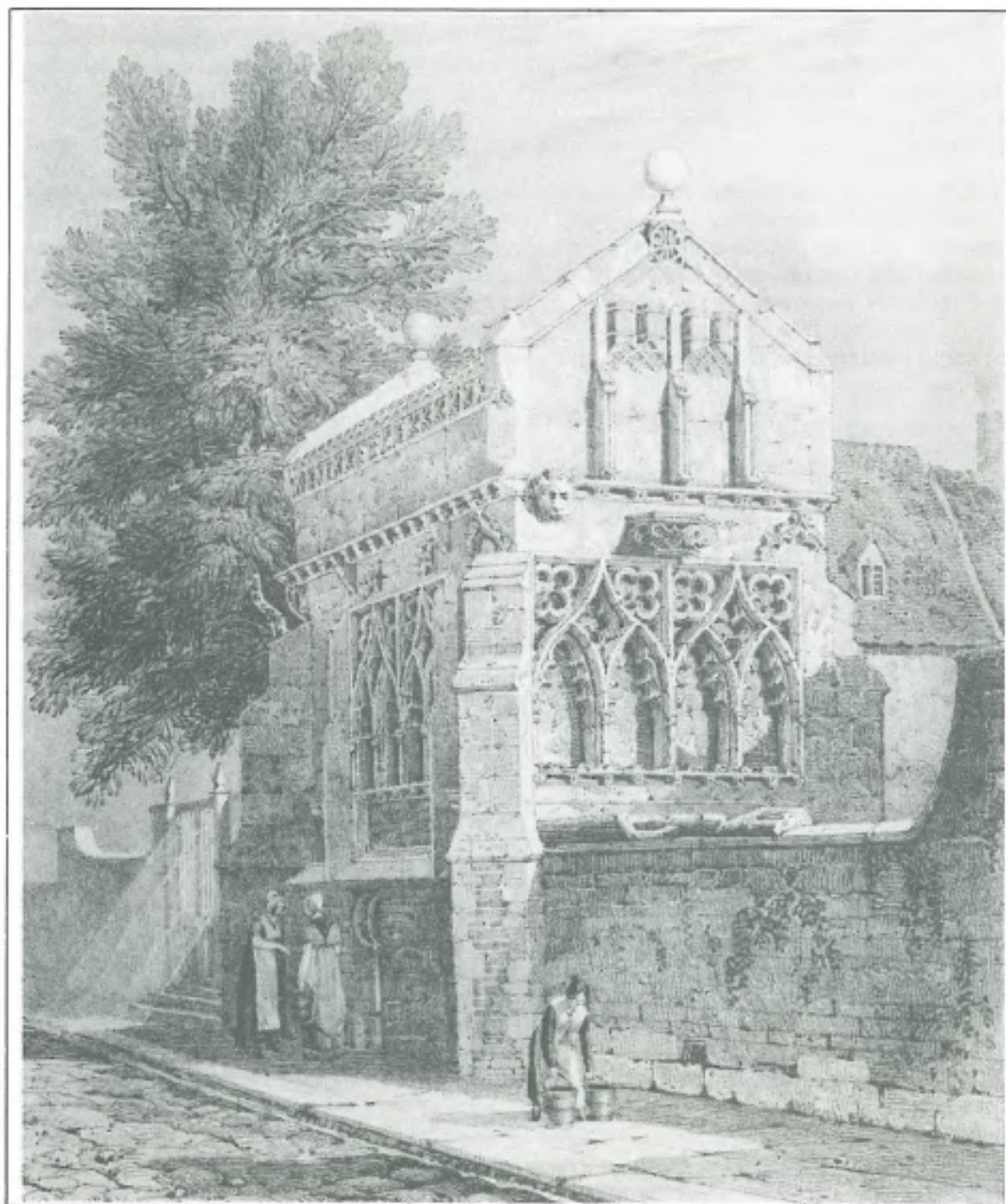


Information Sheet

Archaeology Series No.19

ST. MARY'S CONDUIT, LINCOLN



South-west view of St. Mary's conduit-head from a sketch by Pugin, 1818

INTRODUCTION

Supplying Lincoln with water has always been a problem. The upper part of the city lies on porous oolitic limestone which means that the water-table lies very deep, and hence any wells must go to a corresponding depth. The Romans solved the problem in part by the building of an aqueduct which brought water from the Roaring Meg spring two miles north-east of the city in concrete-jacketed pipes. The Romans, however, were such extravagant users of water that even they must have used other means of supply, the evidence for which remains to be found.

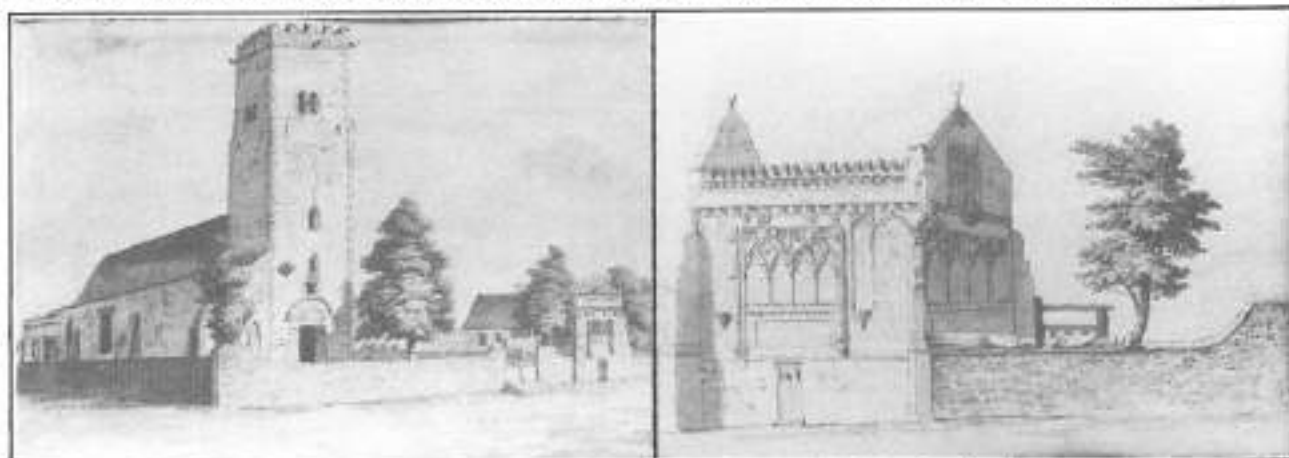
Throughout the Middle Ages the River Witham and the numerous wells must have been the main sources of water, though many of the 'wells' were in fact really storage chambers for surface water and water from roofs. In 1260 the Blackfriars, whose house stood between the present Monks Road and Lindum Road, constructed a pipeline for their own use from a spring to the east of the city. In 1535 the Greyfriars followed suit and it was essentially their pipeline that was to supply the lower part of the city with water, a supply whose sole remaining evidence above ground is the Tudor conduit-head which stands in the churchyard of St. Mary-le-Wigford.

HISTORY

In 1535 the Warden of the Greyfriars (the building which now houses the City and County Museum) obtained permission from the Common Council of the city to lay a conduit in the common land, to supply the house with water. The Friary was undergoing considerable repairs at this time and the Friars can hardly have expected their house to be closed down and their religious life to end so soon; yet in just four years the end came with the Dissolution of the Monasteries. The Common Council had been viewing the water supply with greedy eyes for some time and Bishop Ingworth, who came to take the Friars' surrender, reported back to Thomas Cromwell:

'In Lincoln in the Greyfriars is a goodly conduit for which the Mayor and the Aldermen was with me to make suit to have the conduit unto the city. I could not satisfy them till that I promised to write in their behalf to your lordship for the same'

Thus it was that in May 1539 the city acquired two conduits (i.e. the lead pipelines — one of which may have been the Blackfriars'). One of these they decided to put into use at once, the other to take up and keep. In the event the first pipeline was run to a point near the High Bridge, conveniently close to the Guildhall and the inhabitants of the upper part of the High Street, and a conduit-head of stone was built over it to house the storage tank and faucet.



St. Mary's conduit-head. Two views by S.H. Grimm, 1784 (Usher Gallery)

One year later the other conduit was given to the inhabitants of the South Ward of the city (the suburb of Wigford) for their own use. The pipeline was run on from the High Bridge along High Street and where it terminated at the west end of St. Mary's churchyard another conduit-head was set up, built largely, it is said, of stones from the demolished Whitefriars. When the Whitefriars' site (that of the present St. Mark's station) was disturbed in 1832

carved stonework very similar to that in the conduit-head was found. However the stonework could just as readily have come from one of the city churches pulled down a few years earlier, and this is perhaps a more likely source. John Leland, writing in the early 1540s says:

'There lay in a chapelle at the White Freres a rich marchant callid Ranulphus de Kyme, whos image was thens taken and set at the south end of the new castelle of the conducte of water in Wikerford.

There is another new castelle of conduct hedde *trans Lindim flu;* * and booth these be servid by pipes derivid from one of the houses of freres, that were in the upper part of Lincoln'.

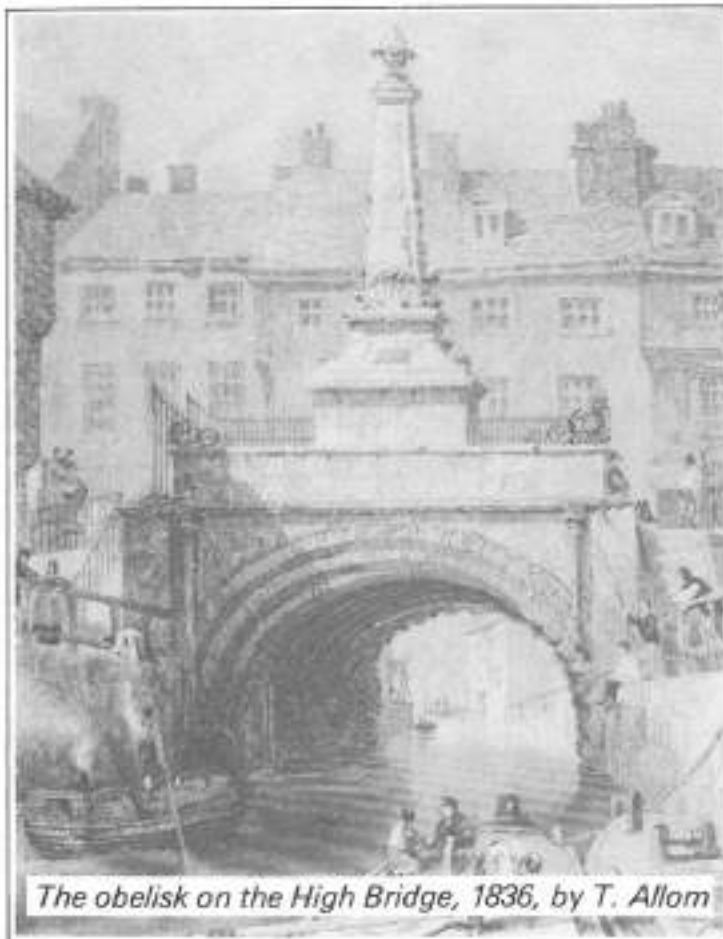
(**across the River Witham*)

Later in the century there were problems over the ownership of the watercourse which supplied the conduits. This was eventually settled by the Common Council of the city in 1585, but a more long-lived problem arose from contamination of the water-supply. In 1571 it was so bad that the conduits had to be stopped, and in 1598 the Common Council had to order that 'no clothes were to be washed at the conduits': seven years later they had to order 'no dust to be swept within six yards of either of the conduits, on pain of 6s. 8d'.

Repairs were necessary from time to time: in 1612 we find the Common Council deciding that:

'John Woodward, hollow-ware man, who is reported to be skilful about conduits, and the city being in want of such a workman, be for his trial set on work about the conduit, and if his workmanship be allowed to be good he shall have his freedom for 100s.'

As in other towns we find the conduits being made to flow with wine at times of public rejoicing. When the new Civic Charter was received in 1685 the Mayor celebrated by drinking claret at the 'great' and 'lesser' conduits. A meaner spirit entered the festivities of 1727, when George II was crowned. At a 'treat' held on 11th October the upper and lower conduits ran with wine for the Corporation, but the 'common people' had to make do with a hogshead of ale.



The obelisk on the High Bridge, 1836, by T. Allom

In 1726 the roof of the High Bridge conduit was let for business purposes, on condition that no more than two men stood on it at a time! Three years later all the pipes were relaid, during the Mayoralty of Thomas Wilson. At some date between 1730 and 1762 the conduit-head near the High Bridge was taken down.

In 1762-63 a new conduit-head was constructed actually on the High Bridge — the first stone being laid

by the Mayor, Richard Ruxton. It was completed in December 1763, and survived until 1939; there have been various moves since then to have the surviving portions reinstated, but so far

these have come to nothing. The new conduit-head took the form of an obelisk standing on a rusticated base, the High Bridge being extended eastwards on purpose to carry it and still to leave sufficient space in the roadway. In 1863 it was restored as a drinking-fountain.

A need was still felt in the East Ward of the city for a water-supply. As we have seen the original conduit to the Greyfriars had been diverted in 1539: in 1732 the Council agreed to restore the supply to the building (by now in use as a Grammar School upstairs and Jersey School downstairs) at the city's expense. The new conduit-head was set up near the west end of the building, between the second and third buttresses from that end. No illustrations of it survive, but it seems to have been a very simple affair. It had gone by 1906 if not before.



South-west view of St. Mary's conduit-head by O. Jewitt, c. 1850, showing the repositioned faucet. Note that the engraver has reversed the whole illustration!

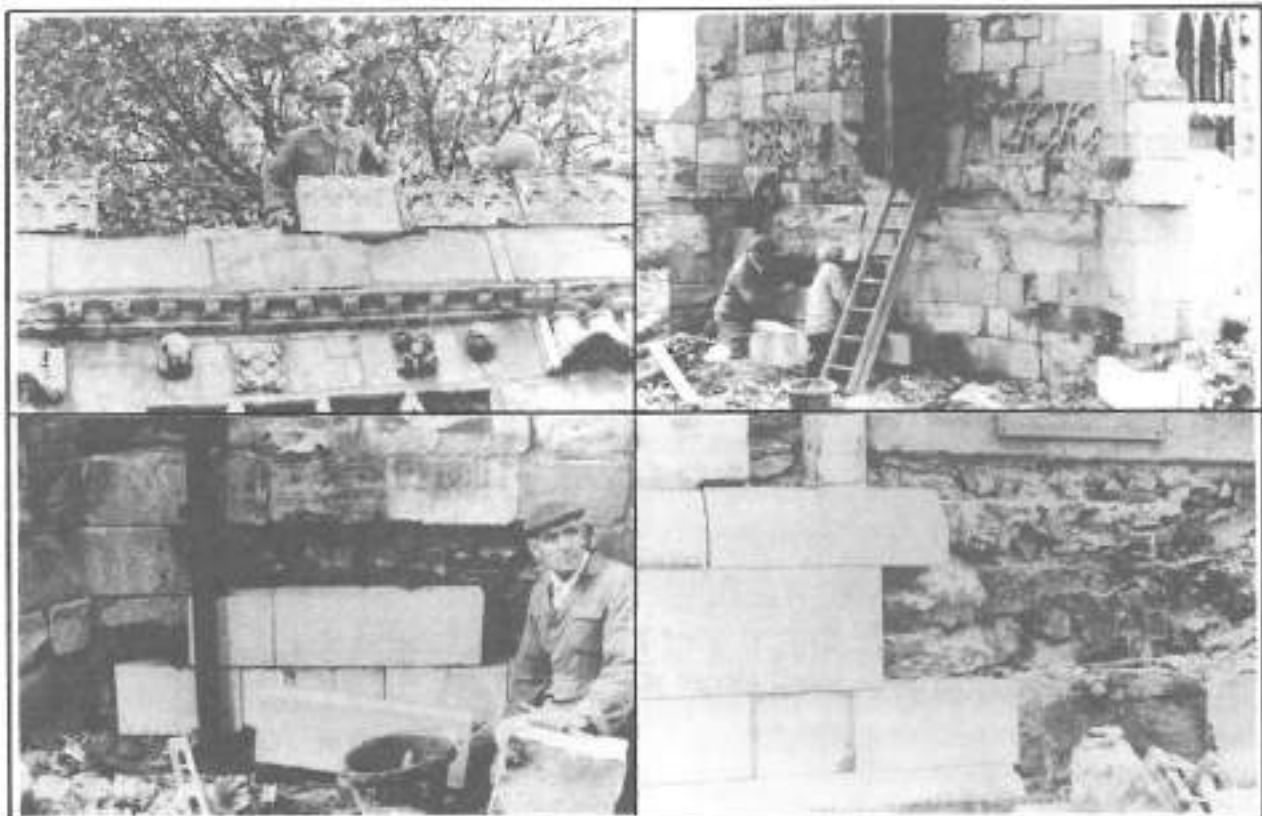


The conduit-head at St. Peter-at-Gowts

The 19th century saw considerable additions to the system. In about 1828 the faucet on the conduit-head at St. Mary-le-Wigford was moved from the west side to the south: this must have involved setting back the churchyard wall which in 1784 lay level with its western edge. In 1842 the monuments which lay on this wall were moved into the churchyard itself, and subsequently disappeared. 1864 saw an extension of the pipeline to the south, to a small conduit-head attached to the churchyard at St. Peter-at-Gowts, costing £100. Five years later a rather more fanciful structure, in the form of a low octagonal tower, was built at the junction of Baggeholme Road, Croft Street, and Winn Street, an area of growing working-class population on the eastern edge of the city.

St. Mary's conduit was by now becoming something of a nuisance as it was obstructing the narrow street close to the railway-crossing and Great Northern Station. Accordingly, in 1864 it was moved bodily backwards into the churchyard at a cost of £40 by Mr. Huddleston the builder, the work being completed by 15th April of that year. The work must have involved moving the faucet and grid back to the west side, where it remains today.

By the end of the century the whole system was thoroughly out of date, and much of the city received its supplies from other sources including the lake in Hartsholme Park. However, the conduit came briefly back into favour during the typhoid epidemic of 1905, when queues formed with buckets at all the outlets. A new source and pumping station at Elkesley in Nottinghamshire soon replaced the existing system and days of the conduit were over. The obelisk on the High Bridge was the first to go, and was followed by the Baggeholme Road tower, demolished in 1958. The other conduit-heads had better luck: that at St. Mary's was saved from collapse by restoration work carried out by the City Council in 1954. A tree that was growing inside it was removed and a concrete roof fitted. An oak door was inserted on the churchyard side to give access to the interior, originally gained no doubt via a trapdoor in the roof. Finally in 1979 the stonework, which was suffering severe erosion from earlier atmospheric pollution was selectively restored and replaced by a Mansfield firm of stonemasons.

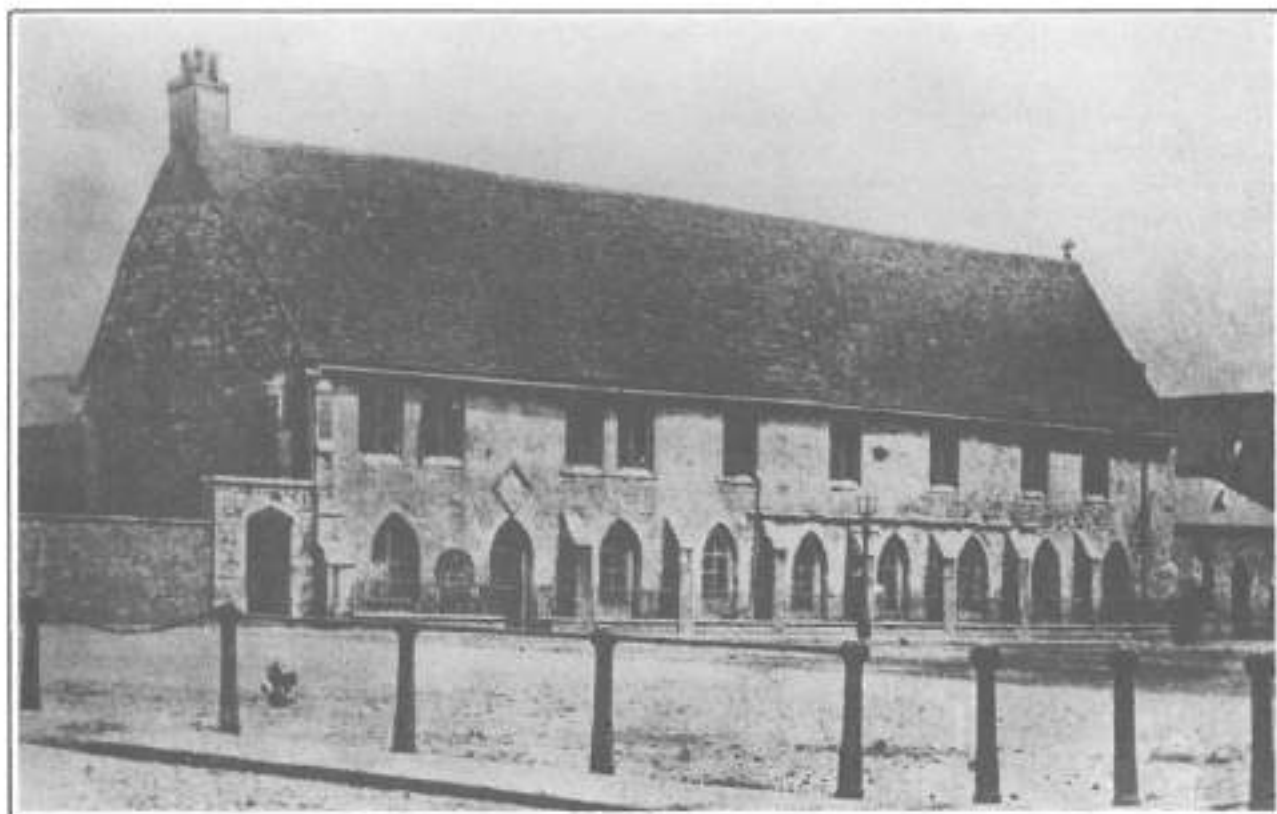


Restoration of St. Mary's conduit-head in progress, 1979

DESCRIPTION

The **source** of conduit water was a spring which rose from the hillside a few fields west of Monks' Abbey. A number of springs were to be found here before 19th century ironstone mining and 20th century housing changed the contours of the hill and the level of the water-

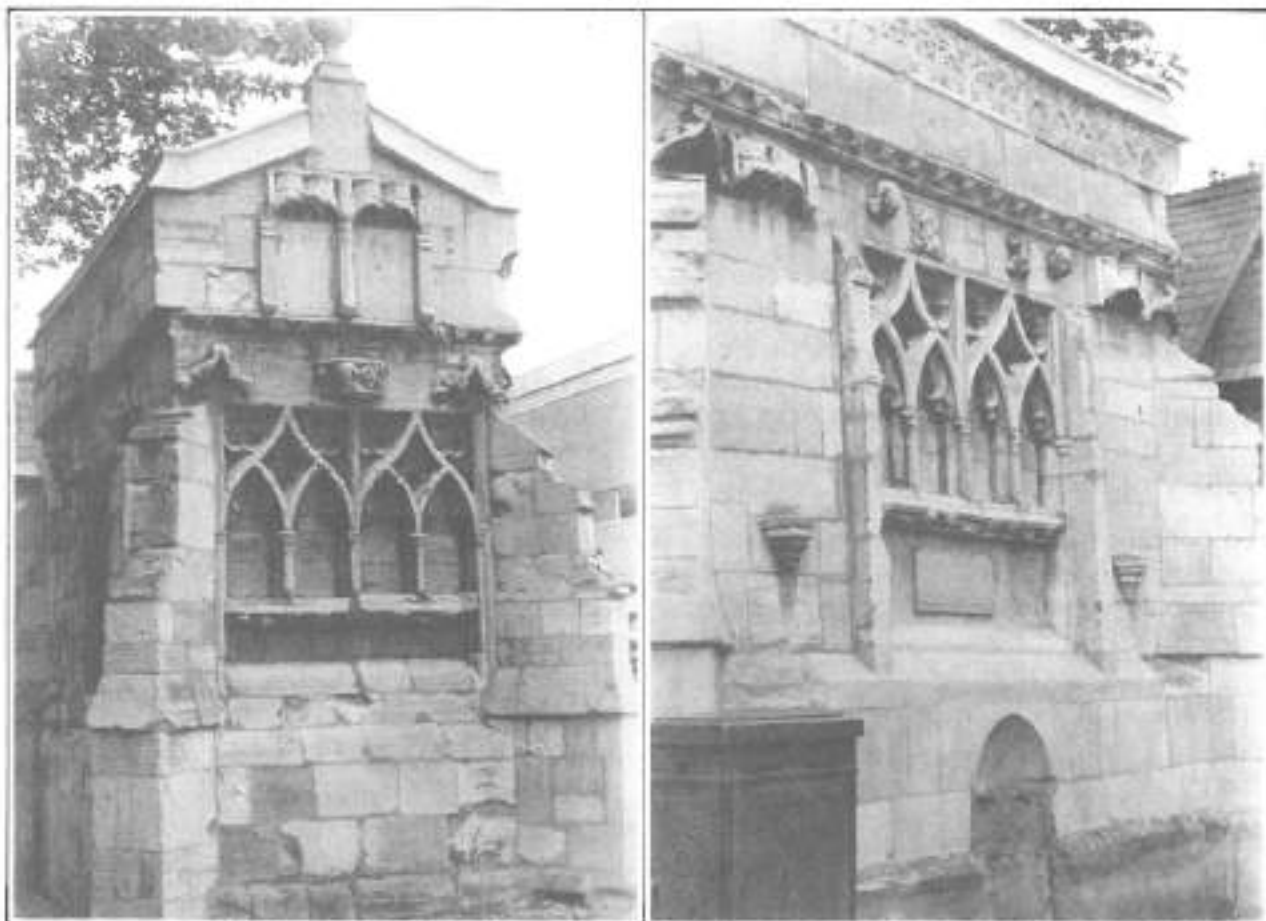
table: there was once sufficient water to operate a mill at Monks' Abbey and earlier still to feed the bath-house of the Roman villa at Greetwell Fields. In the early 18th century the antiquary Thomas Sympson noted that there was 'a small building of brick over the spring-head', presumably to protect it from contamination. From here a lead pipeline ran across Monks' Road in a south-westerly direction, crossing Broadgate at the east end of the Greyfriars (now the City and County Museum). Here it threw off a branch (or perhaps originally ended) and when the pipes were relaid in 1729 the cut-off end which had served the Friary was clearly seen. Passing along the southern side of the building the pipeline continued to the new conduit-head established in 1732 and ran on to join the High Street near the Stonebow. Running along the eastern side of High Street it served the conduit-head at the High Bridge and finally reached the surviving structure at St. Mary-le-Wigford.



The Greyfriars from the south, c. 1868. The faucet may be the black shape which occupies the position of the second buttress from the left

Additions to the system in the 1860s included the octagonal tower at Baggeholme Road and the very simple structure at St. Peter-at-Gowts.

The Tudor conduit-head at the High Bridge is somewhat mysterious. John Leland is clearly referring to it when he says 'There is another new castelle of conduct hedde *trans Lindim Flu*; and booth these be servid by pipes derivid from one of the houses of freres (Friars)'. Otherwise this conduit-head seems to be recorded by one single sketch and one single description. The sketch, by Samuel Buck, made some time before 1726, shows a rectangular building very similar to that at St. Mary-le-Wigford. Thomas Sympson, writing in the 1730s says 'At the Bridge foot is a Conduit 'Tis a stone Building adorned on the front towards the Fish Market with the Red Rose and Fleur de Liz crowned'. It was built in 1539 and may well have been constructed, like the other conduit-head, from re-used masonry derived from the Friaries or one of the recently demolished city churches.



St. Mary's conduit-head today from north (left) and west (right)



Details of tracery (left) and coats of arms (right) on St. Mary's conduit-head

The conduit-head at St. Mary-le-Wigford, the only part of the Tudor system to survive, has had a chequered history, including its bodily removal eastwards in 1864. It is basically a rectangular structure 4.08m long by 2.10 wide, with a maximum height of c.5m. A substantial three-stage buttress projects diagonally at each corner. In the northern, western, and eastern faces are set blank 'windows' consisting in each case of a pair of ogee-headed mouldings pierced with quatrefoils. Empty niches for statuary flank the western 'window' and parts of others are set at odd points below the cornice and in the end-gables. The gables are carried up above roof level and support ball finials, perhaps a feature of the 1672 restoration recorded in weathered numerals on the northern gable. The east side of the building has a centrally placed door set 1.60m above the ground. On either side of this are groups of very weathered armorial shields which seem originally to have been designed to decorate a gable as they run diagonally. The faucet which actually delivered the water originally stood on the west side in a small niche about 1 m above ground level. Shortly before 1828 this was moved around to the south side, probably to protect users from the increasing traffic along High Street. This involved setting back the churchyard wall by some 2-3m to provide access. In 1864 the whole building was set back from the street frontage and the faucet moved back to the west side, where it still remains.

THE WORKING OF THE SYSTEM

The whole conduit system depended upon two things: a reliable and plentiful source of water and a substantial vertical difference between the source and the last conduit-head. There is no evidence for any pumps etc. and gravity feed must have been relied upon entirely. It is a tribute to the Greyfriars' selection of a spring that what was sufficient for their community in the 16th century was still sufficient for half of the population of the city three and a half centuries later.

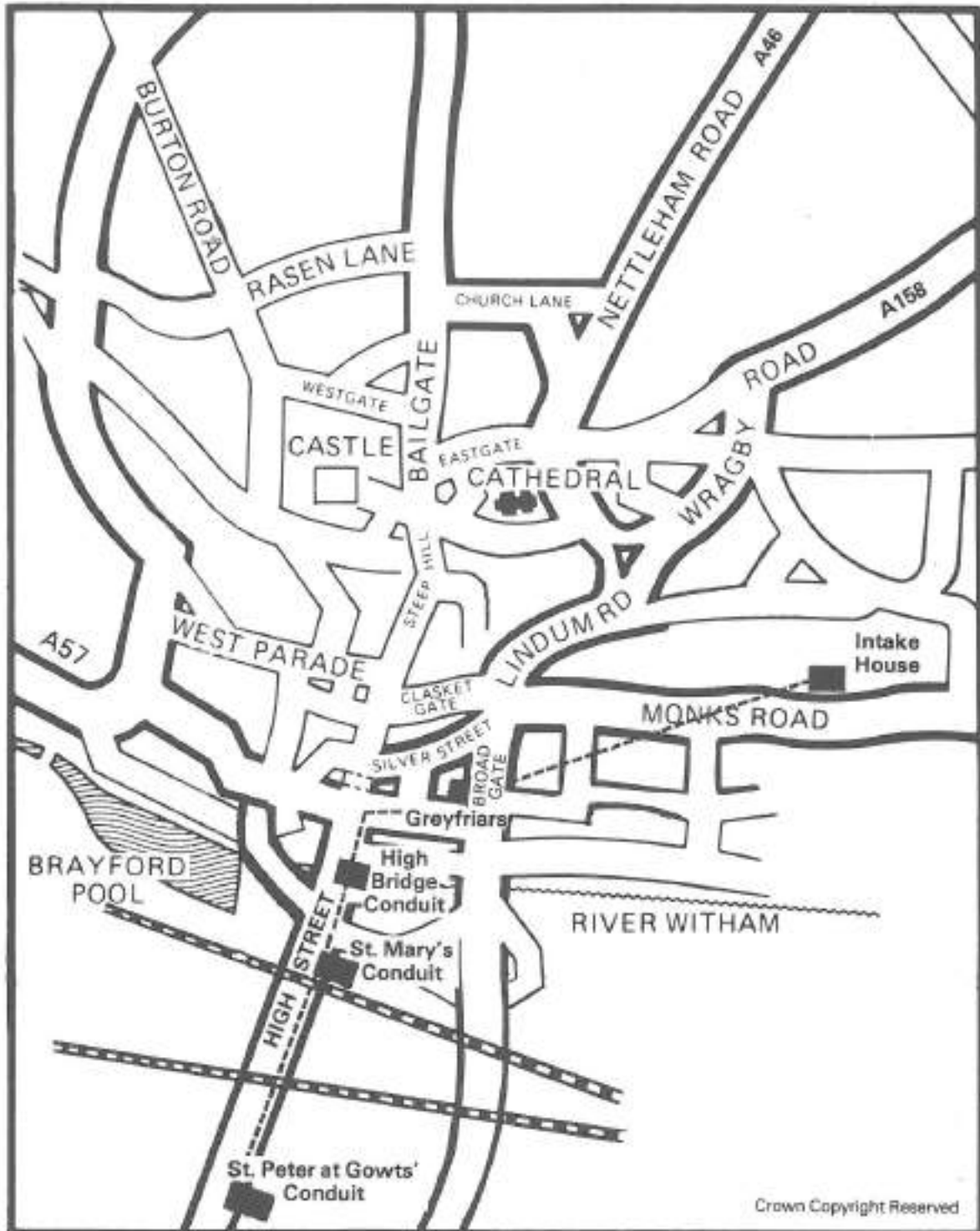
It is probable that the brick building described by Sympson was an Intake House like that at Grantham (see Information Sheet No. 9), designed to protect the spring from fouling by cattle and to collect the water in a basin to which the lead pipes were attached. The pipeline itself, made of lengths of lead pipe soldered together, would need to be buried sufficiently deep to protect it from frost, but might be marked in some way to avoid accidental cutting. (In January 1839 some 'mischievous persons' did succeed in cutting the pipes).

The conduit-heads were essentially decorative water-tanks, the whole of their interiors being given over to lead tanks which stored the water and allowed impurities to settle. Neither of the two surviving conduit-heads retains its lead tank. On the outside of the buildings were faucets at which the users would fill their buckets and jugs. Presumably there was some overflow system both here and at the Intake House to allow water to by-pass the system at night and at other times of low demand.



High Street, Lincoln from the south c. 1835 showing the conduit in use. From a lithograph by I. Haghe

LOCATION MAP



Map showing the course of the conduit pipes and main features

SOURCES

Books etc.

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Other

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Bodleian Library, Oxford. T. Symson *Adversaria* (MS history of Lincoln)

Lincolnshire Archives Office

Lincolnshire Museums: City and County Museum records

Written by Andrew White

City and County Museum, Lincoln

February 1980



Lincolnshire County Council