the markets. Although there has been rebuilding of the waterfront area, this street pattern has partly survived and is an important element of the townscape.



Road leading to the Roman fort south gate, 2-12 Gresham Street MOLAS

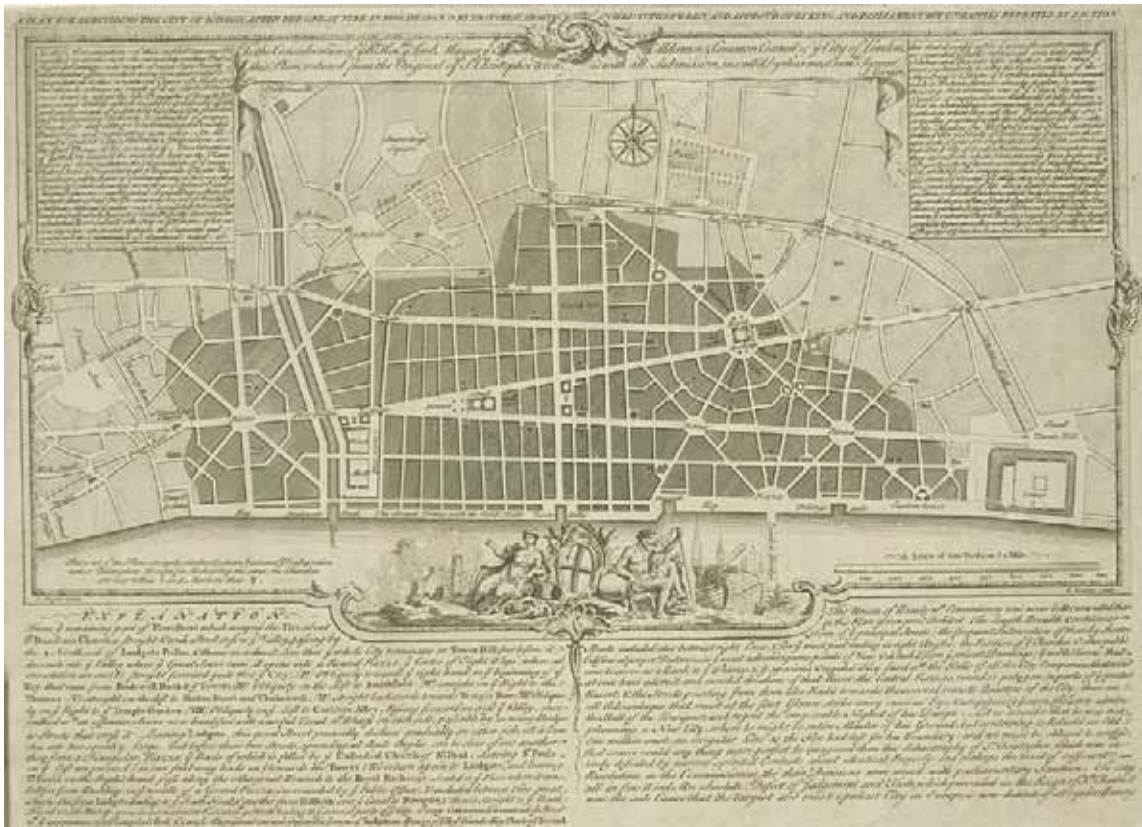


During much of the medieval period, paving was not carried out consistently. However, by the 13th century some controls were introduced and the supervision of paving repairs was delegated to each Alderman. Throughout the 14th century, writs and ordinances were issued by the King and the Mayor to various citizens to elect paviors and others to ensure that the pavements were kept in repair. However, this had limited success and the City's streets remained in a poor state.



Linking passage to Middle Street

The growth of London from the sixteenth century was significant and London became a major European and international trading centre. The population rose from 50,000 in 1300 to 225,000 in 1605, of these, about 190,000 lived within the City jurisdiction, despite the growth of suburbs to the east and west. The City became more densely built up, with a network of alleys and courts giving access to the developed backland behind streets and lanes. The sites of monasteries, dissolved in the 16th century, provided more space for new building and the gradual infilling of many gardens and yards also occurred. A grid pattern of planned streets was established in 1590 on part of the site of St. Bartholomew's the Great in Smithfield, to the east of the priory Church. This street pattern survives today and includes Long Lane, Middle Street and the linking passages and alleys.



Wren's plan for rebuilding the City 1666 Guildhall Library

By the time of the Great Fire in 1666 London was densely developed with timber framed buildings in narrow streets. Building collapse and fires were relatively commonplace and the narrow streets were poorly maintained and dirty. The Great Fire destroyed 400 acres inside and 63 acres outside the City wall. The consequences of the great plague of 1665 and the 1666 Fire marked a fundamental change in the character and use of the City.

Formal plans for the rebuilding of the City by Sir Christopher Wren and his contemporaries were rejected in favour of rapid reconstruction by established property owners, preserving the street pattern almost in its entirety. Notable exceptions were the construction of King Street and Queen Street, which provided a new route from the Guildhall to the Thames, and the canalisation of the Fleet River (now Farringdon Street and New Bridge Street). Although some improvements to the riverfront were achieved, a grand scheme for a Thames Quay was not realised.

The Great Fire also brought about significant changes to the construction of the City's streets. The streets before the fire were hazardous places for the pedestrian, lacking proper footways and drainage and filled with mud and waste. The narrow streets were often roughly paved with cobble stones or gravel, sloping from both sides to an open central sewer. Some regulations were introduced just before the Great Fire, in 1662. However, it was the 1667 Act of Rebuilding the City of London, and its successor of 1670-1 which established the authority to control the streets.



Extract from John Ogilby's Map of the City 1676 Guildhall Library

The re-building Acts following the Great Fire required that all new construction, including party walls, was to be in brick or stone. Wherever possible, buildings were constructed to their earlier plan form, but allowance was made for the widening of some streets and corresponding building heights were specified. Vital to the lasting character of the City was Wren's contribution to the skyline. Of the 87 churches destroyed or damaged, Wren designed and re-built 51, together with St. Paul's Cathedral.

Detailed regulations governing the paving of the City streets were set out in a 1671 document containing 'certain Orders, Rules and Directions Touching the Paving and Cleansing The Streets, Lanes and Common Passages within the City of London.' The Regulations stated that the main streets were to be paved with cobbles or pebble paving. Central drainage channels were also common during this period and continued to be built early in the eighteenth century.



Burning the rumps at Temple Bar, William Hogarth 1726 Guildhall Library

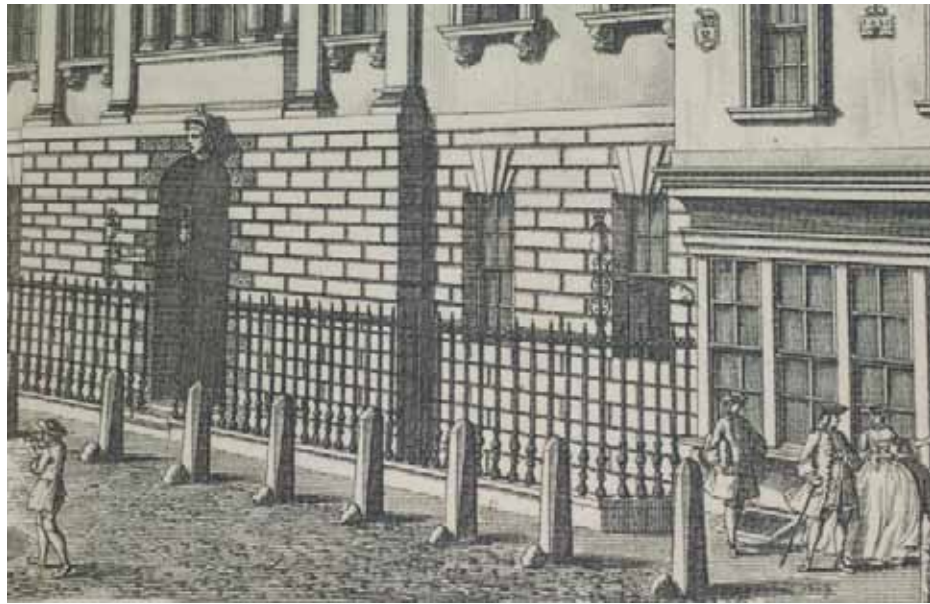
The main footways and some passages and yards were paved with Purbeck limestone. Prior to the use of Purbeck stone, Kentish ragstone, an unsuitable, inferior paving stone, was used. Rows of substantial timber posts between 3ft. 6in and 3ft 9in high were installed in order to keep wheeled traffic off the footways and protect pedestrians.

By 1765, the Paving Act specified channels on each side of the carriageway, which was to be paved in granite setts instead of cobbles, and cambered to allow water to drain into the kerbed side channels. The footways were paved with Purbeck stone and many of the timber posts were taken up as the footways were now raised and separated from the carriageways by kerbs. Projecting street signs, many of which were large and conspicuous, were replaced by consecutive house numbers. Also at this time, control of the streets and footways in the City was passed to the Corporation which was responsible for their upkeep. From 1736 the Corporation charged a rate for street lighting, and from 1766, for cleaning and paving.

Today, only a few examples of Purbeck paving remain in the City despite its past widespread use. Good examples of Purbeck paving may be found at the parvis of St. Paul's Cathedral, the courtyard of Staple Inn, at Hare Court and Kings Bench Walk, Inner Temple.



Purbeck paving,
Kings Bench Walk



Timber bollards, Fenchurch Street John Donowell 1753 Guildhall Library



Great St. Helens, Henry Dixon 1886 Guildhall Library



London Bridge, William Daniell 1804 Guildhall Library

Georgian development in the City was widespread but incremental and largely conformed to the informal character of the street pattern. Architectural fashion and the various building Acts combined to create a distinctive and cohesive urban fabric. Several substantial banking, Exchange and Company buildings were established, heralding the future form of the City. London Bridge was cleared of buildings and widened. The first Blackfriars Bridge was opened in 1769 together with a new approach along Farringdon Street and New Bridge Street which was built over the Fleet canal. A new bridge was built upstream at Westminster. The eighteenth century also saw the incremental removal of the City wall and gates.

The nineteenth century saw dramatic changes in the form and fabric of the City of London. As the capital expanded, the City's importance as a specialist office, financial and commercial centre developed. The residential population in 1801 was 128,000, by 1891, it had fallen to 30,000. River traffic continued to be important and warehouses were a common building type on the waterfront and in many other areas.

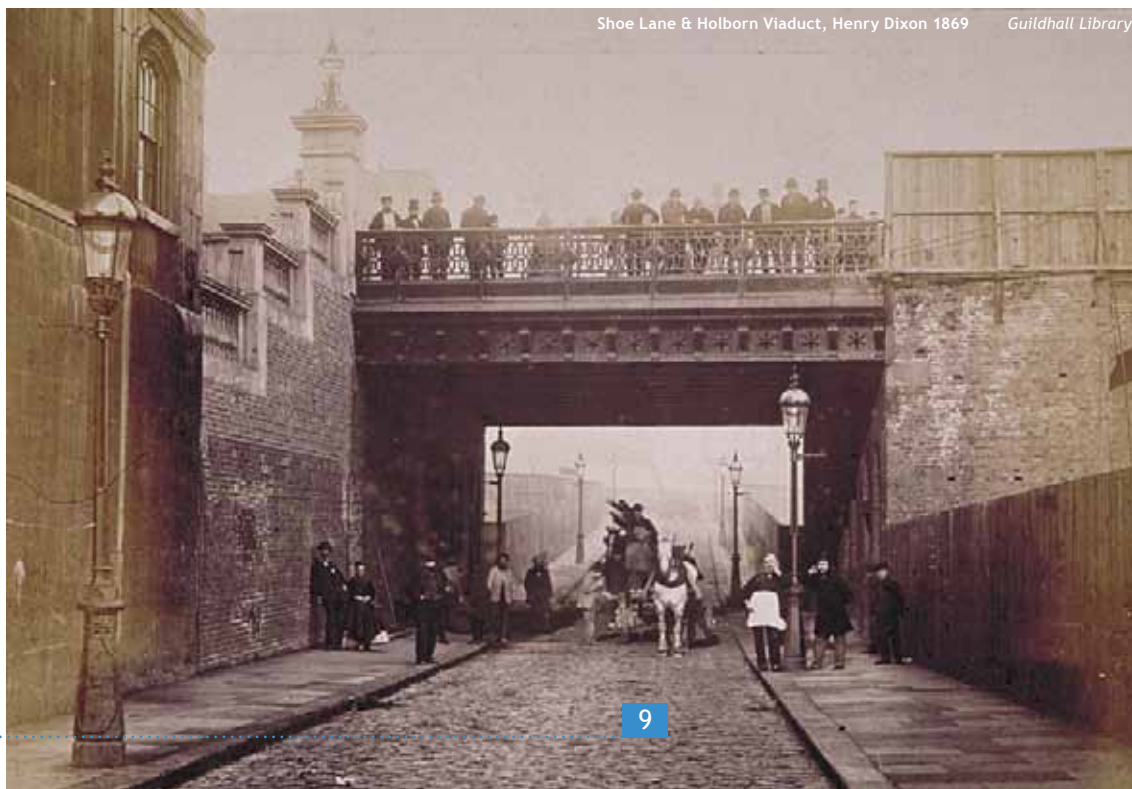
The building of railways, termini buildings and stations with associated bridges and viaducts was undertaken in the middle and late 19th century and was responsible for significant physical change and displacement of some residential and commercial activity. The first underground railways were opened in the 1860's and by 1901 the City had a daily working population of 400,000 served mainly by the railway network. The construction of the lines and stations was accompanied by considerable development and also the creation and improvement of streets.

A series of major alterations to the City's streets were undertaken from the early nineteenth century. Moorgate and King William Street were laid out in 1830 and 1823-1830, respectively, in conjunction with the re-building of London Bridge in 1823-1831. Cannon Street was widened and extended towards St. Paul's. Victoria Embankment was built in 1864-1870 and linked to Mansion House and Bank by Queen Victoria Street, built 1867-1871. Blackfriars Bridge was replaced in the 1860's. Southwark Bridge, the City's third river crossing was constructed in 1814-19. Holborn Viaduct, crossing the Fleet valley, was constructed with new sections of street linking Holborn Circus and Ludgate Circus. Many more streets were widened including Fleet Street, Eastcheap and Gresham Street. A new grid of streets was laid out between the Embankment and Tudor Street on the site of the former City gas works. The Central Meat Market was built at West Smithfield replacing an open market area, and to the east, Minories was formed in association with the building of Tower Bridge which opened in 1894.



Fleet Street, Jules Arnout 1850 Guildhall Library

Despite widespread re-development and intensive use of the street block in the nineteenth century, many of the street improvements were integrated within the existing street pattern and the City retained its close-knit and intimate urban grain and character.



Shoe Lane & Holborn Viaduct, Henry Dixon 1869 Guildhall Library



Paviours at Holborn Viaduct, Henry Dixon 1869 Guildhall Library

By the mid 19th century, York stone was replacing Purbeck as the main paving material on the footways. Timber setts were used at crossing points. In the second half of the 19th century, there was also considerable progress in paving and maintaining the City's streets. By the 1850's practically all of the carriageways had been paved with granite setts from Aberdeen. The streets were often muddy in wet weather and full of dust in the summer. 'Scavengers' were employed to clean the streets and cart away the mud and manure. The granite paved streets were easier to clean than macadamised streets. Macadam was a mix of small granite cubes with gravel and sand on top intended to give a smoother surface. However, in practice, macadamised surfaces often broke up quickly as the rain washed away the sand and gravel, loosening the granite and destroying the cohesion of the road.

The noise from horses and wagons on the granite paving was significant and those that could afford it often spread straw over the roadway in front of their houses. Accidents were also commonplace. Horses as well as people suffered accidents when they fell on the slippery surfaces. Safety was one of the arguments used in favour of the introduction of smaller granite setts after 1844, as they had more edges for horses' hooves to catch against.

In the late nineteenth century the experimental use of asphalt and wood paving for the City's roadways was begun, although granite setts were still used for the majority of the City's streets. Wood paving was reasonably successful as it required less daily maintenance and was a much quieter surface. However, it also had a short life span and was therefore expensive.



Wood Paving at Chequer Street EC1



Bishopsgate 1896 *Guildhall Library*

Asphalt was first used in the City in 1869, as an experiment in Threadneedle Street. At first only mastic asphalt was used for the roadways, but in 1896 rolled asphalt was introduced from the USA. On average, the streets laid with asphalt were narrower than those paved with wood. Street cleansing was also much improved during this period with the use of sweepers and orderly boys as well as scavengers.



King William Street, Cross & Tibbs 1940 *Guildhall Library*

Almost one fifth of the buildings in the City were replaced between 1905 and 1939. The inter-war period saw a continuation and consolidation of Victorian and Edwardian trends in development. Prompted by a greater degree of site amalgamation, the relaxation of the Building Acts relating to the height of buildings and the flexibility associated with the use of the steel frame, meant that many large stone clad buildings were built. The increase in building scale intensified the density and sense of enclosure of the City streets.

The destruction caused by enemy action during World War 2 could almost be likened to that of the Great Fire. Many buildings were lost or badly damaged including a significant number of churches, livery halls and large parts of the Temples.

The Corporation resolved to draw up a plan to guide the post-war reconstruction of the City and in 1945 Dr. C. H. Holden and Professor (later Lord) W. G. Holford were appointed as consultants to prepare it. The “Holden-Holford Plan,” as it became known, was published in 1947. The plan envisaged the sweeping redevelopment and radical re-planning of the City.

Congestion was one of the principal concerns that the Holden-Holford Plan addressed. At the time, the solution was seen as providing sufficient highways and parking to accommodate road traffic and so the Plan proposed an extensive programme of road building. Among the measures proposed were the widespread widening of streets, in some cases to widths of up to six lanes, the construction of several very large new junctions, for example at Bank and Ludgate Circus, and the creation of entirely new routes, including one skirting the northern fringe of the City and another by-passing Ludgate Hill on the line of Carter Lane. A particular concern was the large proportion of through traffic in the City, and several of the Plan’s routes were designed to cope with this, including a double-deck road along Thames Street. It was expected that pedestrians would benefit from increased open space.



Bank Junction, Cross & Tibbs 1940 *Guildhall Library*



London Wall, 1962 Guildhall Library

Of Holden and Holford's proposals only the dual carriageway along the western part of London Wall, then called Route XI, began construction before their plan was superseded by the County of London Plan in 1951. The London County Council's plan continued many of Holden and Holford's schemes, although often in more modest form. Through traffic was to be accommodated by a network of new and widened roads, and the most important of these came to fruition. These were a northern route linking Holborn to Aldgate by way of London Wall, a southern route linking Victoria Embankment to Tower Hill by greatly widening Thames Street and constructing the Blackfriars Underpass, and a western route via Blackfriars Bridge/Farringdon Street. The Plan also envisaged widening all streets in the City to standard widths which led to the widespread setting-back of building lines upon redevelopment and service areas being merged with the street. Some of the streets widened at this time include Gracechurch Street, Old Jewry, Gresham Street, Cheapside, Cannon Street, Wood Street and Bishopsgate.



London Street Garden, 1960's



Barbican

‘Comprehensive development areas’ were designated where street blocks and roads were rebuilt on re-planned layouts. The first large area to be redeveloped was the residential Golden Lane Estate (Grade II listed) by Chamberlain, Powell and Bon, which was built on a heavily bombed site on the northern edge of the City. Immediately to the south of this is the Barbican, by the same architects, also Grade II listed. Golden Lane and the Barbican are traffic free and at the Barbican pedestrians are elevated to a two-storey high podium. To the south of the Barbican is the Barbican commercial fringe, including London Wall. Office developments of towers and lower slabs were laid out across the new east-west route, with more offices and re-built Livery halls at ground level. Raised walkways, with shops and pubs at podium level separated pedestrians from traffic and linked this area with the residential Barbican and the Barbican Arts Centre. Paternoster Square was the last of the post-war precincts to be developed. It was built as a raised pedestrian plaza over a car park, accessed by steps from St. Paul’s Churchyard and Newgate Street. This development was demolished in the late 1990’s and the area has since been re-developed at ground level (completed 2003).



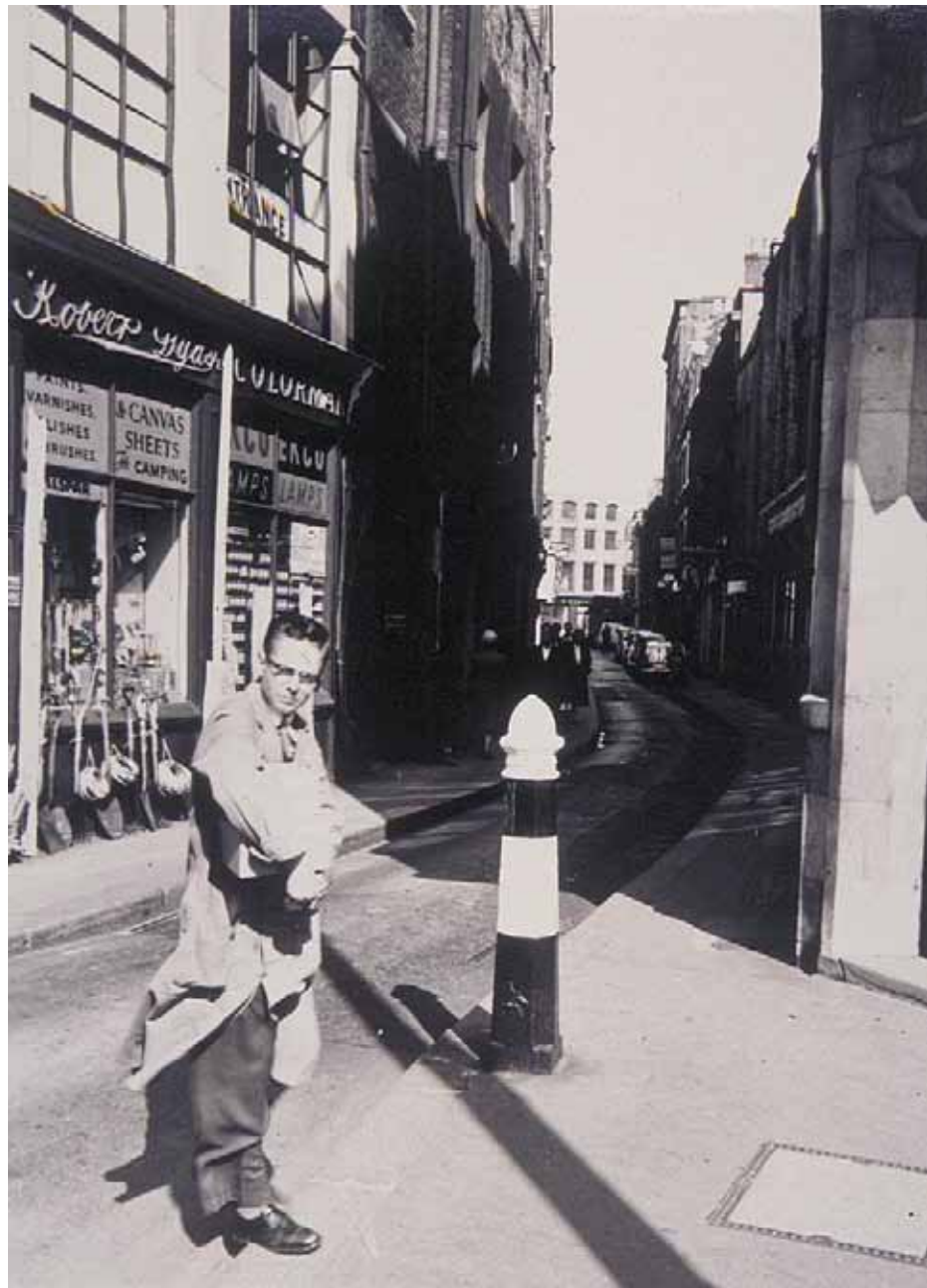
Paternoster Square, 1960’s Guildhall Library

Proposals were drawn up in 1959 to extend the raised pedestrian walkways or ‘ped-ways’ across the whole of the City linking offices to transport and railway stations. Motor vehicles were to be given priority at ground level. It was envisaged that the ped-way network would be achieved on a gradual basis, as more of the City was re-built. Most large buildings of the 1960’s and early 70’s made provision for the walkways in their design. However, the policy was abandoned in the mid 1970’s and it is only in a few parts of the City that the raised walkways remain in any form; including those at London Wall, on Upper and Lower Thames St. and within the Barbican.

The Corporation created many new open spaces and planted numerous trees throughout the City in the post-war period. Advantage was taken of extensive bomb damage south of St. Paul's to plan and build a vista from the river to the Cathedral, forming a major new pedestrian route. The redevelopment of the old wharves was used as an opportunity to construct a riverside walk, and this now forms part of the Thames Path National Trail.

In terms of paving materials, the post-war period saw little change to the already well-established use of asphalt for both the footways and carriageways. Nevertheless, York stone was still in place on the footways of many of the streets and lanes and granite setts also remained in many streets. New materials were introduced in a few of the re-planned areas, most notably concrete slabs in the Golden Lane Estate.

A significant amount of street clutter began to be added to the City streets in the post-war period. The greater regulation of traffic introduced by Ernest Marples when Minister of Transport in the 1960s was responsible for the addition of many new traffic regulation signs and equipment. The requirement for bollards to protect paving has also increased over the years as the volume of traffic in the City has grown.



Artillery Lane, James D Willis 1956 Guildhall Library



Broadgate

In 1986, the 'Big Bang' saw the de-regulation of the trading in stocks and shares. An increasingly large number of foreign banks located in the City and there was a demand for more office space. Planning permissions for office floor space tripled in area between 1985 and 1986 and nearly doubled again between 1986 and 1987. It is estimated that between 1985 and 1993 half of the office floorspace of the City was re-built. Several large-scale office complexes were developed to meet specific requirements such as large open plan trading floors. Many new developments were built on railway land including Broadgate, constructed on the site of Broad Street Station and goods yard and above railway tracks at Liverpool Street Station.

Today, new buildings are increasingly being built on the sites of post-war office developments which have reached the end of their useful commercial life. Many new buildings are now re-built to earlier established building lines and street frontages, with service areas contained within the building, helping to re-instate the sense of enclosure of the City streets.

Broadgate



It came to be realised that the road-building projects of the post-war plans were not solving congestion and policy moved instead towards the restraint of traffic. A final break with earlier approaches came with the City of London Local Plan 1984. This included traffic-management measures to assign through-traffic to the now-completed northern, southern and western relief routes in order to relieve traffic congestion in the City core, for the benefit of pedestrians and local traffic. The traffic and environment zone, a series of traffic restrictions including entry points and road closures, was introduced in the central and eastern parts of the City in 1993.

In 2003 the traffic and environment zone was extended to the western and northern parts of the City and to south Shoreditch in the London

Borough of Hackney. The Mayor of London's Central London congestion charging scheme was introduced in February 2003 and it has been successful in further reducing traffic volumes and congestion, although its effects have been less marked in the City than in the rest of the congestion charging zone.

Reduced traffic flows within the City are now giving more scope for schemes to improve the environment and enhance the public realm. The Street Scene Challenge Initiative (described in Part One) has enabled a wide range of street enhancement schemes to be implemented across the City including many partnership schemes with City businesses and developers. Traditional high quality materials such as York stone paving and granite setts are used with the aim of achieving continuity for the City street scene.



Noble Street



Acknowledgements

The Street Scene Section of the Department of Planning & Transportation would like to thank the following organisations and individuals: The Guildhall Library, The Museum of London Archaeology Service & Emma Creasey for their illustrations.

© The Corporation of London 2005. Design by Dom Strickland

Produced under the direction of: Peter Wynne Rees B.Sc, BArch, BTP, RIBA, FRTPI, FRSA
The City Planning Officer, Corporation of London, PO Box 270 Guildhall, London EC2P 2EJ

Readers are referred to the sources mentioned in the General Introduction to the Conservation Areas in the City of London, and to: Turvey, Ralph (1996) Street Mud, Dust and Noise (London Journal 21 (2)); Jeffery, Sally (1988) Pebbles, posts and purbeck paving (Association for Studies in the Conservation of Historic Buildings Transactions vol.13).

city street scene manual

The Corporation of London is the municipal government for the financial and commercial heart of Britain - the City of London. The policies it pursues, and the high standard of services it provides, are dedicated to maintaining and enhancing the City of London's status as the world's leading international financial and business centre.

Among local authorities the Corporation is unique; not only is it the oldest in the country, combining its ancient traditions and ceremonial functions with the role of an efficient modern authority, but it operates on a non-party political basis through its Lord Mayor and members of the Court of Common Council.



April 2005

Department of Planning & Transportation