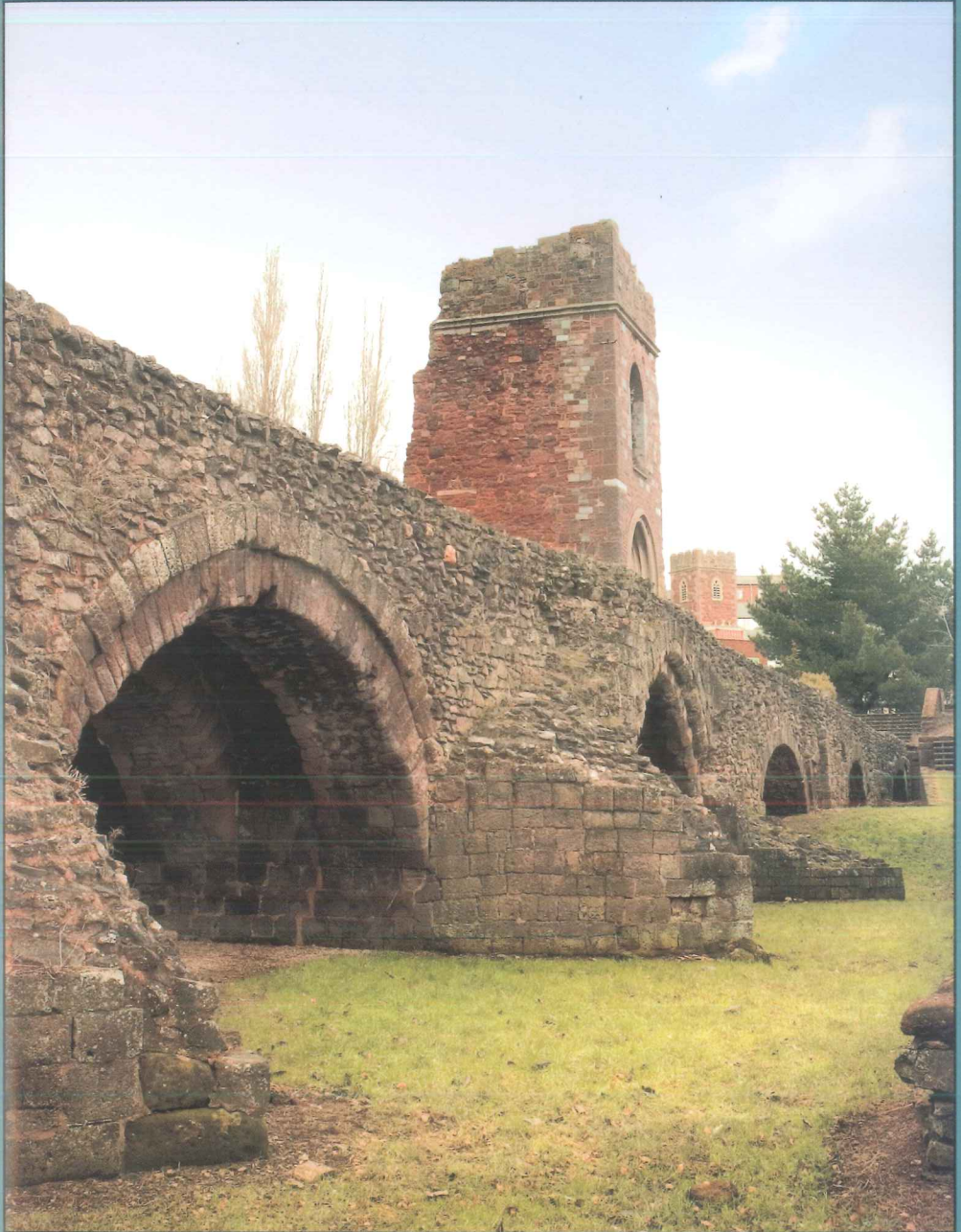




THE EXE BRIDGE, EXETER





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By Stewart Brown

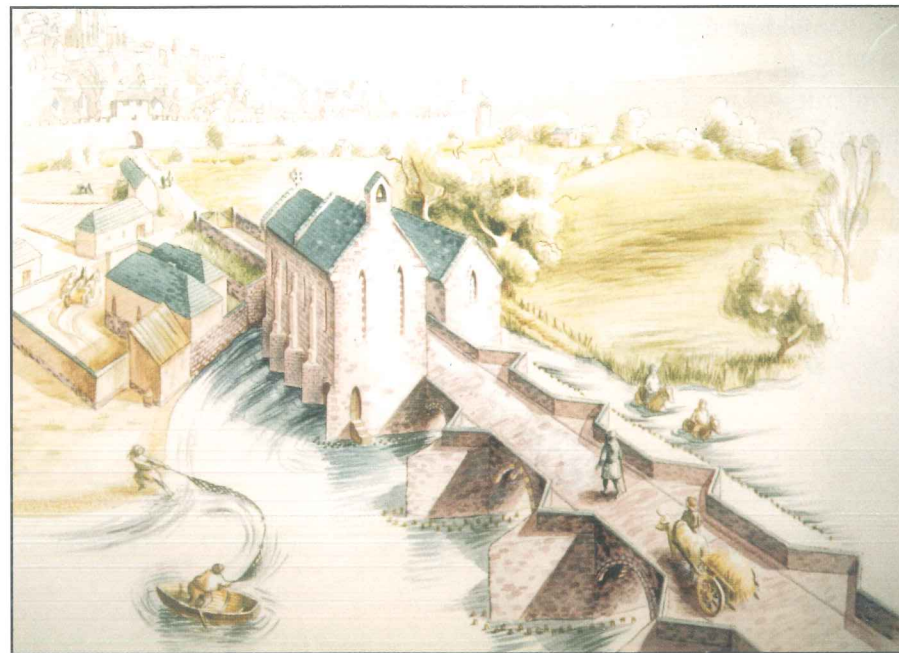
Photographs by David Garner and Gary Young

Design by Tony Ives



Exeter City Council

The front cover shows Exe Bridge with the tower of St Edmund's church rising above it and the city in the distance (Gary Young).



Drawn by E. Kadow

Reconstruction showing the bridge with St Edmund's church, the smaller chantry chapel on the opposite side of the road, and waterfront houses as they may have appeared in the mid-13th century.

Introduction

Set within a small park close to the River Exe, the remains of the medieval Exe Bridge form one of Exeter's most important historic monuments. The bridge was built about AD 1200, when the river was much wider than it is today. Nine of the original 17 or 18 arches still stand, making this one of the most substantial survivals of Britain's early medieval bridges.

The remains of St Edmund's church also form part of the monument; the church was built as part of the bridge. Its tower was added in the 15th century and rebuilt in the 19th. Beside the old river bank are also displayed the excavated foundations of medieval stone houses which grew up on the adjacent riverbank.

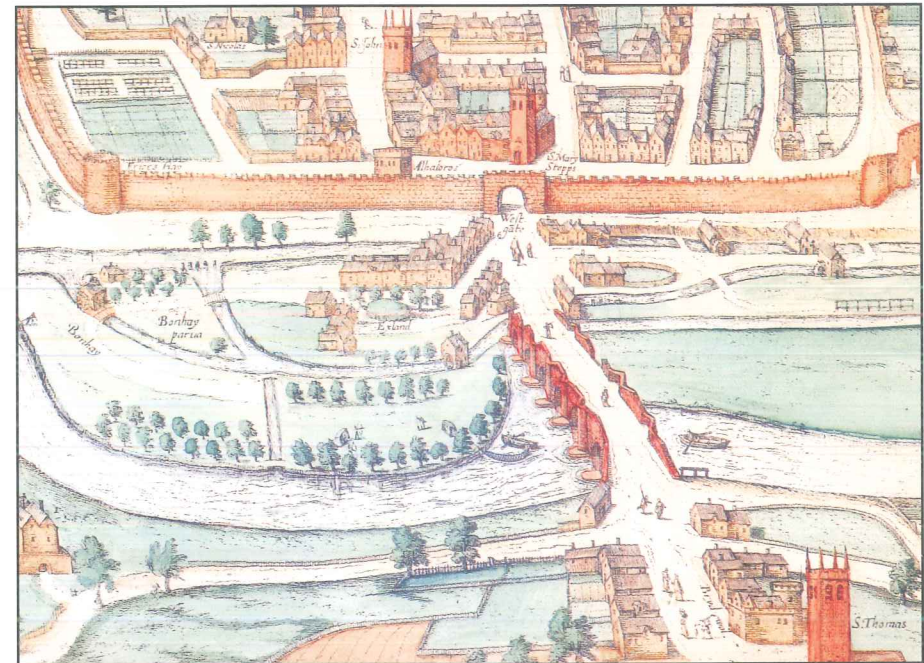


Aerial photograph of 2008 showing the modern Exe Bridges over the River Exe, the old bridge (arrowed), the suburbs of St Thomas (lower left) and the walled city (upper right).

The early river crossing

In prehistoric times the River Exe was naturally broad and shallow at this point, making this the lowest fordable place above its tidal estuary. The first bridge across it may have been built by the Roman army and would no doubt have been maintained throughout the Roman period, but no trace of it has so far been found.

Some kind of provision would probably have been made for crossing the river in later Saxon and Norman times. One late medieval writer tells us that before the stone bridge there was a flimsy wooden footbridge which was carried away most years by winter floods, whilst another says that there was only a perilous ferryboat. Whatever means were provided for foot passengers, horses would have forded the river. Numerous early medieval horseshoe fragments and nails have been excavated from the river bed next to the bridge, as well as a coin lost by an unfortunate 9th-century traveller.



The medieval bridge outside the city's West Gate, with Exe Island to its left, as shown in Hogenburg's view of Exeter, drawn in 1587.

Building the stone bridge c. 1196–1214

The building of the stone bridge was probably underway by 1196, when a city document records a ‘chaplain of Exe Bridge’. Work is likely to have been complete by about 1214, when the churches of St Edmund and St Thomas, which stood at each end of the bridge, are first mentioned. Nicholas Gervase, a wealthy merchant who owned mills and workshops near the river, took charge of building operations; his son Walter travelled widely to collect money for the work and bought property to endow the bridge. Walter was mayor of Exeter on a number of occasions.



Bridge foundations below St Edmund's church, with later stakes consolidating the river bed.

The foundations

The foundations in shallow water were made of rubble and river gravel, simply tipped onto the riverbed. In deeper water, the foundations had to be built up in stepped layers, each held in position by rows of oak stakes driven around the outside. Brushwood had been woven between the stakes, forming low wattle walls. Where the current was strongest, the river bed was first stabilised by driving in rows of large stakes in a grid pattern.



The monument today, looking towards Exeter (above) and towards the modern river channel (below).





The bridge had 17 or 18 arches and spanned a distance of about 180m (590ft). At the eastern (Exeter) end, and probably the western end too, it had an elevated approach road or causeway leading to the first arch. An archaeological survey of the surviving eastern half of the bridge showed that it was built with both round and pointed arches, and that the pointed arches are not the result of later rebuilding as sometimes suggested. All the arches are supported on ribs. By using ribs in a stone arch the builders needed less timber framework to erect it, making construction easier and quicker. The bridge piers between the arches have pointed cutwaters upstream and downstream so that the flow of the river passed around them with the least possible resistance. The bridge roadway was 4.2m (12 ft) wide between parapet walls, very wide for a medieval bridge, and sufficient for two carts to pass. The road was paved with flagstones and had gutters with drain spouts that emptied into the river. One of the spouts survives on the north side of the fifth arch. Originally there would have been triangular recesses or refuges for pedestrians above the cutwaters.



Alternating pointed and round arches, showing their different forms.



Views of the bridge from upstream, showing the church (above) and adjacent arches (below).



Building stones

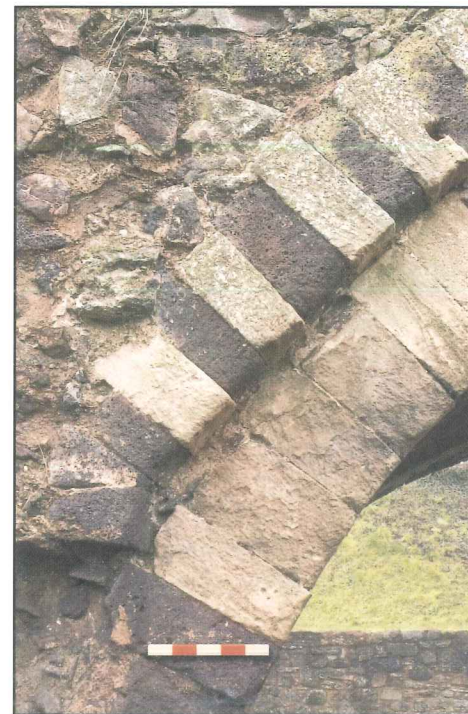
The bridge was built of stone laid in white lime mortar. Although rough rubble filled the wall core, the monument was faced with courses of dressed stone or 'ashlar'. Some of the arches were built of alternating light and dark stones, showing that the builders desired to achieve a decorative effect.

The stone used in most of the bridge is a dull purple or mauve volcanic stone known as 'Exeter Trap', which came from quarries in the Exeter area. Most of the paler stones are of yellow sandstone from Salcombe Regis on the east Devon coast. There are lesser amounts of red and white Triassic sandstone, from other local quarries on the Exe estuary. Occasional blocks of cream-coloured limestone from Caen in Normandy, northern France, can also be seen in places; this material was imported into England in great quantities for carving and fine masonry, mainly in the 12th and 13th centuries.

In later medieval times new quarries were opened at Heavitree, Exminster and Wonford, working beds of dark red breccia containing coarse angular rock fragments; it is commonly called Heavitree stone. This soon became the most popular building stone in Exeter.

It could be quarried in large blocks but unfortunately weathers badly. This stone type was not in use when the bridge was first built but is seen in repairs and in St Edmund's church tower.

Courses of purple-grey volcanic trap, showing the vesicular (holed) surfaces of much of this stone.



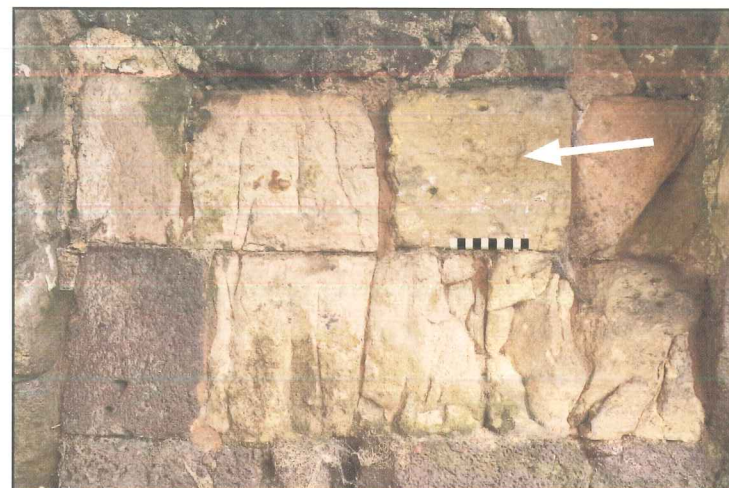
Blocks of sandy yellow Salcombe stone in one of the bridge arches, alternating with purple volcanic stones in the outer order of the arch. The photograph shows the bands of sand visible in some Salcombe stones.



Red Triassic sandstone from the Exe Estuary, used alongside purple/grey volcanic blocks.



Sloping blocks of red Heavitree stone (mixed with some purple and grey volcanic trap) in the 15th-century relieving arch below the church tower. The photograph shows the signs of heavy weathering typical of this material.



A block of cream-coloured Caen stone (arrowed), alongside whiter Triassic sandstone from the Exe Estuary and volcanic trap, in the lower courses of one bridge pier.



The Bridge Trust and Wardens

When the bridge was built a Bridge Trust was set up to finance its upkeep. Wardens were appointed each year in the Mayor's Court; they looked after the property and funds of the Trust and were responsible for day-to-day maintenance. They kept detailed annual accounts on parchment rolls which survive with few omissions from the years 1343 to 1711, numbering 345 rolls in all. This is the largest and most complete series of bridge accounts surviving in this country after those for London Bridge.

The estate of the Trust grew larger over the years with donations and bequests. In 1257 Walter Gervase bequeathed lands and properties including mills and a great weaving shed. By the end of the 14th century the Trust managed more than 70 properties in the city and its suburbs, including corn and fulling mills in Exe Island and fifteen shops on the bridge. Rents from the properties provided an income of about £15 a year, whilst the annual profit from the nearby Cricklepit Mills was some £20. The Trust even entered into agriculture. In 1389 the Millhay, lying between Cricklepit Mill and the river, was ploughed, sown with beans, rolled, hoed, weeded and harvested. Bridge tolls are recorded for wagons – 2d each in 1345. These would have been from outside the city since citizens of Exeter were exempt. In the 16th century the Trust owned seven lime pits, as well as two dozen racks or tenters for drying cloth on ground near the river.

The hermit

A record of 1249 tells us that a troublesome female hermit had shut herself up on the bridge and obstructed the traffic. Bridges in medieval times often had hermits living on or close to them; they collected tolls from travellers to pay for repairs, which they undertook themselves. Some, however, abused their position for the sake of an easy life, as may have been the case at Exe Bridge.



Left: The Exe Bridge seal. Documents concerning the bridge were sealed with impressions from this lead seal. The inscription reads S(IGILLUM) PONTIS EXE CIVITATIS EXONIE – The Seal of Exe Bridge of the City of Exeter. The earliest surviving impression of the seal is on a grant made by the Mayor and Bridge Wardens in the early 1260s. Right: A modern impression.

Exeter Guildhall and Royal Albert Memorial Museum, Exeter

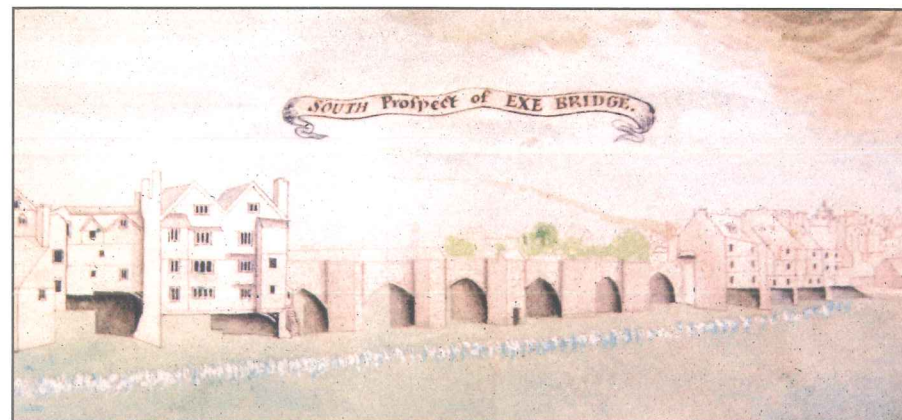
The Exe Bridge accounts

The Exe Bridge accounts record many interesting details about expenditure on the bridge, such as the cost of iron cramps used to hold damaged masonry together, and the use of lead to fix the cramps into the masonry. In 1344–5 a blacksmith was hired and iron and coal bought to make a pick, a hammer, wedges and cramps. Wooden stakes were purchased on numerous occasions to strengthen the foundations. Brushwood was woven between the stakes to form outer 'defences' around each of the bridge piers, which were then filled with river cobbles and capped with rushes. In this way the foundations were protected from scouring by the river and battering by driftwood and floating ice. Four piers were provided with new defences in 1370 at a cost of 14s 6d. The road across the bridge was repaired in 1356–7 with 100 new paving stones, each costing 3d. A new wooden gate at the Exeter end of the bridge in 1385 cost 9s 9½d. In 1425–6 a carpenter took 17 days to repair the latrine on the bridge with wood and nails.

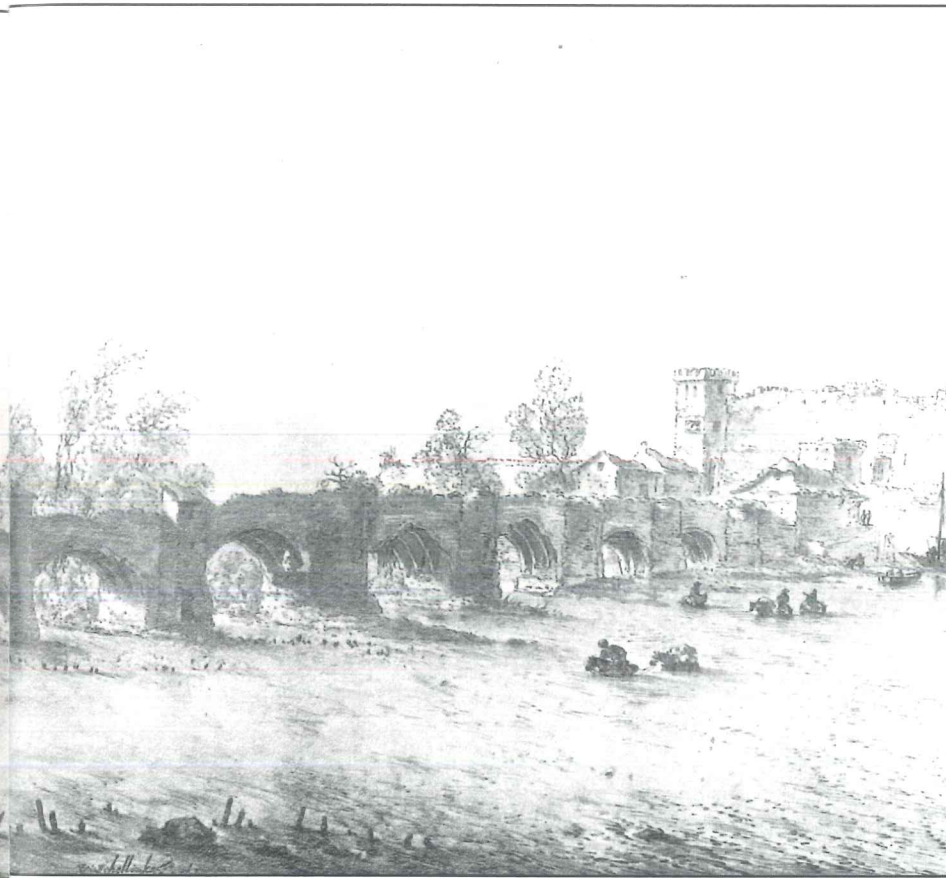
Repairs and maintenance in later centuries

There were many instances of damage caused to the bridge by floods. The western arches were most at risk since this was where the river was deepest and the current strongest. Various accounts mention major repairs in 1286, 1351, 1384, the last said to have been necessary after a disastrous flood carried away a number of the western arches which then had to be made up again in timber. Soon after, the wooden section itself became dangerous and had to be replaced in stone at the large cost of £2,000. When the cost of repair was too great to be met from the Bridge Trust's funds, money was provided by the city.

View of the medieval bridge as drawn by W. Schellinks in 1662. This fine drawing is the first accurate record of the bridge, with the stake weir downstream and packhorses fording the river.



South prospect of Exe Bridge before 1775, showing the spread of housing at each end and the weir of stakes downstream.



The churches on the bridge

St Edmund's church

This church was built with the original structure of the bridge; it stood above the second and third arches from the Exeter side and fronted onto the bridge roadway. Originally it had a simple rectangular plan. Its two end walls were supported by bridge piers with specially shaped cutwaters, whilst its rear wall was carried on four small arches. The church was rebuilt above bridge level in the mid-15th century, when a tower was also added. In about 1500 a small north aisle was added, supported on a new arch beneath. This was extended eastward soon



St Edmund's church prior to final demolition, c.1974.



after 1658; the aisle's arch was then blocked, showing that the river no longer passed beneath the church. In 1833 the church was again rebuilt, this time with an even larger north aisle, built up from the riverbed. The area beneath the church was let out as a cellar. Following damage by fire in 1969, the church became ruinous. It was partially dismantled in the mid 1970s, when the remainder was consolidated.

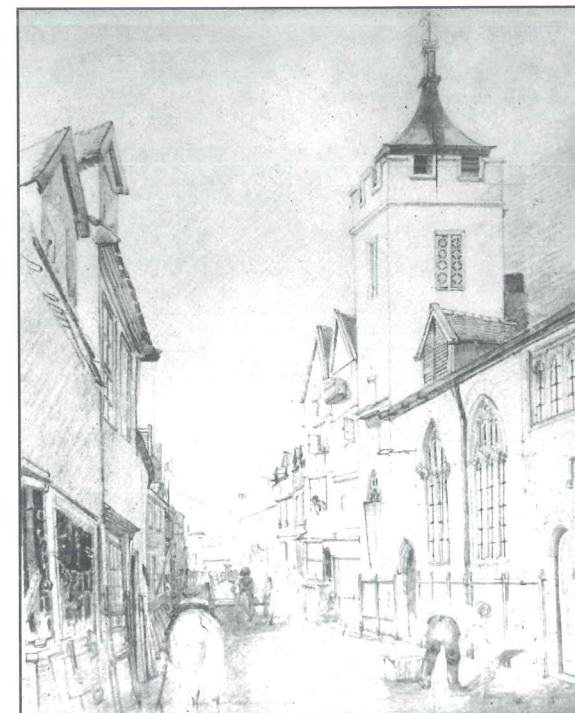
Excavations on the site of St Edmund's church on the bridge and nearby waterfront houses.

Chantry chapel

A chantry chapel dedicated to the Virgin Mary once stood opposite St Edmund's church; it was built by Walter Gervase and consecrated in 1257, the year of his death. Walter stipulated in his will that a priest should serve in the chapel for ever to pray for the souls of himself, his father, and family. The priest's salary was paid for by the Bridge Wardens, who also maintained the building. The chapel continued until 1546, when chantry chapels across the country were suppressed. In 1553 the building was sold as a private dwelling. It stood until the 19th century.

St Thomas' church

The church of St Thomas Becket stood at the western end of the bridge. In 1261 it became the parochial chapel for Cowick, the suburb of Exeter now known as St Thomas. There was no burial ground attached to the chapel, so parishioners were buried in the graveyard of St Michael's Church at Cowick Barton, about a mile away. St Thomas' church was swept away by a disastrous flood at the beginning of the 15th century. It was replaced in 1412 by a church built on the present site in St Thomas, 350m to the west and well away from the river.



Drawing of the bridge by the local artist J. Gendall c. 1825, with St Edmund's church on the right and the low chantry chapel just visible on the opposite side of the road.



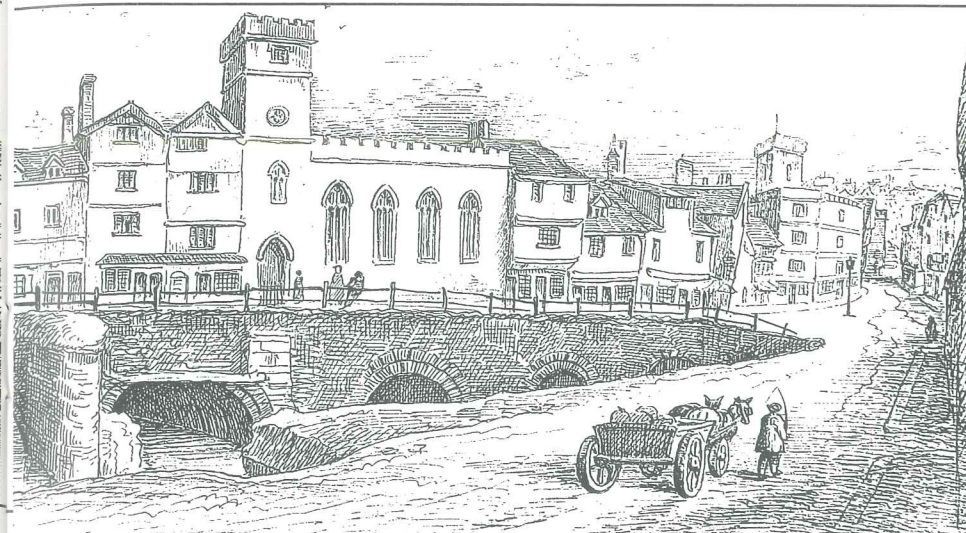
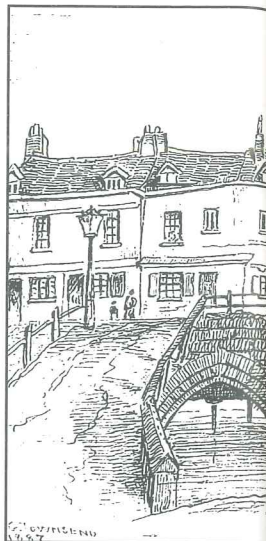
Houses and shops on the bridge

Houses with shops at the front were built on the bridge from at least the early 14th century; they sat on beams stretching between the bridge cutwaters. The earliest record mentions two shops standing on the east side of St Edmund's church by 1319. By the late 14th century there were nine shops clustered around the church and chantry chapel, and six more elsewhere on the bridge. More houses and shops were erected in the following centuries until all but six arches toward the middle had become built up.

Scenic view by E. Jeffrey showing houses perched precariously above the river in 1832.



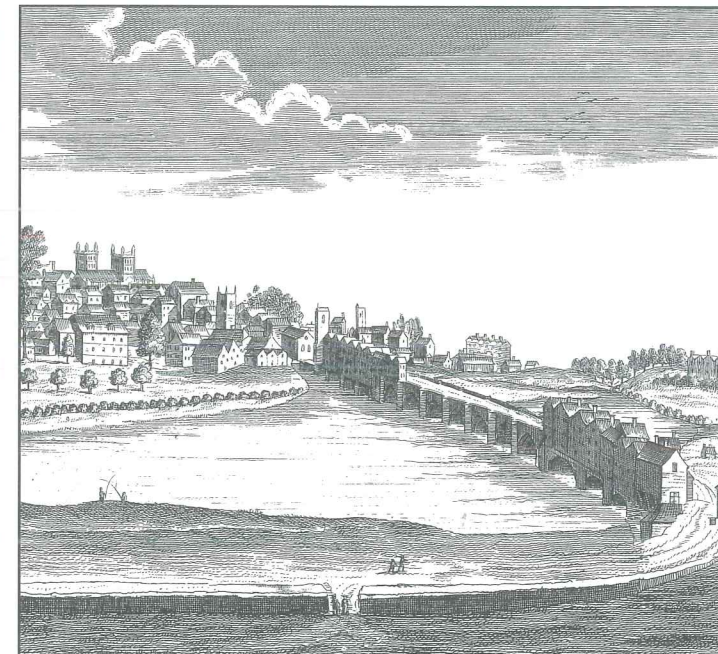
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Above: George Townsend's view of St Edmund Street in 1887, showing St Edmund's church and shops.

Below: The bridge and Exeter in Stukeley's view of 1723.

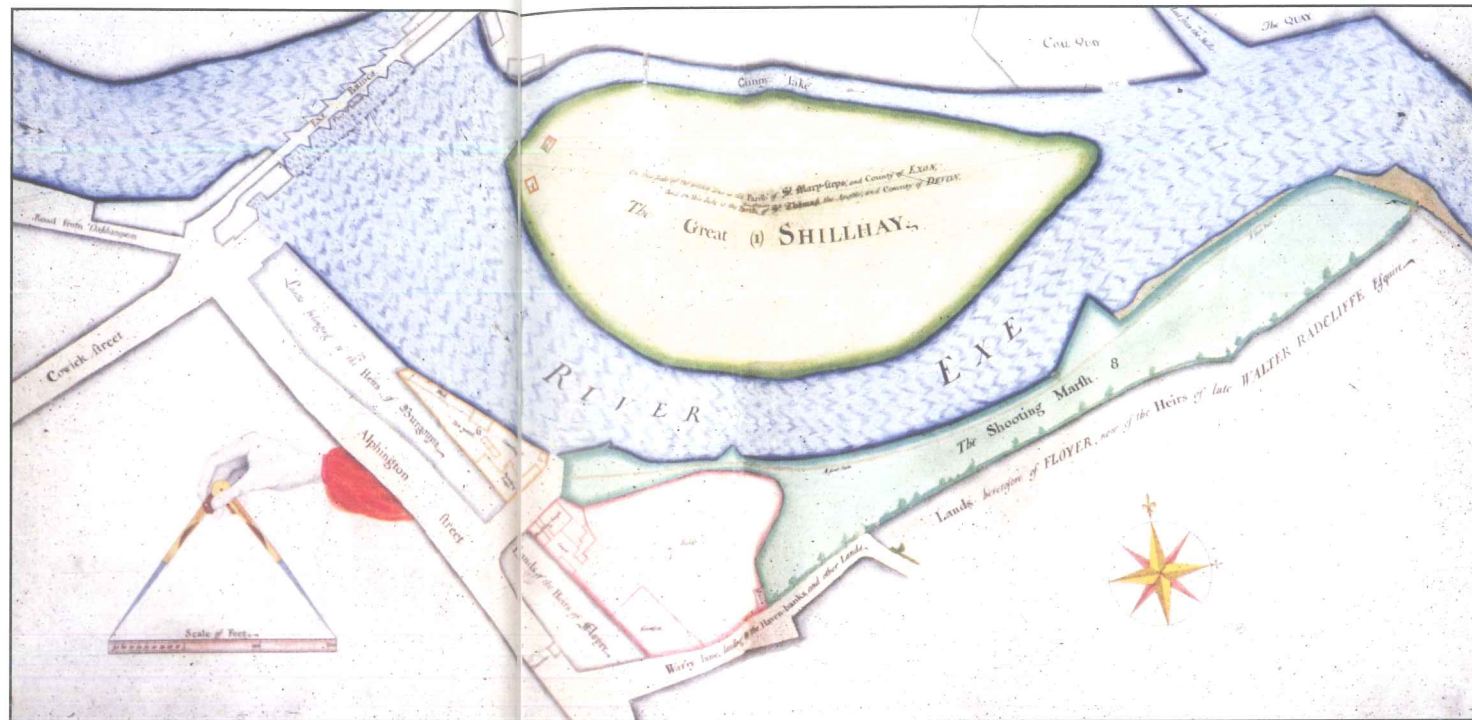


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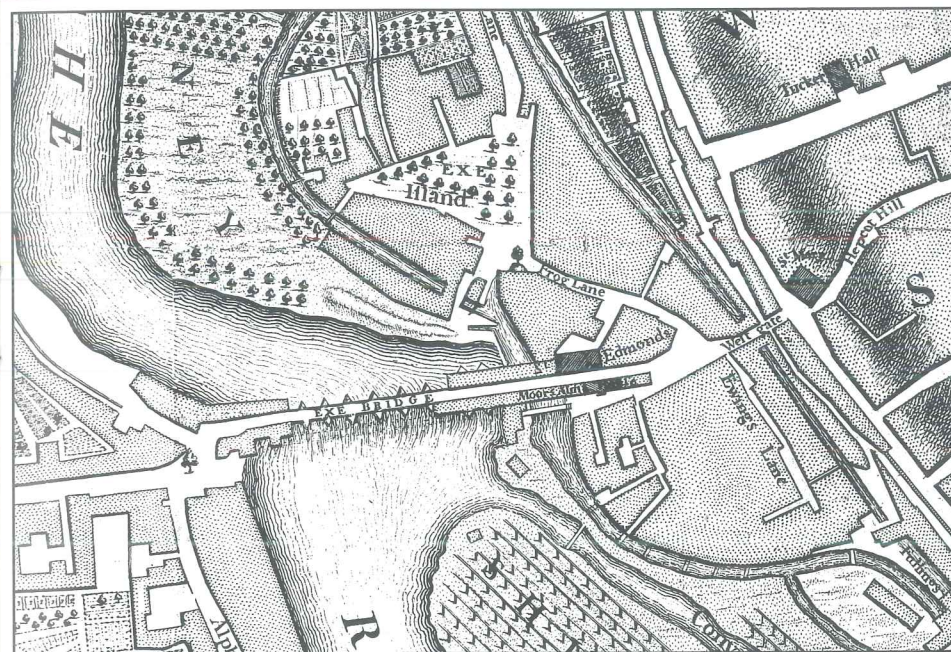
The suburbs around the bridge

The floodplain around Exe Bridge was originally little more than a wasteland of sandbanks and floodwater channels lying between the river and the city wall. Exe Island was formed when Higher Leat was dug, cutting off land enclosed within a wide bend in the river. The leat can still be seen in places today, running for almost half a mile from Head Weir next to Bonhay Road to the Quay. In the Middle Ages the area became the chief industrial suburb of the city. By the 16th century, there were many mills given over to fulling woollen cloth and numerous open-air racks or 'tenters' for hanging out the cloth to dry. In the 19th century the suburb

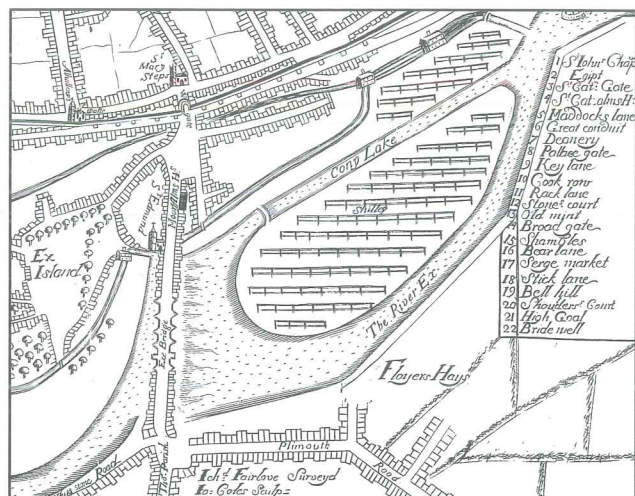


Above: Exe Bridge and Shillhay as shown in Exeter City's Chamber Map Book of 1755-60.

became occupied by iron foundries, tanneries, corn mills and breweries.



Left: Joseph Coles' map of 1709. Right: Rocque's map of 1744. Both views show the leats, mills, housing and cloth racks which grew up around the bridge.



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Excavation of the medieval houses on the waterfront



Stone houses began to appear along the waterfront about 1240. They were built on a sandbank which grew up next to the bridge soon after it was constructed. Excavated evidence shows that the occupants of the houses made their living from industry – by working leather, metal and horn. Over the next 600 years houses spread further along the riverbank as land was progressively reclaimed from the river; they fronted onto a lane which came to be known as Frog Street.

Excavation of the waterfront houses in 1976. Left: Successive river walls in the foreground and round pits to hold barrels which were probably used for processing leather to rear. Opposite: A tenement with a bakehouse with its oven and a well in its back yard.



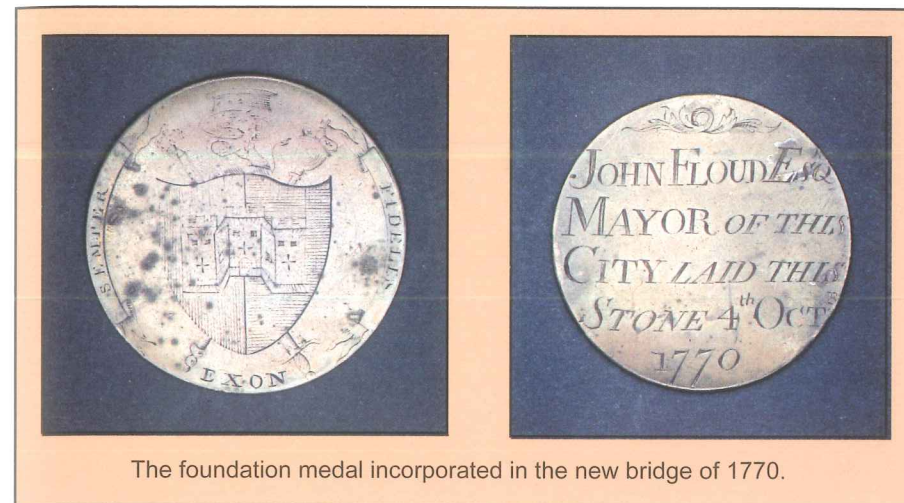
Left: Metal offcuts and scrap excavated from the medieval waterfront houses—evidence for medieval metalworking.



The first Georgian bridge

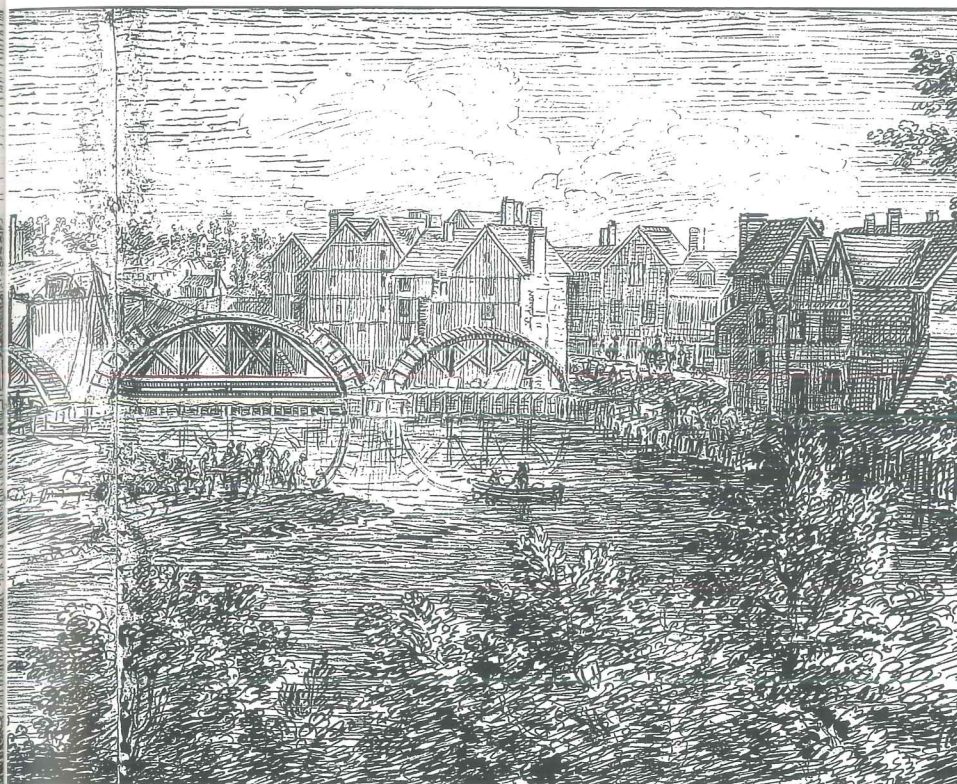
By the mid-18th century, the volume of traffic crossing the bridge had increased so much that congestion had become a problem. A plan to widen the old bridge was considered but rejected. In 1769 the funds of the Bridge Trust were transferred to the Turnpike Trustees, who were empowered by an Act of Parliament to erect a new bridge upstream from the medieval one. The new bridge was to be in line with Fore Street on the Exeter side of the river and Cowick Street in St Thomas on the other. Joseph Dixon produced a design, and the new bridge was begun in 1770. Building work suffered a major setback, however, when a catastrophic flood in 1775 carried away its arches and destroyed its foundations.

The first Georgian bridge under construction in the 1770s, with the medieval bridge in the background. In the foreground are rows of cloth-drying racks.



The foundation medal incorporated in the new bridge of 1770.

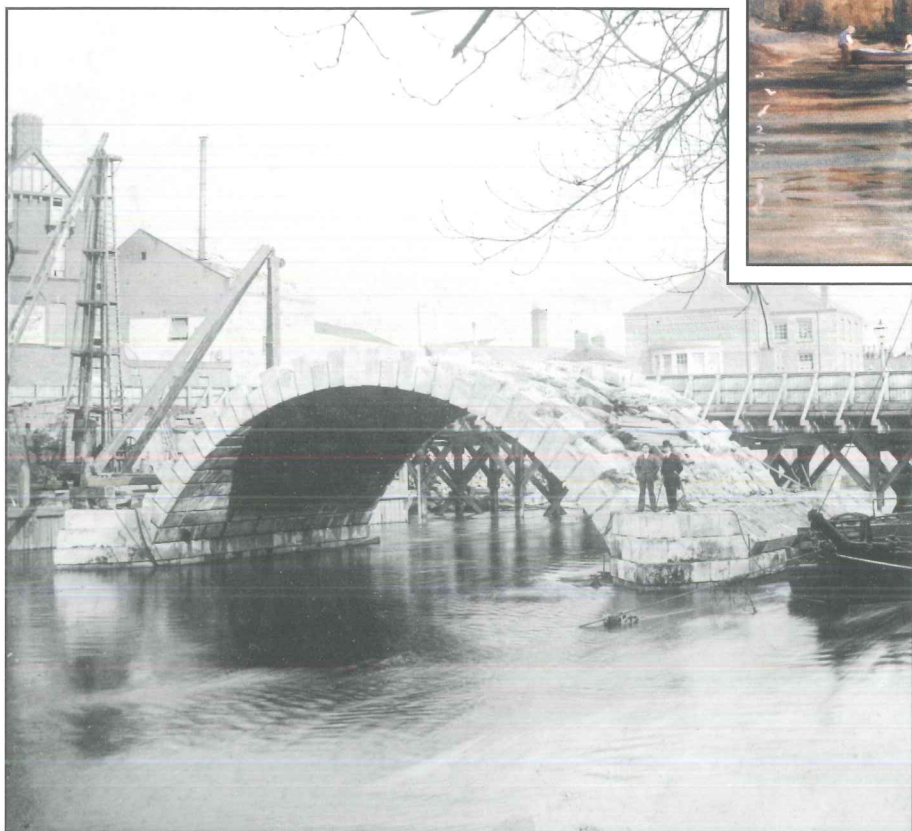
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The second Georgian bridge

After 1775 work on the new bridge began again, it was completed in 1778. It contained three stone arches, was 11m (36 ft) wide and had a parapet of balustrading. An elevated roadway known as New Bridge Street was constructed across Exe Island to connect the bridge with Fore Street, and a section of the city wall was breached to make way for it. In the same year, the western half of the old bridge was removed so that the river below the new bridge was not obstructed. The eastern half, together with the buildings standing on it, was retained and became known as Edmund Street.

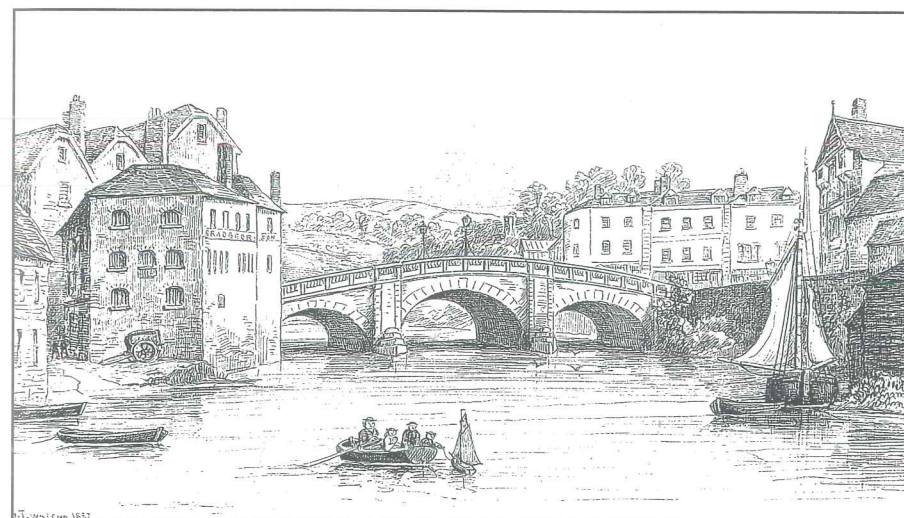


Dismantling the second Georgian bridge in 1904-5.



Above: Rubens Southey's painting of the bridge in the late 19th century.

Royal Albert Memorial Museum, Exeter

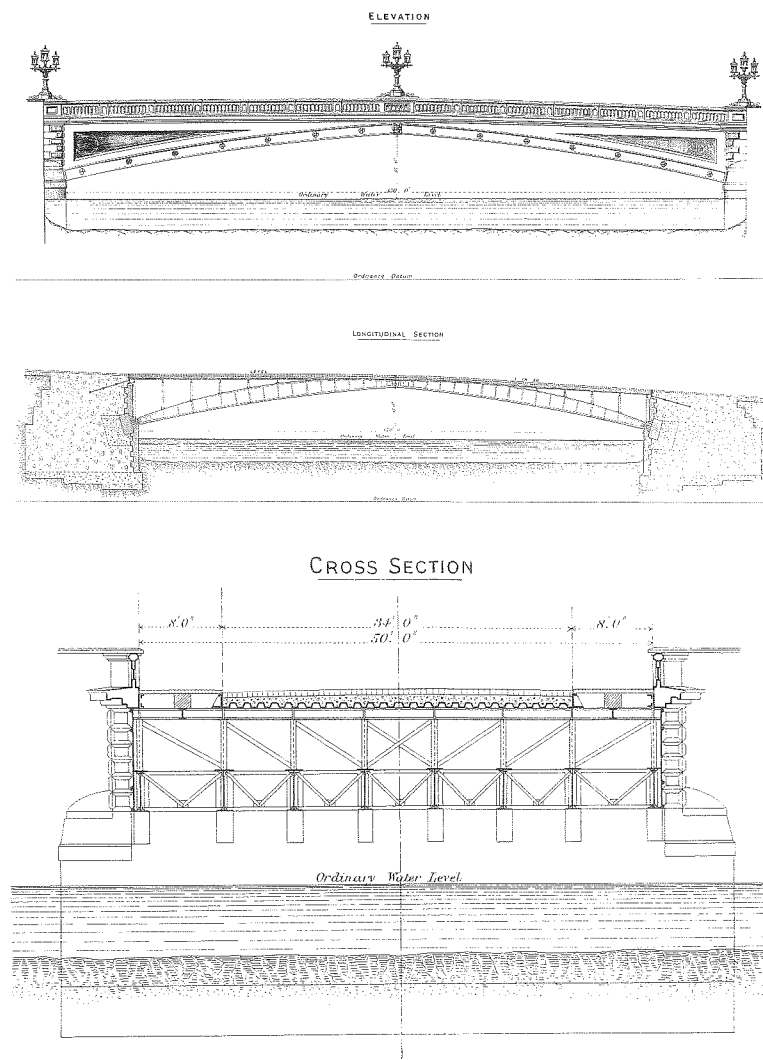


George Townsend's view of the bridge in 1887.

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The bridge of 1905

In 1905, the Georgian bridge was replaced by a single-span cast iron and steel structure 15.2m (50 ft) wide designed by Sir John Wolfe Barry. Barry's design was based on the 'three hinged arch', which allowed for a very wide and flat span.



Barry's designs for the new bridge.

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Above: The 1905 bridge under construction.
Below: Celebrations at the bridge opening, 1905.



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The 1905 bridge in the 1960s.

The new bridges of 1969 and 1970

The iron bridge was in turn replaced by the modern twin bridges built of concrete and completed in 1969 and 1972.



F. M. Griffith/D. Garner

Redevelopment of the area around the new bridges in the late 1970s.



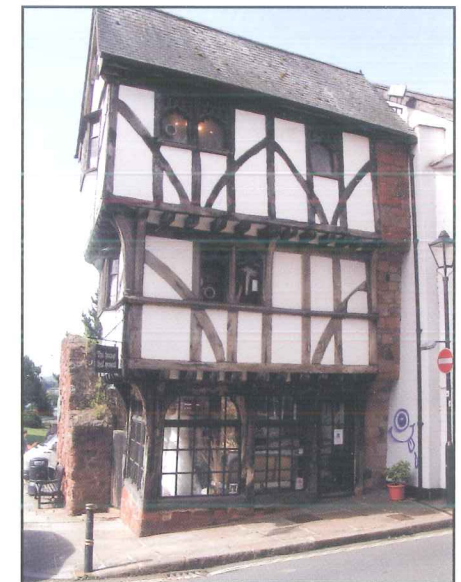
The house before it moved.

The House that Moved

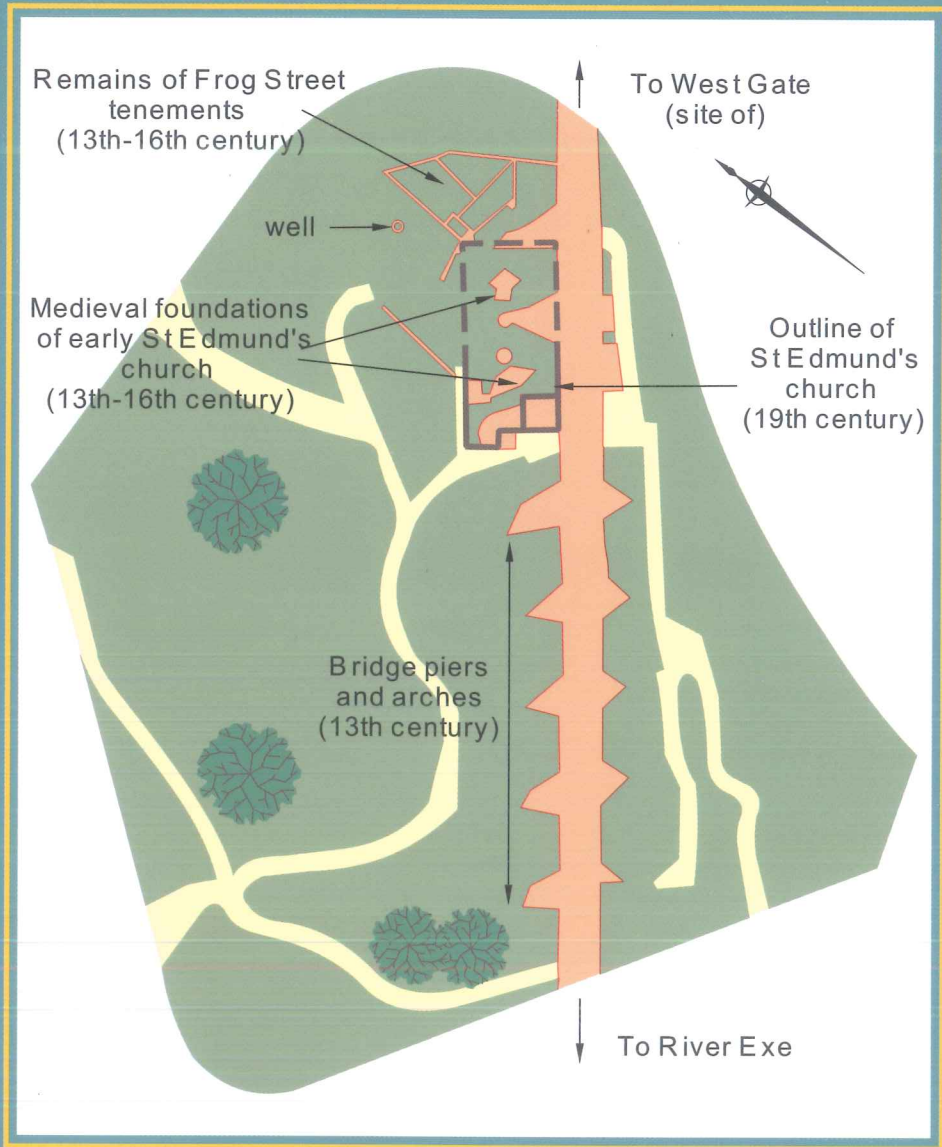
Frog Street was swallowed up by the modern road scheme in the 1960s. This timber-framed medieval house stood on the corner of Exe Bridge and Frog Street. Now known as 'The House that Moved', it was rescued and transported in one piece on wheels some 50m to its present position opposite St Mary Steps church.



Moving the house in the 1960s.



The house today.



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