

## CHAPTER 3

# PAST FIELDWORK AT *CALLEVA*

While the modern excavations of Fulford (1975–present) and the earlier campaigns of the Society of Antiquaries are well known (1890–1909), they are but a fraction of the many surveys, excavations and records that have been undertaken at the site since observations began. This chapter chronicles that earlier work, which from the mid-eighteenth century has led to plans which have been digitised within this project. It adds significantly to Boon and Hingley’s accounts of early work done at the site (Boon 1974; Hingley 2012).

### THE EARLY ANTIQUARIANS

Our earliest known visitor was King John on 19 May 1215, travelling the long way round from his hunting lodge in Freemantle, near Kingsclere, to Winchester; this was only a few weeks before he went on to meet the Barons at Runnymede (Hardy 1833, appendix). Thomson (1924, 101) mused about what the King felt, seeing the ruins and how all great powers fail, just before his capitulation to the Barons and signing of the *Magna Carta*, but beyond the royal itinerary we know nothing of King John’s thoughts.

The earliest recorded find, in 1283, not unsurprisingly comes from a frustratingly incomplete early reference. In the nineteenth century, albums of colour images of antiquities or ‘archaeological sites’, as they were starting to be called, populated the market. Within one, in amongst the myths and legends, it was relayed that ‘Constantius, it is pretended, died and was buried here, without the walls; and a manuscript chronicle in the College of Arms tells us that his body was found there in 1283’ (Wright and Fairholt 1845, 150). As they said, probably some remarkable discovery had been made there at the time, perhaps from one of the cemeteries surrounding the site. The unnamed source has yet to be located.

**John Leland** (1503–52) is our first named antiquarian to visit the site. Building on his knowledge gained from reading in the libraries of the monastic houses shortly before the Dissolution, he developed an interest in topography and antiquities. His notebooks collated his own observations with the records and charters he had seen in the libraries. Alas, the resources he assembled for Silchester, which he visited in 1541, were meagre, merely providing a description of the oak-covered walls. However, he did include what is believed to be the first description of a cropmark (Fagan 1959): ‘There is one straung thing seen ther that in certen partes of the gound withyn the Waulles the corne is mervelus faire to the Yee, and ready to shew perfecture, it decayeth’ (Leland 1754, VI.49).

**William Camden** (1551–1623) elaborated on Leland’s work, bringing it together with his own research and maps of England by Saxton and Norden, to create his monumental *Britannia*, a complete survey of Great Britain and Ireland. First published in Latin during the highpoint of the Elizabethan age, it was translated into English by Holland as the crowns of England and Scotland came together. He wrote significantly more than Leland on Silchester but followed the same themes describing the oak-covered walls and the cropmarks of the roads within:

These walles take in compasse about two Italian miles... And before the wals westward, where is a plaine, there lieth a banke of a great length, raised and cast up for a defense and fortification. The site of this old citie containeth about fourscore acres of ground within, which being a soile ploughed up and tilled, are divided into corne-fields, with a little grove in

the West-side: but on the East, neere unto the gappe in the wall, there standeth a Farme-house and a pretty Church more lately built ...

This is found by continuall observation (as I have learned of the inhabitants of this place), that although the ground bee fertile and fruitfull inough, yet in certaine places crossing one another, the corne doth not thrive so well, but commeth up much thinner than else where, by which they suppose the streets of the citie went in old time. There are heere daily digged up bricks such as we call Britaine-bricks, and great store of Romane coine which they terme *Onions pennies*. For they dreame that this Onion was a Giant and dwelt in this citie. There are digged up also many times inscriptions, of which the unskilfull rurall people envie us the having. (Camden 1610, 271)

In terms of detail he was the first to mention the Outer Earthwork to the west beyond the Roman walls. Amongst the many inscriptions, only one was reported in detail by Camden, the tombstone to Flavia Victorina (*RIB* 87, now in Cambridge) found in 1577 just to the north of the town.

**John Aubrey (1629–97)** had varied interests spanning writing gossipy biographical sketches of Elizabethan notables to researching the antiquities and natural history of Surrey and Wiltshire. His Wessex study, largely completed by 1671, was only posthumously published as a *Natural History of Wiltshire* in 1847; but within it his fifth chapter on soils discussed the phenomenon of cropmarks, ranging from his misguided notion that fairy rings were due to vaporous gasses from the ground, to a relayed conversation about the cropmarks at Silchester:

The right reverend father in God, Seth, Lord Bishop of Salisbury, averres to me that at Silchester in Hampshire, which was a Roman citie, one may discerne in the corne ground the signe of the streetes; nay, passages and hearthes: which also Dr. Jo. Wilkins (since Lord Bishop of Chester) did see with him, and has affirm'd the same thing to me. They were there, and saw it in the spring. (Aubrey 1847)

His *Monumenta Britannica* remained largely unpublished in the Bodleian until recently, but also contained a number of other observations of Silchester, including noting erroneously that the 'walls of the city do make an oblong right-angled' (Aubrey 1980–82, 428–9, 436–41, 680, 973).

**Thomas Hearne (1678–1735)** was another notable antiquary residing in Oxford. He gained prominence for his work as an editor of important early editions of various chronicles, including volumes by Leland and Camden. His interest in nearby Silchester came partly from the debate over the name of the site (he mistakenly thought the best candidate for *Calleva* was Henley), but also from individuals telling him about all the coins, hoards and other discoveries that were being discovered in the fields from 1706 onwards (Hearne 1885, 165; 1889, 361, 438; 1898, 359–64, 368). He finally visited the ruins in 1714, writing up his journey in his diaries; critically checking his visual observations against earlier authors' descriptions. As with Camden, Hearne noted the cropmarks and also the Outer Earthwork on the western side of the town:

Before the west gate, there is at a considerable distance an Agger, or raised work, that was made for defence of the city, when it was besieged on that side, as there is another raised work or mount on the north-east side, made also upon the same account when the siege happened from the enemy that lay on Mortimer's heath. (Hearne 1813, 188)

Hearne imagined the south of the city to have been of some import, associating it with a monument to Constantine, whom he believed to be the founder of the site. This idea was perhaps established in his mind by mention of a recent discovery: '... not far from the South Gate, in the south field, as they term it, they found not long ago a tessellated pavement, very large, but miserably broken, which I suppose was an ornament of the principal room of the palace ...' (Hearne 1813, 189). A plausible location for this mosaic, dug up by unnamed excavators, would be in House VIII.1 close to the *Mansio*. These excavations had not just been taking place inside the town, but also outside the walls, revealing inhumations:

As I was walking on the east side of the wall in the trench, just under the wall, I came to a tumulus or barrow, in one part of which was they were digging in the year 1713, they found the head, skull, and bones of a man, 9 feet in length, which they think there (as is usual with the vulgar on such occasions) to have been the bones of a gyant. (Hearne 1813, 195)

**The Revd Robert Betham (d. 1719)** was appointed rector to Silchester in 1698. Educated at St John's, Cambridge, he settled in the village for twenty years, building the rectory and within it a large library. He was probably responsible for many of the early excavations, and had certainly himself accumulated a large collection of coins which he had shown to Hearne and others. Unfortunately he met an untimely death, murdered and thrown into the Fleet ditch in London in 1719, especially so since 'he was preparing an account of the Roman city at Silchester, which was lost by his untimely death' (Urban 1839). Much of his library was bought up by Principal King of St Mary's Hall, Oxford for Sir Thomas Sebright, but if Betham's papers for his account were amongst them it is unlikely Hearne would not have come across them as he knew Sebright's collection well (Gough 1780, 185; Hearne 1898, 368; 1906, 70, 97, 171, 299; 1915, 455).

**William Stukeley (1687–1765)** was perhaps one of the last great antiquarian travellers across the British landscape, his *Itinerarium Curiosum* in many ways a counter-reaction to the increasingly fashionable alternative of the continental Grand Tour (Sweet 2004, 166). He visited Silchester on his journey tracing *Iter VII* from London to Chichester, during which he observed the solar eclipse of 1724 (though curiously the plan of the town in his volume, unlike his drawing of the Amphitheatre, is dated to two years earlier). On his visit he saw the collection of the by then late Revd Robert Betham (Stukeley 1776, 178). While his literary description provided good observational detail, particularly of the Amphitheatre which he purported to have discovered, his representation of the site was as a rectangular fortress with two opposing gates. This significant distortion of the shape of the city is all the more curious given the detailed land boundaries within and around, all of which are broadly correct. He even identified a gate leading out towards the Amphitheatre which was not to reappear on any other maps for a century (though he neglected another on the southern side) (Joyce 1876b, 413). The detailed interior and exterior leave no question that he walked around a considerable proportion of the site (*contra* Boon 1974, 24), in which case it would have been clear the Town Wall did not have right-angle corners to it. Nonetheless, he projected on to the site the classic playing-card shape of a Roman fortress which in his mind was what the site was meant to be. 'Men willingly believe what they wish to be true' (Caesar, *BG* 3.18); he saw what he wanted to see and had it engraved accordingly.

Stukeley's plan had not been the earliest of the site, and certainly was not the most accurate. Betham's plans are lost, but an earlier estate plan is known to have existed as well. By 1653 a map showing the correct shape of the city had been drawn up, though it would seem only in outline. This was observed by Boon in the estate office of Stratfield Saye which then owned the land (Boon 1974, 24); though it appears on an inventory of their estate plans in 1932, it can no longer be traced amongst the archives, which have now been split between Stratfield Saye, the Hampshire Record Office, the Museum of English Rural Life and the University of Southampton.

### THE EARLY EXCAVATORS

If the details of the seventeenth-century campaigns are lost to us, the eighteenth century sees the first surviving records of 'archaeological' campaigns initiated with the intention to plan, record and recover details.

**John Stair (1708–82)** was the first to create a plan of the interior of the city, though he was by no means a gentleman antiquarian. His interest must have begun when a teenager, as many years later his homonymous schoolmaster son said his father had been collecting for 60 years before his death (Chandler 1821, 19). During some of these early years he worked in the service of Betham's successor-but-one at Silchester, John Paris (Rector 1726–42), a former Fellow of Trinity Cambridge. The job certainly would have gained him familiarity with the site, and maybe with Betham's collections. His penultimate year there, 1741, was a harsh winter followed by a long dry summer, and it was in this year that Stair drew his own detailed plan of the site from the cropmarks (Strutt 1779). Upon Paris' death Stair moved to Aldermaston where he became a cobbler then inn-keeper (Boon 1974, 23), and he began his excavations, continuing from the early 1740s through to at least 1752, and quite possibly much later. These were perhaps the first methodical investigations on the site and resulted in the first clear plan of the walls, roads and

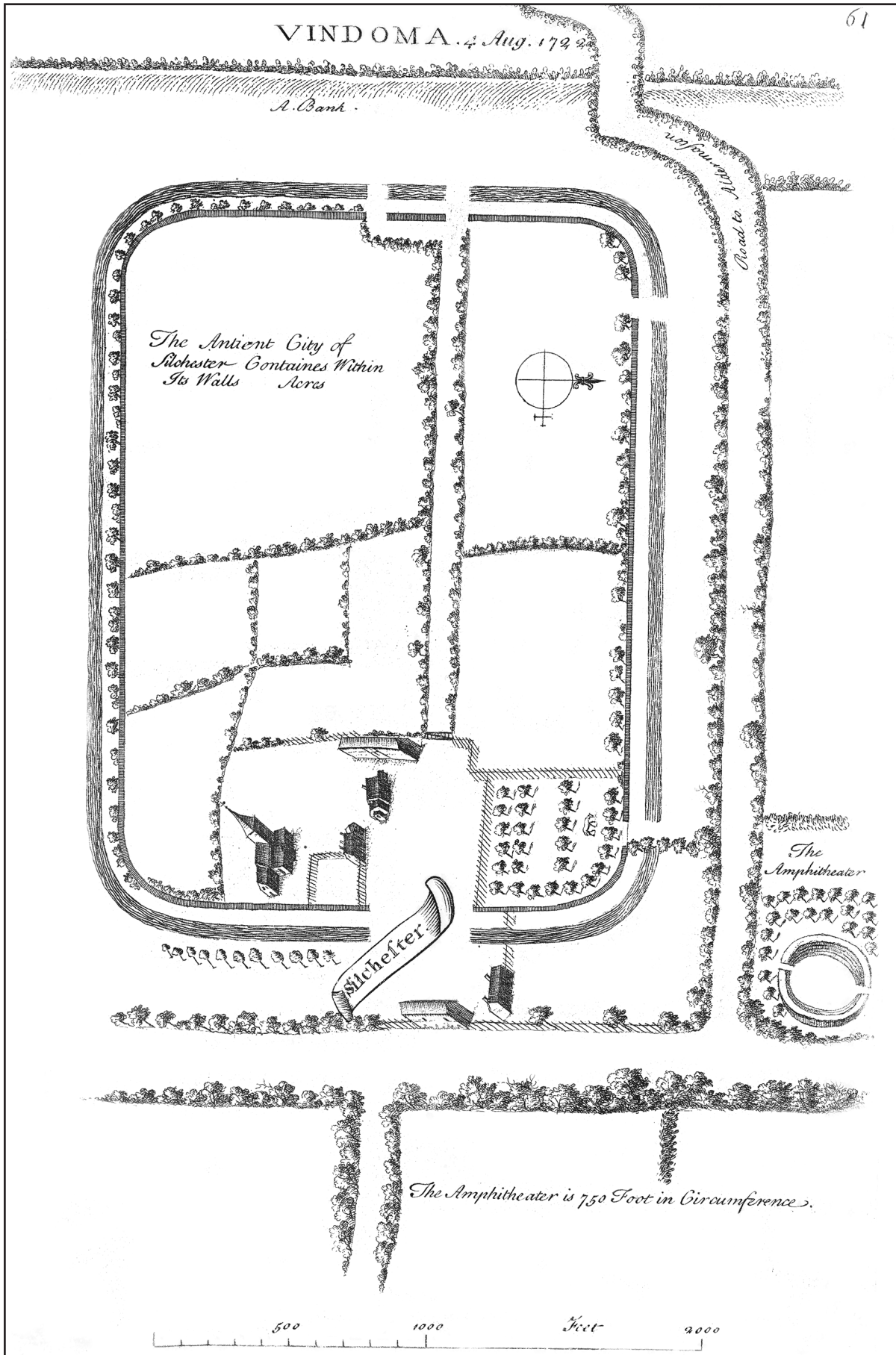


FIG. 3.1 Stukeley's map of 'Vindoma' 1722 (Stukeley 1776, Tab. LXI).

Forum. They were described a century and a half later as ‘random diggings’ by Fox (1899b, 80), remarkably unkindly since, from what we do know, Stair appears to have set about a clear targeted campaign of work to establish the street pattern.

The method taken by Mr Stair, in order to discover where the streets formerly lay, was by observing for several years before the harvest those places, in which the corn was stunted, and did not flourish as in other parts. These were very easily distinguished in a dry summer, and run in strait lines crossing one another, as they are drawn in the plan. Moreover, by spitting the ground, and often digging it up, he found a great deal of rubbish, with the plain ruins and foundations of houses on each side of these tracts. Whereas in the middle of the squares nothing of the nature appeared, and the corn usually flourished very well. The ploughmen also confirmed the same, who found the earth harder, and more difficult to be turned up, in these tracts and near them, than elsewhere. (Ward 1748, 607)

We also discover that he had a good understanding of stratigraphy. Stair appreciated that there were earlier and later buildings, discovering the foundations of others beneath the predominantly late Roman buildings he was finding. Some considered these were remains of the pre-Roman town:

This conjecture is almost rendered a fact by the discoveries of Mr Stair, who in digging under the old buildings, and taking up the Roman pavements, with their foundations, discovered other foundations of an older date, and of different workmanship, composed of rough flint Stones, and gravelly mortar. What confirms the conjecture of these being the works of the ancient Britons, is, that British coins have been found there, among which is one of gold, and another of silver, well preserved, now in the possession of Mr Stair. (Chandler 1821, 3)

This is remarkable given these excavations pre-date the work of James Hutton and William ‘strata’ Smith who introduced the concept of stratigraphy into geology in the late eighteenth century. Stair’s work was extensive and prolonged, building up a private collection of more than 2,000 British and Roman coins, maximising recovery by sieving the soil (Chandler 1821, 19).

One of his main areas of activity was around what we now know to be the Forum. He uncovered the ‘black marble’ dedication to ‘Hercules Saegon ...’ (*RIB* 67), from a depth of 1.2 m, in the northern end of what we now know to be the Basilica (Ward 1744–5). He then partly uncovered the building, identifying it as a market square since there was an open area within the middle of it. A longer description of some of his finds was preserved by Gough, Brayley and Britton:

In Gough’s additions to Camden, mention is made of a person named Stair, who formerly kept a public-house in the neighbouring village of Aldermaston, ... ‘had a great collection of coins, both brass and silver, from Julius Caesar to the latest Emperors, found hereabouts and some gold and silver, British: two onyx seals; one with a cock picking out of a cornucopia; the other only ZACP. Of the Roman coins found here, one of the rarest is a gold Allectus; rev. Apollo, with a whip and globe; at his feet, two captives, ORIENS AVG. ML. and gold ones of Valentinian and Arcadius. One spot, called Silver-Hill, where are foundations of large buildings, has yielded a great quantity of silver coins. In or near the Temple (Forum) above mentioned, Stair told me, he found twelve or more pedestals, and fragments of stone statues, too imperfect to bring away: he shewed me the small alabaster head of a man, with curled hair, about three inches high, and said that many copper penates had been found: he had a sword with two serpents encircling the hilt, found within the walls.’ (Brayley and Britton 1805, 248–9)

**John Ward (1679–1758)**, at the time the Gresham Professor of Rhetoric, visited the site with the surveyor John Wright, and commissioned the latter to draw a plan developing Stair’s 1741 drawings to create a new map which he then published, shamelessly neglecting to credit Stair on the final version (Ward 1748). By way of contrast, years later when the antiquarian **Joseph Strutt (1749–1802)** visited Stair and reported on his works he took pains to make clear the proper attribution of the work (Strutt 1779, 301). Both Stair’s 1741 and Wright’s 1745 maps were preserved in the King’s Library, now the British Library (Kempe 1833, 123). However, the most detailed rendition of Stair’s work appears on another drawing altogether, as a vignette in the top left corner of a one-inch-to-a-mile map of Hampshire, drawn up by Isaac Taylor in the first and failed attempt to win the Royal Society’s prize-winning challenge of 1759 to map any county

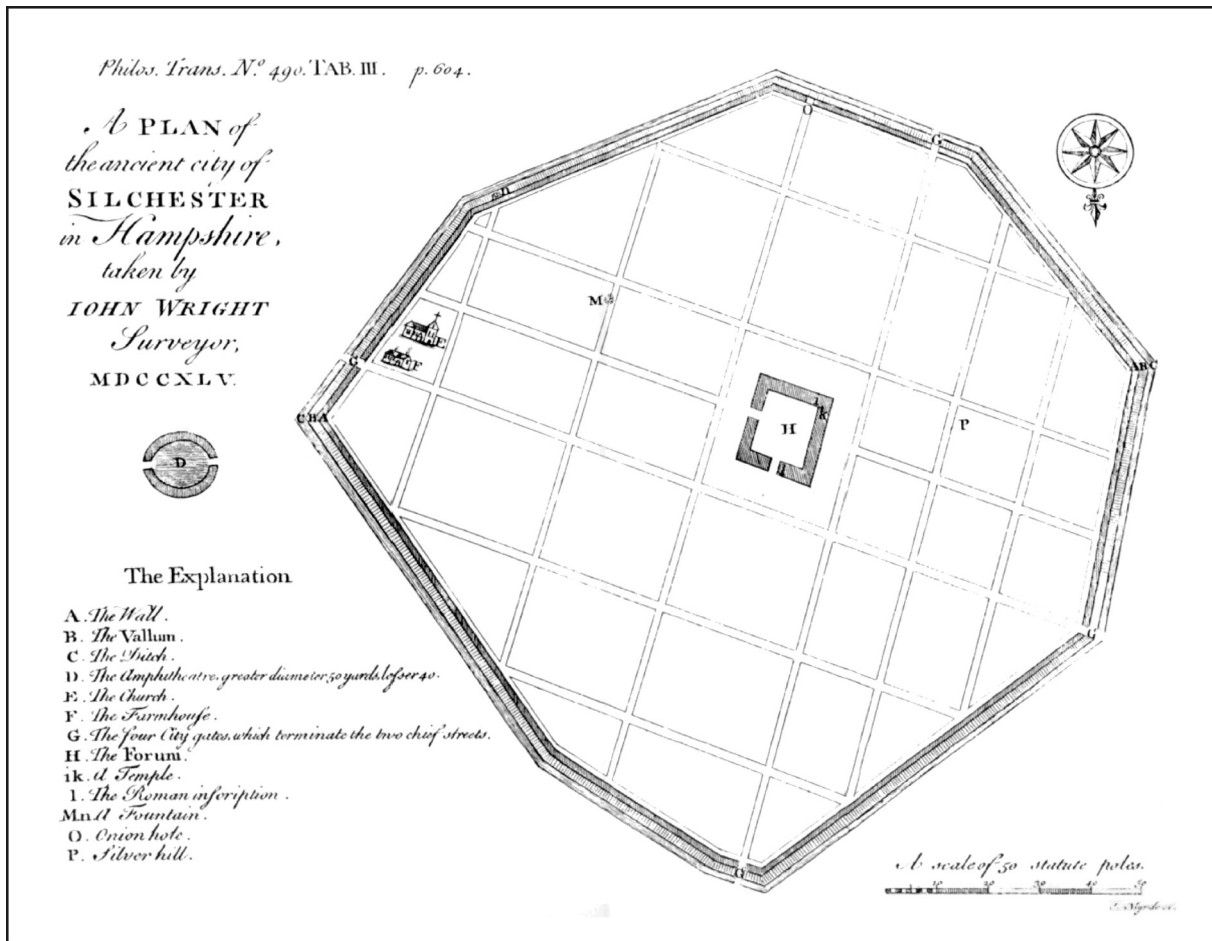


FIG. 3.2 John Wright's plan of 1745, based on John Stair's work (Ward 1748).

at this large scale (Taylor 1759). This plan shows that Stair's campaigns continued, excavating a number of partial buildings along the roadsides to the west of the Forum. On one corner a large number of coins were found, leading to the place being called 'Silver Hill', the building we would now call House XVI.3. Strutt had persuaded Stair to draw up an account of his many years' work at the site, to provide for the world a record of his diggings and a full account of all the coins he had recovered (Strutt 1779, 301). Alas, if ever written, it is lost to us now.

Thereafter there appears to have been a lull in excavations at Silchester, though it is clear that many people were still acquiring their own collections from the site. The Revd Thomas Powys, Rector of Silchester (1769–1809) reported finds from the field including an iron Roman Eagle which passed into the possession of the Bishop of Carlisle (Anon. 1789).

We largely know what was going on from a Basingstoke printer, Samuel Chandler, who collated scraps of information about the city, though the largest scrap by far was the unpublished research undertaken by a local dissenting minister, the **Revd Joseph Jefferson** (1766–1825). Jefferson had been active in the area 1791–1819, when circumstances 'better to forget' meant he suddenly had to resign his ministry and move to the other end of the country. To these notes Chandler added the recollections of John Stair's son and others. Many people, it seemed, had established large collections by this date, including Mr Cloase, William Jeffries and Jefferson himself. While Chandler studiously avoided calling himself the author of the volume, but rather the compiler, an obituary of Jefferson made it clear it was based on the Reverend's manuscript (Chandler 1821; Anon. 1825). While relatively unknown now, it was a thoughtful summation of knowledge at the time for which Jefferson deserves credit, whatever the cause of his sudden departure and it becoming politic not to mention his name.

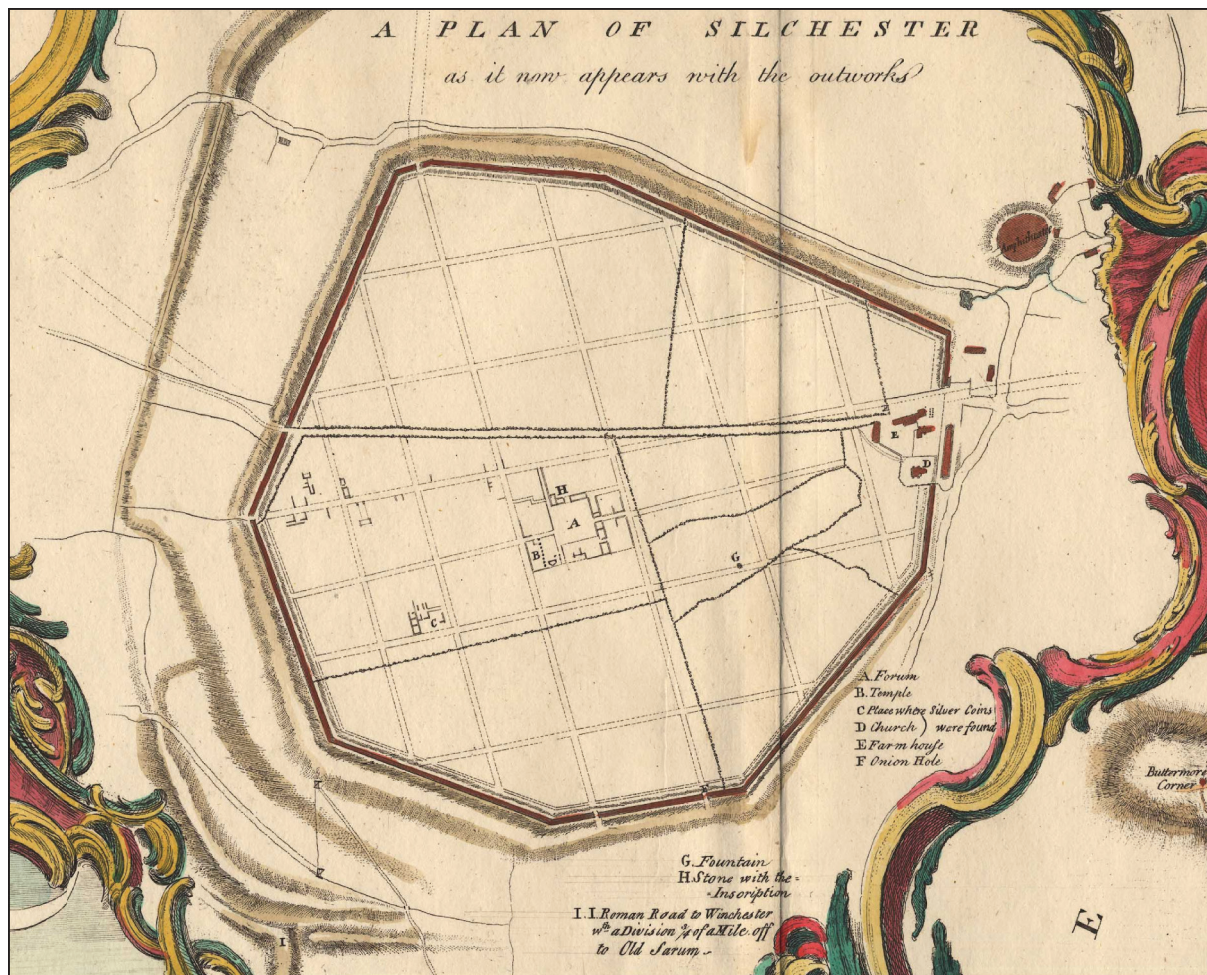
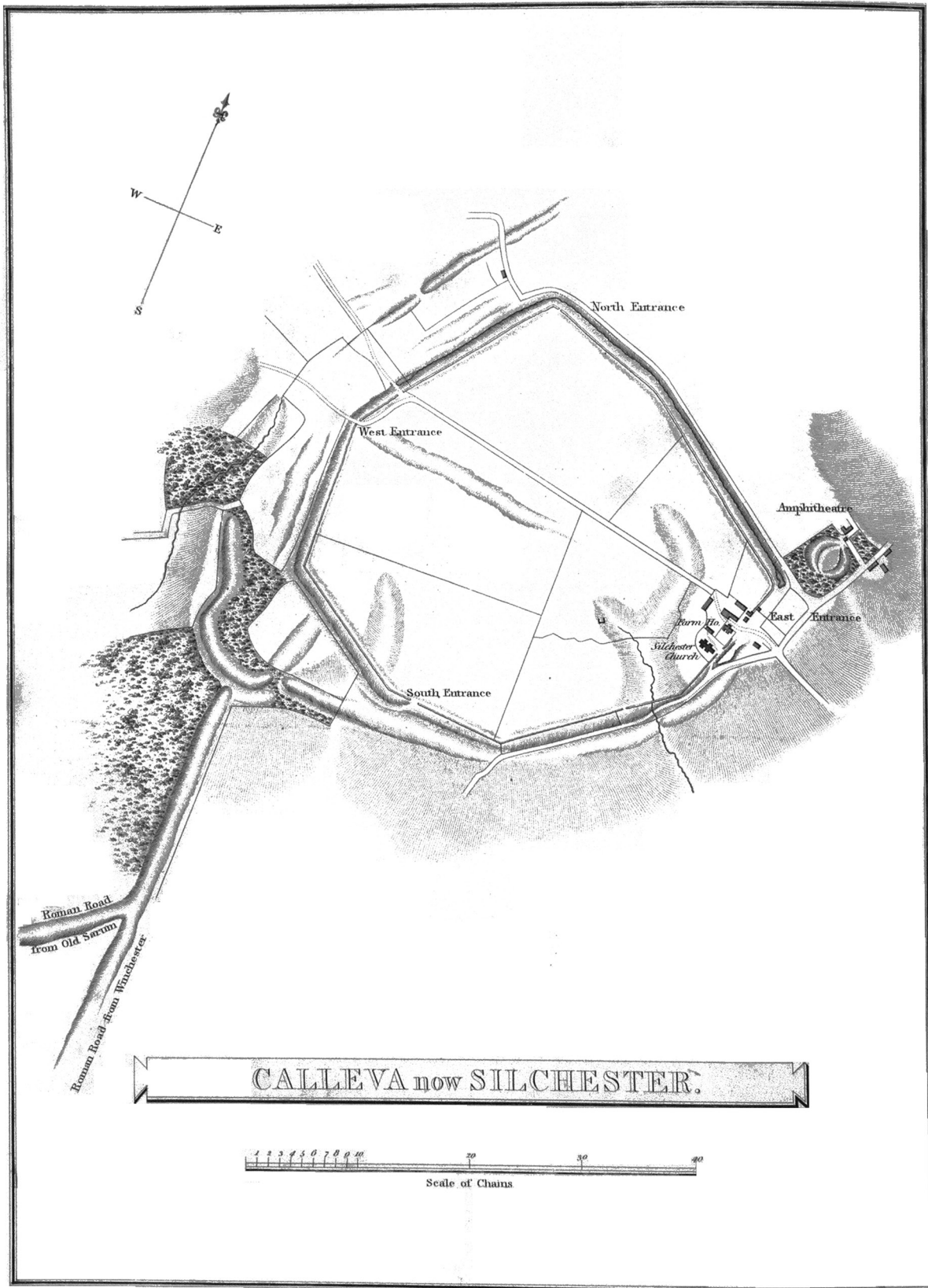


FIG. 3.3 Isaac Taylor's map of Hampshire 1759. Top left vignette showing Stair's excavations at Silchester. (Image © Martin & Jean Norgate 2003)

In terms of excavations following Stair, c. 1780 'a floor of mosaic pavement was discovered in a part of the area called Watch Field, by a person of the name of Curtis. The tesserae were of different colours and ranged in right lines. The whole was taken away by a gentleman who visited the place' (Chandler 1821, 20). Then in 1821 a hole was excavated near the East Gate, perhaps associated with one of the many buildings there: 'A space of about three feet square was excavated, and within the depth of three feet these reliquaries were found amongst ashes and fragments of bones, deer's horns etc.' (Bartlett 1854); otherwise little is known to have happened. However, in 1818 the site was visited by **Sir Richard Colt Hoare** (1758–1838), who strayed outside his study area of Wiltshire into the neighbouring counties tracing the Roman roads. He, or perhaps his trusted topographical draughtsman Philip Crocker, surveyed the site, coming up with a slightly different plan of the outer earthworks to Taylor's. Particularly notable here is the record of the survival of an earthwork in the Rampier Copse, subsequently ploughed out.

In 1828 the Manor of Silchester was bought by Arthur Wellesley, the Duke of Wellington, adding it to his Stratfield Saye estate which had been acquired for him by Parliamentary trustees on behalf of a grateful nation following victory at Waterloo. The next year the **Revd John Coles** (1787–1865) was appointed Rector of St Mary's, and by 1833 was excavating the bathhouse of what we now know to be the *Mansio* (Fox 1899b, 84). Coles also embarked upon three or four further explorations. Hilton Price later observed that the phrase 'site of Roman villa' appeared close to the *Mansio* on some plans of the time. 'This was probably another of these excavations, and the baths and villa [were] well remembered by old inhabitants' (Hilton Price 1887, 275).



Published by Lackington, Hughes, Harding, Mavor & Leppard, London, March 1821.

FIG. 3.4 Plan of 1818 by Sir Richard Colt Hoare (1821, 57).



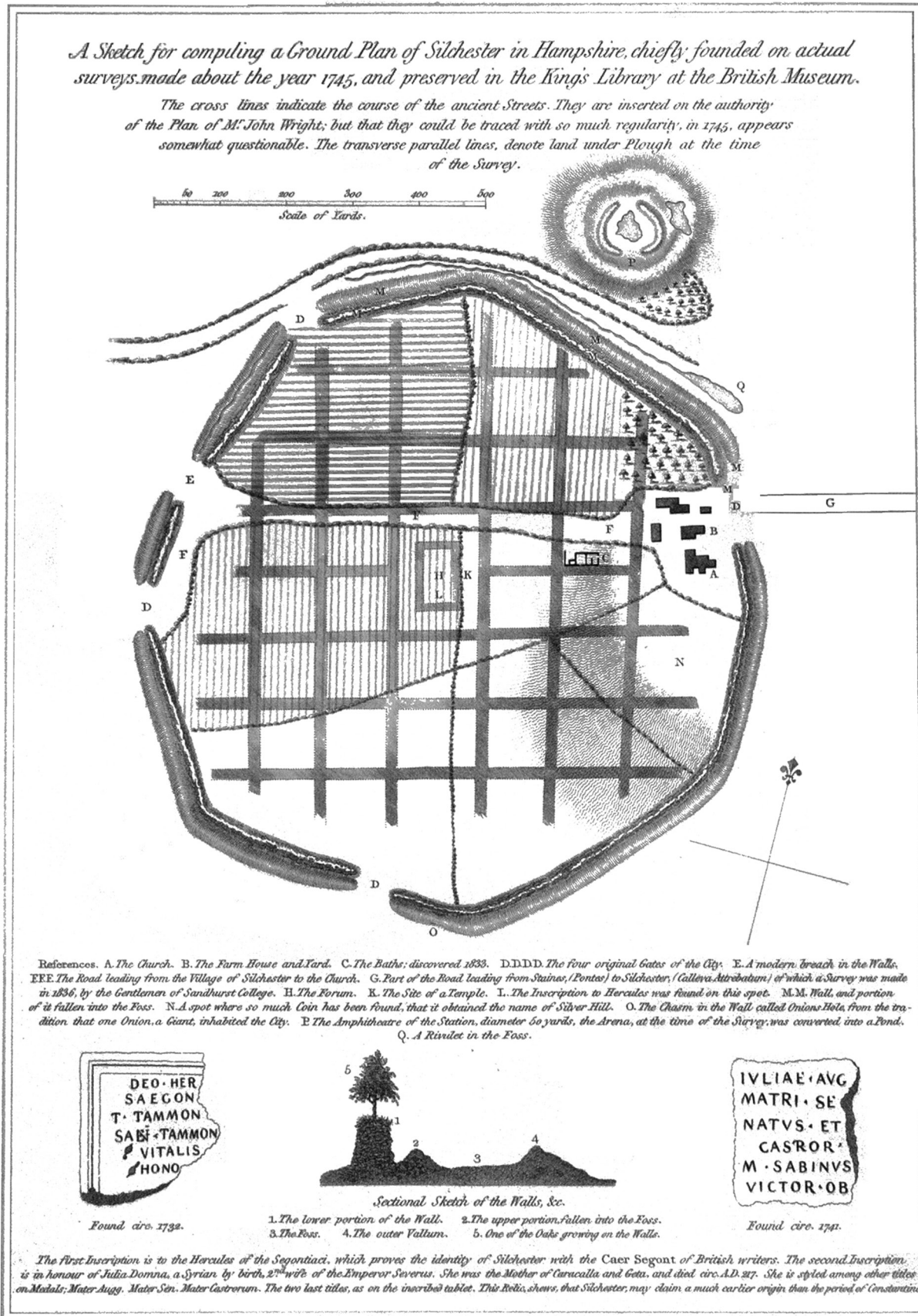


FIG. 3.5 Kempe's inaccurate elaboration on Wright's map of 1745 (Kempe 1838).

The excavations did not last long and were discontinued by order of the duke, who had been persuaded that the work was injuring his property. Coles instead turned his attention to other activities in the parish and went on to build the ‘The Crown Inn’ in 1837, now well known to most archaeologists who have ever worked or visited Silchester as the ‘*Calleva Arms*’.

**Alfred John Kempe (c. 1785–1846)** published plans in 1833 and 1838 purporting to summate existing knowledge (FIG. 3.5: Kempe 1838, pl. XXXII); they drew heavily on the earlier surveys in the King’s Library, and added to them details of which fields were under the plough and the contemporary land-divisions. While acknowledging the actual polygonal shape compared to Stukeley’s playing-card representation, Kempe similarly imagined the site as a military establishment with a *praetorium* in the middle rather than a market place or forum:

If Mr Stair’s notes are not antiquarian imaginings, the interior of Silchester was laid out nearly in conformity with that of a Roman camp, according to the description of Polybius. A broad centre street with two lateral ones crossed by an equal number at right angles. In the centre of the station are the foundations of a considerable building, probably the praetorium. Here were discovered portions of some large columns, and an altar constructed of brick. (Kempe 1833, 123)

Unfortunately in compiling his plan he failed to observe that the north point on Stair’s and Wright’s maps pointed down and not up resulting in an inversion and confusion of a lot of the detail. This can be seen from a comparison with Taylor’s more detailed map of 70 years earlier. Taylor (1759) has the silver coin find on the west, Kempe on the east; Taylor has a hypothesised ‘temple’ to the west of the Forum, Kempe to the east; Kempe also totally mislocated Coles’ excavation of 1833 (see discussion of the *Mansio* bathhouse in Insula VIII). In general, Kempe’s map has to be taken as very poor derivative cartography, and the error is certainly not the engraver’s as the original sketches are in the archives of the Society of Antiquaries. Unfortunately this map has been used as evidence through the years for the location of Coles’ excavations, and so the mistakes have been perpetuated in various sources down to the twenty-first century (e.g. Neal and Cosh 2009, 222: mislocating the baths).

**Henry Maclauchlan (1792–1882)** provided the first detailed plan of Silchester within its topographical setting. He had spent a career in cartography, at first with the Royal Corps of Military Surveyors, and later briefly with the Ordnance Survey. It was after his retirement in 1844 that he began work on what were to become his notable archaeological legacies. He initially surveyed some hillforts close to home in Cornwall, but later went on to survey the area around Silchester alongside conducting work for the Duke of Northumberland in North Yorkshire. His archaeological contribution reached its zenith in his landmark survey of Hadrian’s Wall in 1857–64 (Charlton and Day 1984).

The occasion for the work at Silchester was in preparation for a visit to the region by the Royal Archaeological Institute in 1850. When it duly happened Maclauchlan gave a lecture to them on the Friday evening in Oxford discussing his survey, the adjacent works and entrenchments. On the following day the party boarded a specially hired train to the ruins.

They alighted a short distance from the Mortimer station, and under the able guidance of the Revd E. Hill, repaired to the site, easily attainable from that place. The visitors, upwards of 100 in number, were very courteously received by Mr Barton, the occupier of the farm, with whose obliging permission the expedition had been arranged. After a hospitable welcome at the Manor House, and the inspection of numerous antiquities, coins etc. collected by Mr Barton, the party dispersed to examine the most striking features – the amphitheatre, gates, lines of streets, to which their attention was drawn by the Revd W. Gunner. They also examined the vast earthworks existing in the neighbourhood. (Anon. 1850, 316; see also Anon. 1846a for Barton’s collection)

The survey was most important for highlighting, in addition to the Town Wall, the outer earthworks and the linear entrenchments running off to the south (Maclauchlan 1851). His work was very accurate, drawing upon the 1841 Tithe Map (Hants. Record Office 21M65/F7/209/2). His hachures interpreting the earthworks remain the foundation for those shown on

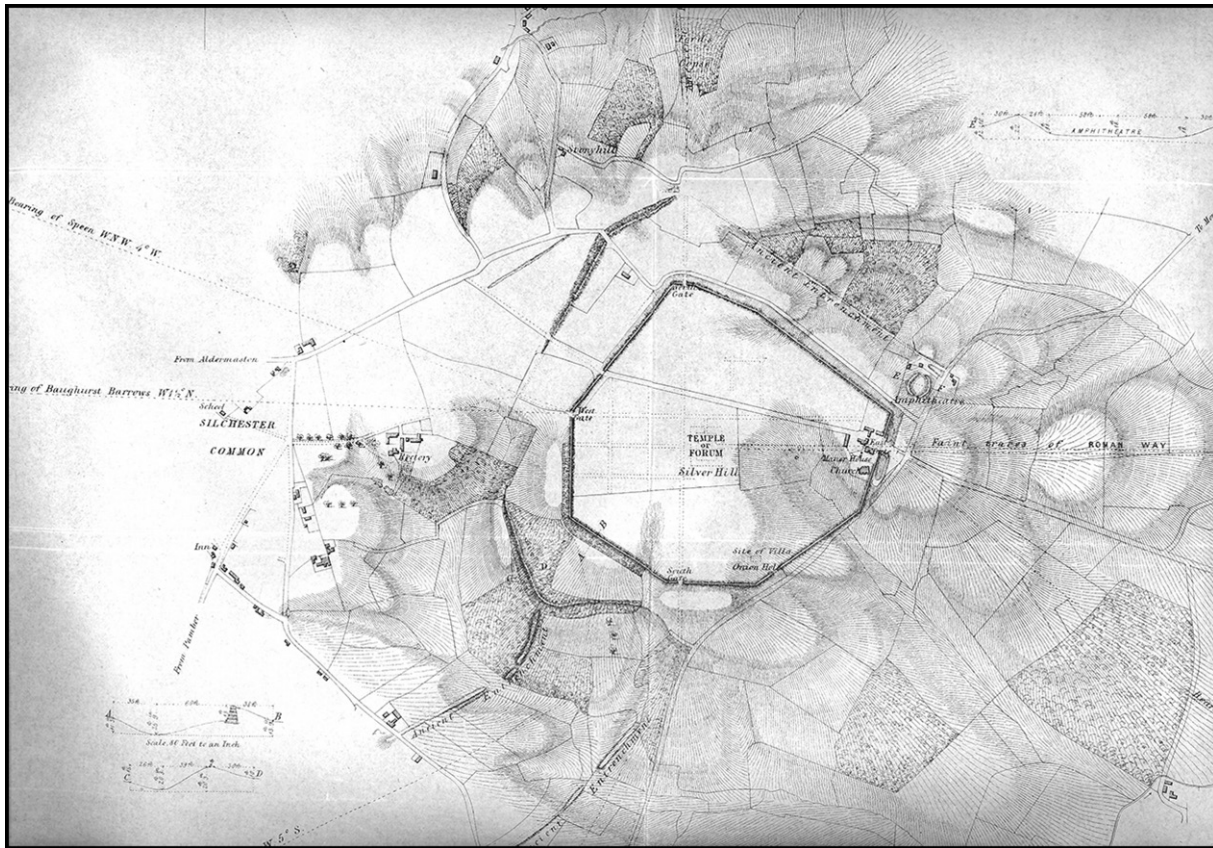


FIG. 3.6 Henry Maclauchlan's map of 1850 (Maclauchlan 1851).

Ordnance Survey maps for a century until Philips resurveyed the site in the 1950s. Significantly he observed that there was no evidence then that the outer earthworks ever formed a complete circuit; nothing survived obviously to the south-east (Maclauchlan 1851, 230).

Curiously, a group from the Bristol and Gloucestershire Society touring the site many years later made a reference in their report of the visit to Maclauchlan excavating in 1851 (Anon. 1898), and he himself stated that the Revd Coles had given him permission to dig for remains within the glebe lands (Maclauchlan 1851, 238 note 8), but I am unable to trace any evidence of what he was investigating, though the context suggests it may have been an attempt to trace the roads leading from Silchester, particularly to the west, if he dug at all.

### JOYCE, MONRO AND LANGSHAW

The Duke of Wellington died in 1852 to be succeeded by his homonymous son, the second Duke of Wellington (1807–1884). Within a few years a new rector was in post at Stratfield Saye, and there was also other change afoot in Silchester. Mr Austin, the sitting tenant, died, and his collection of artefacts passed to the duke, perhaps stirring his interest. Shortly thereafter the duke encouraged the rector, the **Revd James Joyce (1819–1878)** to make 'arrangements for systematic excavations' (Joyce 1867b). Joyce came to the task with a remarkable degree of diligent note-taking. His bound site notebooks and sketchbook, preserved in Reading Museum, contain exceptionally detailed records of the excavations and demonstrate his understanding of stratigraphy. He considered the role soil formation and earthworm activity had in the subsidence of floors, and he played host to Darwin who carefully examined his sections (Darwin 1881, 201–21; Evans 2009, 482–4). An affectionate appreciation of Joyce is provided by Boon (1974, 24–6).

The excavations commenced in 1864 and continued until 1878, when, after struggling with a couple of years of illness, Joyce died. While he was diligent in presenting his work in lectures to

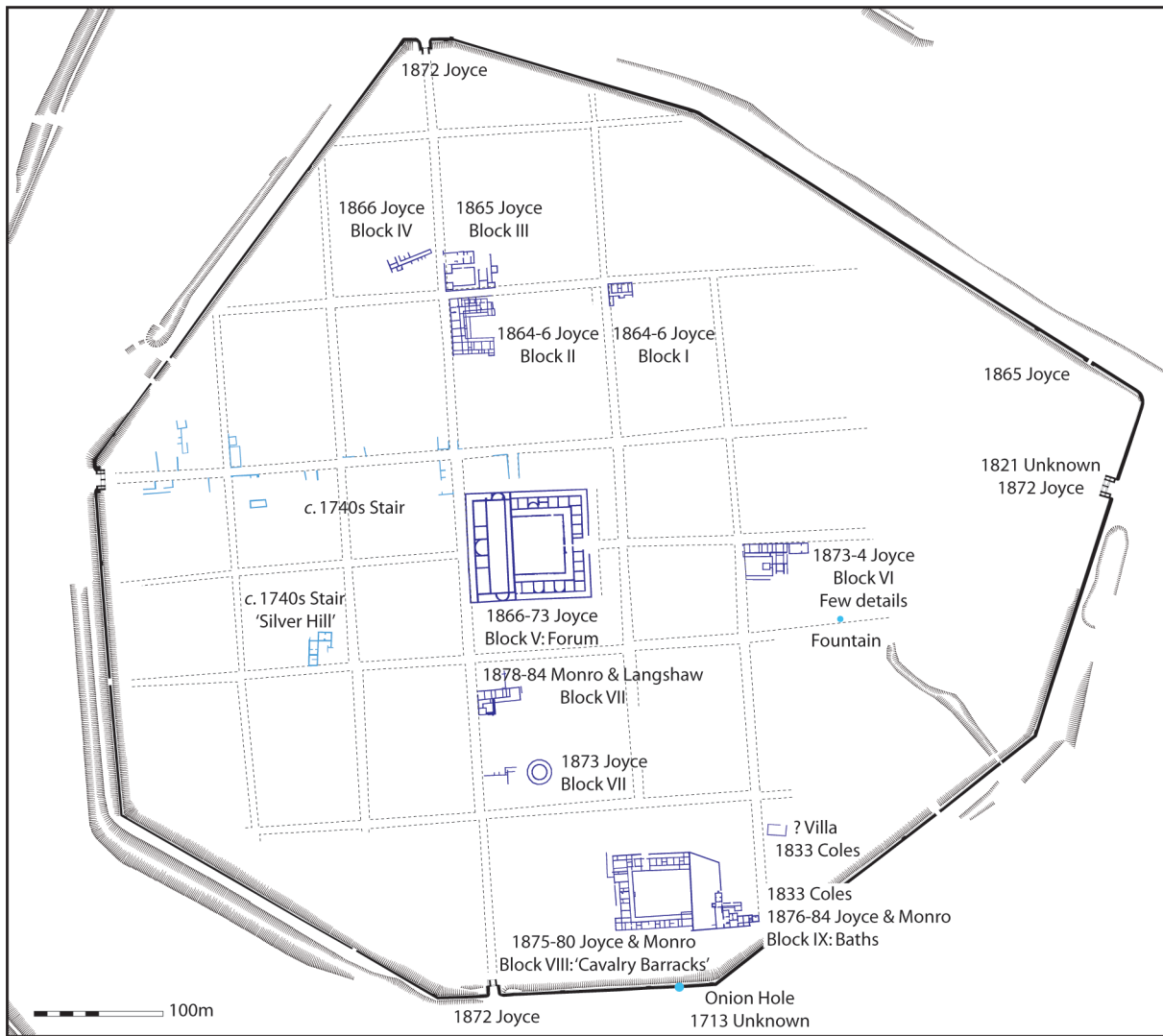


FIG. 3.7 Excavations before the Society of Antiquaries' work.

the Antiquaries and other societies (Joyce 1865; 1867a; b; 1873; 1876a), only one of the papers was fully published during his lifetime, the others were posthumously drawn from his notes (Joyce 1876b; Joyce 1881a; b). Alas, many of his smaller excavations were never reported on in any significant detail. His largest opening was that of the Forum-Basilica, which included the discovery of the iconic 'Silchester Eagle' now in Reading Museum, though he also excavated the Town Gates and buildings in *Insulae* I, VIII, XXI, XXVI, XXIII and XXXIV. During these works a mosaic from House XXXIV.1 was lifted and moved to adorn the duke's house in Stratfield Saye. The campaigns were very long and continued, sometimes, into the winter. In 1999, from a pit in *Insula* IX, the remains of a large stove were uncovered which probably came from Joyce's excavations (Tootell *et al.* 2005).

In terms of interpretation, Joyce declined to be drawn on the name of the site, *Vindomis* or *Calleva*, but he did ponder upon the origins of the site and the possible involvement of the legions. Because of its irregular shape he considered it to be a British settlement or camp in origin 'but it was occupied, undoubtedly, at an early date by the Romans. The internal portion of the town was subdivided into rectangular forms ... From the fact of there not having been found tiles in Silchester inscribed with the name of any legion, it [is] doubted whether it was ever occupied as a military station' (Joyce 1865).

After Joyce's death, the campaigns continued for another seven years until 1884. These were

initially led by the **Revd Horace Monro (1831–1901+)**, Joyce's successor at Stratfield Saye, but after a while he found the travel to and from his parish 'too great to be constantly in attendance to watch the old men at the excavation, at his suggestion the late Duke of Wellington asked the **Revd Thomas Langshaw, M.A.**, rector of Silchester, a careful archaeologist, to supervise the work for him, which he has since done with much zeal' (Hilton Price 1887). Their campaigns finished off some of Joyce's excavations and opened three new areas. Monro's most notable achievement was the completion of the excavations in Insula VIII of the building we now call the *Mansio*, though at the time this was imagined to be a cavalry barrack building (Fox 1899b, 80), and the Antiquaries were to call it the *Hospitium* (Fox and St John Hope 1894, 211, 224). Later they probably investigated a large area to the east of the *Mansio* as indicated on a map in an early Antiquaries' report (Fox and St John Hope 1893a, 571).

The scale of the work attracted public attention. Many local societies, such as the Newbury District Field Club and the Wiltshire Archaeological Society, came to visit during Joyce's campaigns, perhaps stimulated by his touring and lecturing (Chutterbuck 1884; Anon. 1871). This continued under his successors, for example with Langshaw showing around the Newbury District Field Club (Anon. 1886).

Monro and Langshaw's work was watched closely by a London banker, **Frederick George Hilton Price (1842–1909)**, who took a great interest in matters. As early as 1881, concerned at the lack of planning and recording, he had instructed the architect **Henry Hodge (b. 1824)** to make plans of the site and excavations, returning in 1884 to record the additional discoveries (Hilton Price 1887). Hodge, practising in London, had already gained some attention drawing architectural survivals and Roman ruins through the 1870s and in 1881–2 he was instrumental in recording some of the early Roman walls belonging to the London forum in Leadenhall.

By early 1884 the four-man labouring team that originally helped Joyce had dwindled to two, and efforts on the site were flagging. Along with two other gentlemen Hilton Price decided to see the ageing second Duke of Wellington.

... he granted me permission to have further plans made, and undertook to employ some extra labour to supplement the two old men who, scrape the ground, and who were the remains of four, the other two having become effete; he further said he wished Mr Langshaw, who lived upon the site, to conduct all the excavations, and if we could undertake to supervise him and assist him when necessary with a few hints he would be obliged. This was agreed to, and the next day his grace called upon Mr Langshaw, and told him of our conversation, brought him copies of Mr Joyce's journals made by Mr Monro, and beautifully illustrated by Miss Monro, and promised that he should have a cabinet of coins to show to the visitors who came to see the remains; this was all carried out and things looked favourable for the future, when his lamented death put a stop to all further work. (Hilton Price 1887, 264)

Appeals to his successor and nephew, Henry Wellesley, the third Duke of Wellington, were met with hesitation and a disinclination to sanction any further work at the time.

### THE ANTIQUARIES

Joyce had revealed the possibilities of the site, and the Forum lay open for visitors to stare and wonder at. Over the next few years a momentum built up to re-launch the Silchester excavations, but this time under the auspices of the Society of Antiquaries of London, with a team larger than the two ageing labourers Langshaw had had at his disposal. Hilton Price talked to the Society about the recent discoveries (effectively publishing Munro and Langshaw's work) while at the same time wishing 'to revive the dormant interest for the grand old city of *Calleva Atrebatum*' (Hilton Price 1887, 264). Perhaps it was the banker in him that envisaged working with the cooperation of the tenant, paying compensation for the land taken out of cultivation, excavating, mapping and then covering back up areas 'until the whole or greater part of the city should be placed upon the Ordnance map, which Mr Hodge has enlarged seven times for the purpose, and which would become a permanent record of the work done' (Hilton Price 1887, 265).

The idea was developed by **George Edward Fox (1834–1908)** and **William Henry St John**

**Hope (1854–1919)** into a full proposal. Fox was an artist and architect, while St John Hope had a strong interest in ecclesiastical architecture, but had also only recently begun what was to be a 25-year reign as assistant secretary of the Society of Antiquaries, the last to actually live in Burlington House, during which time he significantly broadened his interests. The research potential was sold on the advantages of it being a greenfield site, unlike Chester, Lincoln and Leicester, where only fleeting glimpses during building works had enabled the Roman cities to be seen (Fox and St John Hope 1889–91, 86).

Their ‘memorandum on a proposed excavation of the site of Silchester, Hants.’ was drafted, and they selected General Pitt Rivers, ‘who has throughout most warmly supported the scheme’, to approach the third Duke of Wellington in person and later present the memorandum to him (Fox and St John Hope 1889–91, 93). Pitt Rivers was the first Inspector of Ancient Monuments and of course an eminent archaeologist, but the connections between him and the duke ran deeper. First, the general was a relation of Sir William Pitt (1559–1636), principal officer of the exchequer under James I, whose family had purchased Stratfield Saye and accumulated the estate before it had been acquired by the Parliamentary trustees as the nation’s reward to the victor at Waterloo. Secondly, the two were probably personally acquainted: **Augustus Henry Lane-Fox (1827–1900)** (who took on the name Pitt Rivers later in life from his uncle when he inherited his estate) was already a colonel in the Grenadier Guards by the time the young Henry Wellesley joined the Second Battalion after leaving Eton in 1865, and both retired from it in 1882. Whatever, the approach was effective. ‘Not only has the duke been pleased to express his entire approval of this scheme, but he informed General Pitt-Rivers that he would give a site for a museum, and contribute towards its erection, and assist in defraying the cost of roofing in any remains of sufficient importance to be kept open’ (Fox and St John Hope 1889–91, 94).

Not surprisingly, the banker, Hilton Price, adopted the role of treasurer for the Silchester Excavation Committee; he also went on to become the Society of Antiquaries’ director in 1894 until his death in 1909. The initial season, it was thought, would cost around £100. At the 20 March 1890 meeting of the Antiquaries £25 was awarded from the Society’s Funds, £25 from the Research Fund income, and £50 promised by a number of private donations: £10 from Hilton Price, £10 from Mr Minet, £30 from Lieut. Gen. Pitt Rivers (Anon. 1889–91, 120–1). In the first few seasons this figure of £100 per insula recurred in the money-raising campaign literature and was quoted in public lectures (Anon. 1891b); however, within a decade the actual funding sought had risen closer to £500 per season for the 20 or so men who were now employed for six months each year from May to November (Ditchfield 1899b).

Outreach was, of course, important for raising money. The excavations were visited by many groups over the years from as far afield as Bath and Birmingham, guided by Fox, St John Hope or Stephenson. **Mill Stephenson (1857–1937)** was the long-serving superintendent on the site and the person who really managed the workmen, himself having a particular interest in Roman coinage (M.S.G. 1937). Many of these societies wrote up their excursions, providing small additional details to those in the official published reports, as well as other colourful details such as where they had lunch (Anon. 1891a; c), or sharply noting how the lord of the manor had charged them sixpence to walk along the middle of the driveway to reach the excavations (Anon. 1895). Some used the dig as a model to inform the exploration of other sites, such as the Shropshire Archaeological and Natural Historical Society’s intentions to excavate Wroxeter (Fox 1899a). In the first few seasons wooden models were made of the excavated areas, including the West Gate and ‘church’, just as Pitt Rivers had seen made of his own excavations, but soon mention of these at Antiquaries’ meetings ceases (Fox *et al.* 1893; Fox and St John Hope 1891b).

In determining their methodology they sought to advance on the work of Joyce, though they were a little harsh in their critique:

His account, though an admirable and important contribution to our knowledge of the site, was not of a sufficiently detailed character, as to the different structures, to entirely satisfy the requirements of the present time. The minor objects of antiquity receive, perhaps, somewhat undue attention, and so little value was placed on the architectural remains of both forum and basilica, that they were for the most part left by their discoverer to perish from exposure

to rain and frost on the spit where they were turned up in the excavations. No adequate plans were published of the buildings, nor were sufficient illustrations given of their remains. (Fox and St John Hope 1893a, 540)

The practice they developed was to excavate an insula at a time. They numbered them from Insula I to XXXVII in more or less the order they excavated them. First, the external lines of each insula were traced, and then diagonal trenches were cut across the block. Where foundations were discovered the walls were chased so that complete plans could be established. During the excavation of Insula I they stated these diagonals were 4.9–5.2 m apart (Fox and St John Hope 1890, 734), though in the following season this was reduced to 4.3 m or less (Fox 1892, 263). Re-excavation of their trenches in Insula IX, dug in their fourth season, was undertaken by Fulford and Clarke (Fulford and Clarke 2002c); here it was observed parallel sets of trenches were a little under 4.0 m apart. In some parts of the site these exploratory trenches still show up in the geophysical survey data (FIG. 3.8); their visibility varies from insula to insula, but generally seems to confirm the stated strategy. The trenches from some of the seasons, such as 1905, are very clear; this may be explained by the remarkable depth of soil which was reported on that year, with some of the trenches being as much as 1.0 m deep rather than going just beneath the base of the plough-soil (St John Hope 1906, 162). The Antiquaries believed that they would

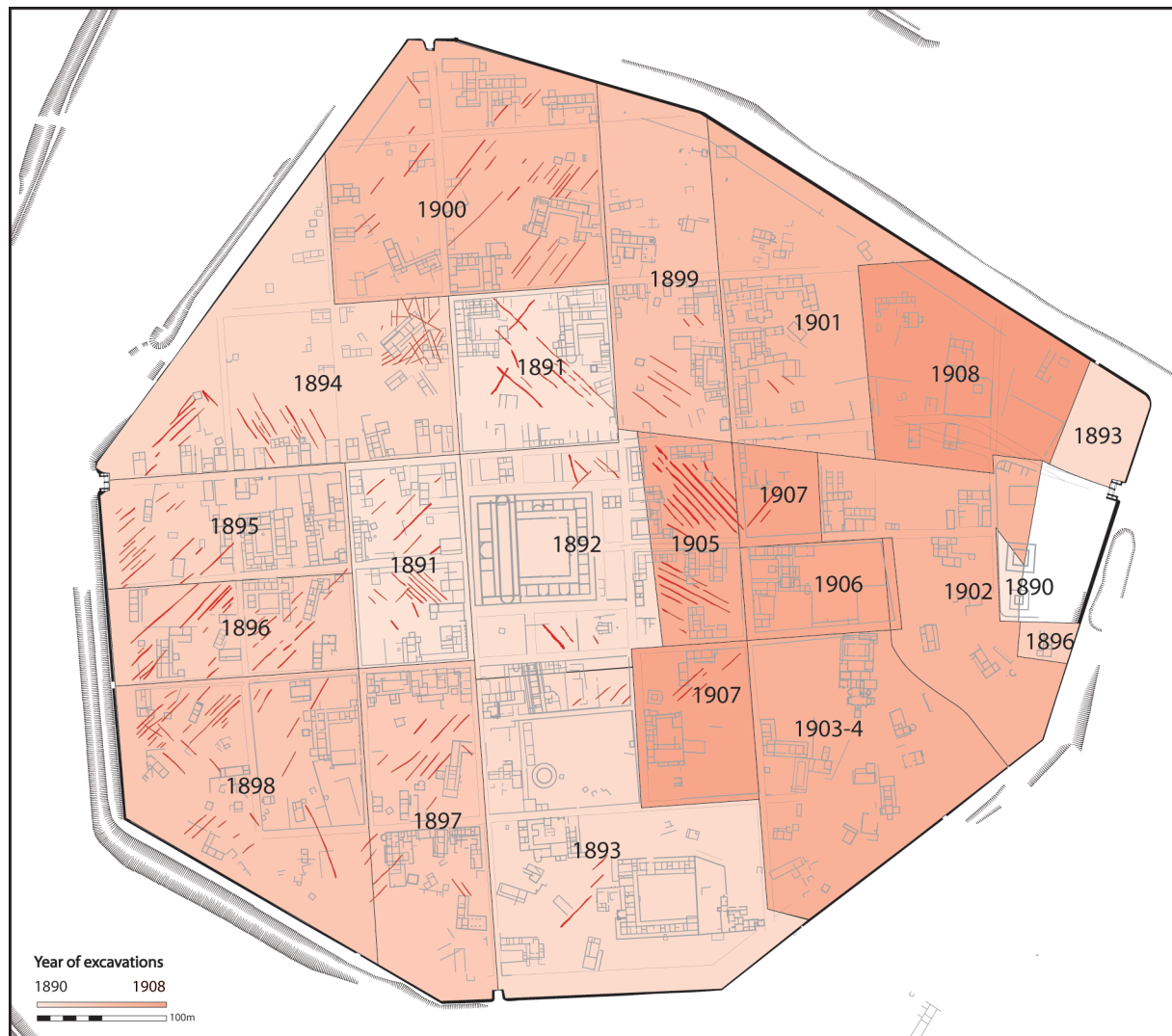


FIG. 3.8 The Society of Antiquaries of London's excavations: the areas covered each season and trenches revealed by the geophysics.



FIG. 3.9 Photographs of the original Great Plan by Henry Hodge, completed in 1909. Unrolled at the Society of Antiquaries of London.

probably be finding most of the buildings, but might be missing some rubbish pits and wells using this method (Fox and St John Hope 1890, 741); they did not realise they were missing the timber buildings which only really started to be recognised in urban archaeology in the second half of the twentieth century. Each year the plan from that season was transcribed onto Henry Hodges' Great Plan, still held at the Society of Antiquaries, to create what was envisaged to be a complete plan of a Roman city (FIGS 3.9–10; St John Hope 1909a). They were relatively tidy excavators, being careful to dig pits for their own rubbish in the middle of the roadways so as not to disturb more sensitive remains (Fulford and Clarke 2002c, 295).

The aspirations for finds recording were also admirable: 'All objects found must be properly labelled and registered, and the exact spot where found fully recorded. It is highly desirable that as far as possible everything should be retained and preserved on the spot in a proper museum, the nucleus of which already exists; but objects unique in character or special value might, with the noble owner's approval, be deposited in the British Museum, or elsewhere, for safety' (Fox and St John Hope 1889–91, 95). Alas these specifications were not lived up to and spatial information on the finds is singularly lacking. Given the leading lights of the excavations had backgrounds in architecture rather than as finds specialists, the emphasis on buildings and site plans was perhaps inevitable, even though they had criticised Joyce for letting piles of finds build up by the baulk edge. One wonders what the ageing Pitt Rivers, who valued the everyday object so highly, would have thought.

The excavations lasted from 1890 until 1909. In the first season the site was largely under corn



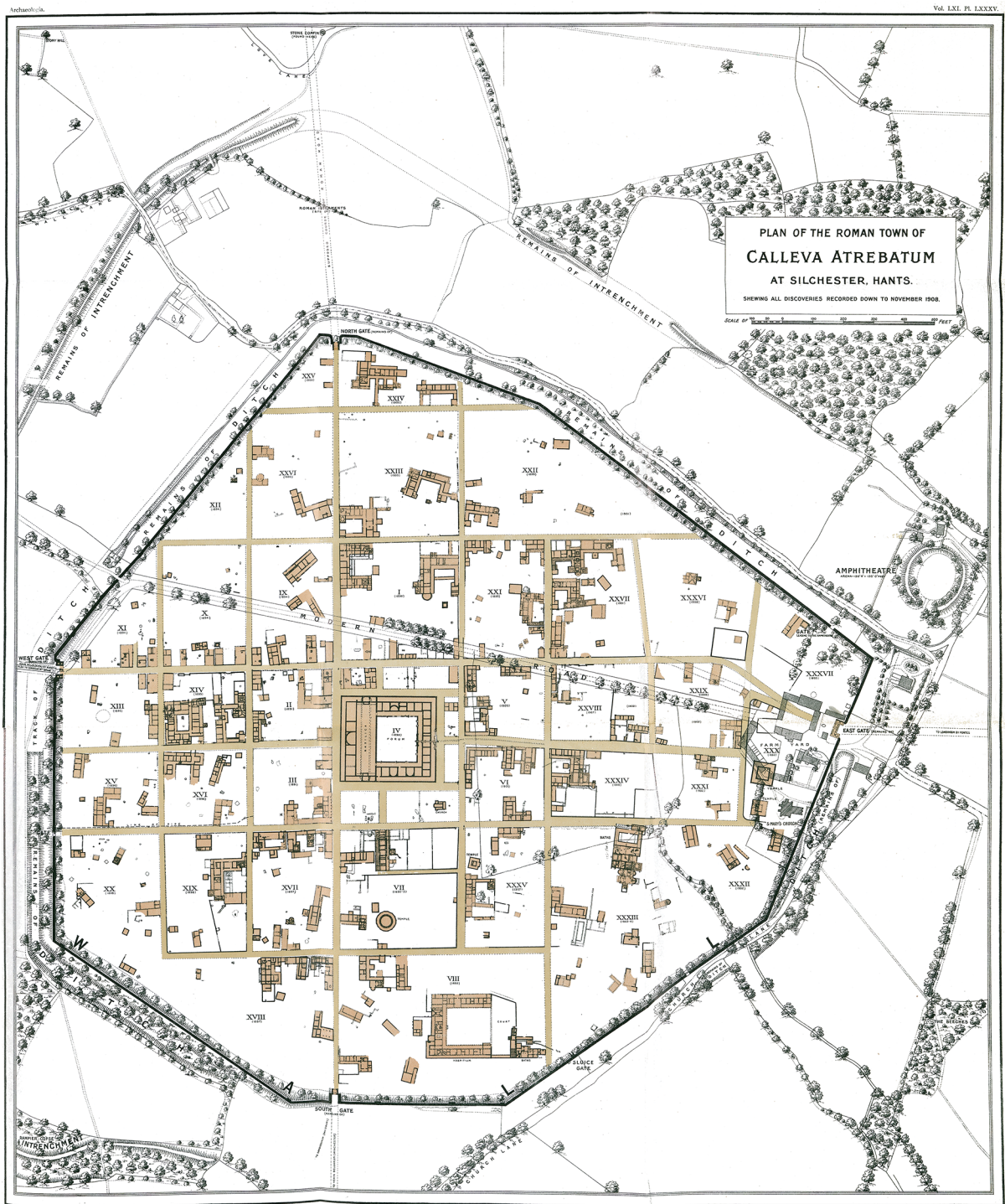


FIG. 3.10 Reproduction of the Great Plan of 1909, Henry Hodge (St John Hope 1909).

and peas, so the first works were devoted to the periphery, the North, South and West Gates (St John Hope 1890a), but thereafter insulae were dug gradually across the town until almost all had been explored. In 1907, with one season left in the interior to undertake, there were clear intentions of moving on to explore the cemeteries, ditches and other exterior features (Anon. 1908b). However, the report of the 1908 excavations, the last in the interior, was prefaced by the sad news of the deaths of both Fox and Hilton Price (St John Hope 1909a, 473). One further season did take place in 1909 investigating some kilns to the north (without the permission

of the landowner) and cutting sections through a number of the defences (St John Hope and Stephenson 1910), but that was where the Society of Antiquaries campaign drew to a close. St John Hope formed a new triumvirate with Hawley and Montgomerie and turned the Society's efforts towards Old Sarum (1909–15) (Fulford 2007). The cemeteries of Silchester remained unexplored and undiscovered. The Antiquaries' legacy was, however, the creation of a plan of a complete Roman cityscape, the first of its kind in Britain and the northern provinces. Their understanding of stratigraphy may have been poorer than Joyce's, their attention to finds poorer than Pitt Rivers', but Hodge's 'great plan' became an icon of twentieth-century Romano-British archaeology. Wheeler's evaluation summed it up well:

In 1890 none of our Romano-British towns had been excavated; we knew almost nothing of their plans and buildings, of their material and sociological make-up. We could not, in fact, begin to discuss the economy and sociology of Roman Britain. What was wanted, and within a measurable space of time, was just such a picture as the excavators of Silchester proceeded to give us. The picture was of course both synthetic and incomplete but thereafter we knew certain fundamentally important things about Roman towns and could begin to fit them into our general scheme. It would have taken ten Pitt Riverses ten times as long as Pitt Rivers' two decades to have dug the site accurately in depth, and meanwhile much else that was now due would have been kept waiting; the whole accelerating progress of Romano-British studies would have been held up, the impulse lost. It is a sound military axiom that a second-rate plan carried out in time is preferable to a first-rate plan executed tardily; and, applied with caution, this axiom may be apposite on occasion to scientific research. It was certainly apposite to Silchester, however little the matter may have been understood by the excavators themselves. (Wheeler 1950, 124)

For a few years excavations in the vicinity were continued by a villager who had spent time on some of the excavations. **Lt.-Colonel John Karslake (1868–1942)** had been an army officer, barrister and one time vice-chairman of London County Council. Unfortunately none of his excavations were published with plans and all of his write-ups are difficult to evaluate. He began his excavations concurrent with the Antiquaries' work around 1909 to the south-west in Rampier Copse on the line of the outer earthwork (Karslake 1910), though he carried on by excavating a supposed eastern gateway through a hypothesised eastern outer defensive line (c. 1912; Karslake 1914; 1920). His interests in the site continued and in 1926 he excavated a tiler's at Little London (Karslake 1926), as well as writing a number of speculative articles about Silchester and its vicinity (Karslake 1921; 1922; 1933).

The broader historical context of these explorations from the sixteenth to nineteenth century has been explored recently by Hingley (2012).

Alas neither St John Hope, nor any of the other survivors of the Antiquaries' campaigns, drew all this knowledge together into a grand synthesis of the town; while the Great Plan brought all the insulae plans together, the rich detail lay divided amongst the annual reports and in the collections in Reading Museum. One person who rapidly stepped forward to synthesise the work was James Thomson, completing a manuscript just before the outbreak of the Great War, though only concluding publication a decade later (Thomson 1924). His *A Great Free City: The Book of Silchester* was remarkably discursive and rambling, but it filled a gap that the excavators had left, even if reviews of the day all thought it could have done with significant pruning (W. 1925).

### THE LATER TWENTIETH-CENTURY EXCAVATIONS

Shortly after the succession in 1934 of Arthur Wellesley (1876–1941) as the fifth Duke of Wellington, arrangements were put in place to hand over a stretch of the wall to the keepership of the Ministry of Works and Buildings. The portion ran from the North Gate to the Amphitheatre, and the intention was to permit restoration and preservation. This began in 1937 and the following year, with the trees and overgrowth now cleared, **Molly Aylwin Cotton (1902–1984)** began a couple of years of work: at first evaluating the dating evidence for the wall, then adding an additional research season to examine the outer earthworks in order to gain a complete picture

of the development of the defences. By this stage in her career she had just completed a posting as deputy director at Maiden Castle (1934–37) for Wheeler, who occasionally visited Silchester to give his advice. Cotton's small-scale excavations were notable for gaining evidence dating the defences, realising that the co-axial road-system once extended beyond the line of the later walls to the north-west and finding very early 'Belgic' material low down in several sequences, though always associated with Claudian or later material (Cotton 1947).

After the interruption of the war, **Kenneth St Joseph (1912–1994)** linked his aerial photographic interpretation skills developed through the RAF with his schoolboy interest in Roman archaeology and began his remarkable flying career. Early photographs revealed a new 'Inner Earthwork' to the defensive circuits surrounding Silchester (Crawford 1955). **George Boon (1927–1994)**, then an Archaeological Assistant at Reading Museum, eagerly followed this up with a series of small trenches from 1954 to 1958, to try and establish if this represented the missing pre-Claudian phase of the town. To support him a Silchester Excavation Committee was revived with Cotton as Chair, and himself as Secretary and Director of Excavations. By the time he had finished Boon had moved on to become Assistant Keeper at the National Museum of Wales. Nonetheless, not only did Boon demonstrate that the Inner Defences were early, but he also questioned Cotton's late dating of the Outer Earthworks, trying to push them back into the Iron Age (Boon 1969). Despite his job move Boon's interest in the town never wavered and he continued publishing on the site until his death. The year following his dig, he suggested to the Silchester Excavation Committee that the supposed church close to the Forum would be an ideal candidate for re-excavation to obtain better dating evidence than the Antiquaries had achieved. **Sir Ian Richmond (1902–1965)** was invited to conduct the excavation and did so in 1961. Dating evidence was still equivocal and unfortunately Richmond died before the site was written up, a task which was later undertaken by **Sheppard Frere (1916–2015)** (Frere 1976).

In 1966 a further stretch of wall to the south came into guardianship, and work started on clearing the blackthorn bushes and trees to assess the damage. In this case it was a young **John Collis (b. 1944)** who was brought in to do the work for the Ministry of Public Buildings and Works in 1967–8, undertaking the task in difficult winter conditions (Collis 1983). The work consolidating the walls continued, and by the mid-1970s more excavation was necessary; by this time Collis had moved to Sheffield to take up a lectureship there, so in 1974 **Michael Fulford (b. 1948)**, Barry Cunliffe's research assistant, who had just been appointed to a lectureship at the University of Reading, began the first of his many excavations on the site (FIG. 3.11; Clarke *et al.* 2013; Catling 2015).

Fulford's work can best be separated out into a number of parallel strands, all of which are discussed in more detail later. First, there was work associated with the consolidation of the walls and the guardianship management of the site: his excavations of the defences in 1974–6, 1978 (Fulford 1984) and then again on the north side in 1991–3 (Fulford *et al.* 1997). Secondly, there have been a series of small-scale responsive works, many associated with building works within the town in the vicinity of Manor Farm and St Mary's Church, and others associated with water mains or exploration of areas where Late Roman siliquae or Iron Age mirrors were turning up. Finally, and the area where he has most made his mark, are the three major research excavations: the Basilica 1977, 1980–6 (Fulford and Timby 2000), the Amphitheatre 1979–85 (Fulford 1989c) and Insula IX 1997–2014 (Fulford *et al.* 2006; Fulford and Clarke 2011a). He has also recently opened a new area in Insula III, 2013+.

Much of the site came into the ownership of Hampshire County Council in 1979 following the death of the seventh Duke of Wellington in 1972 and the sale of this part of the estate to pay for the death duties. Their purchase averted a scheme to sell it off to Americans in a number of  $\frac{1}{8}$  acre plots. It has been while in the ownership of Hampshire that the strong partnership between them, English Heritage and Fulford has developed to ensure that Silchester is both curated and researched.

The twentieth- and twenty-first-century archaeologists have, like the Antiquaries before them, left their mark on the site. In this case it can be seen in the material culture left behind by the archaeologists camping and working on the site (FIG. 3.12). In the geophysical survey data if the signature of 'metallic spikes' is separated out (dipoles, see p. 44), this neatly maps the campsites

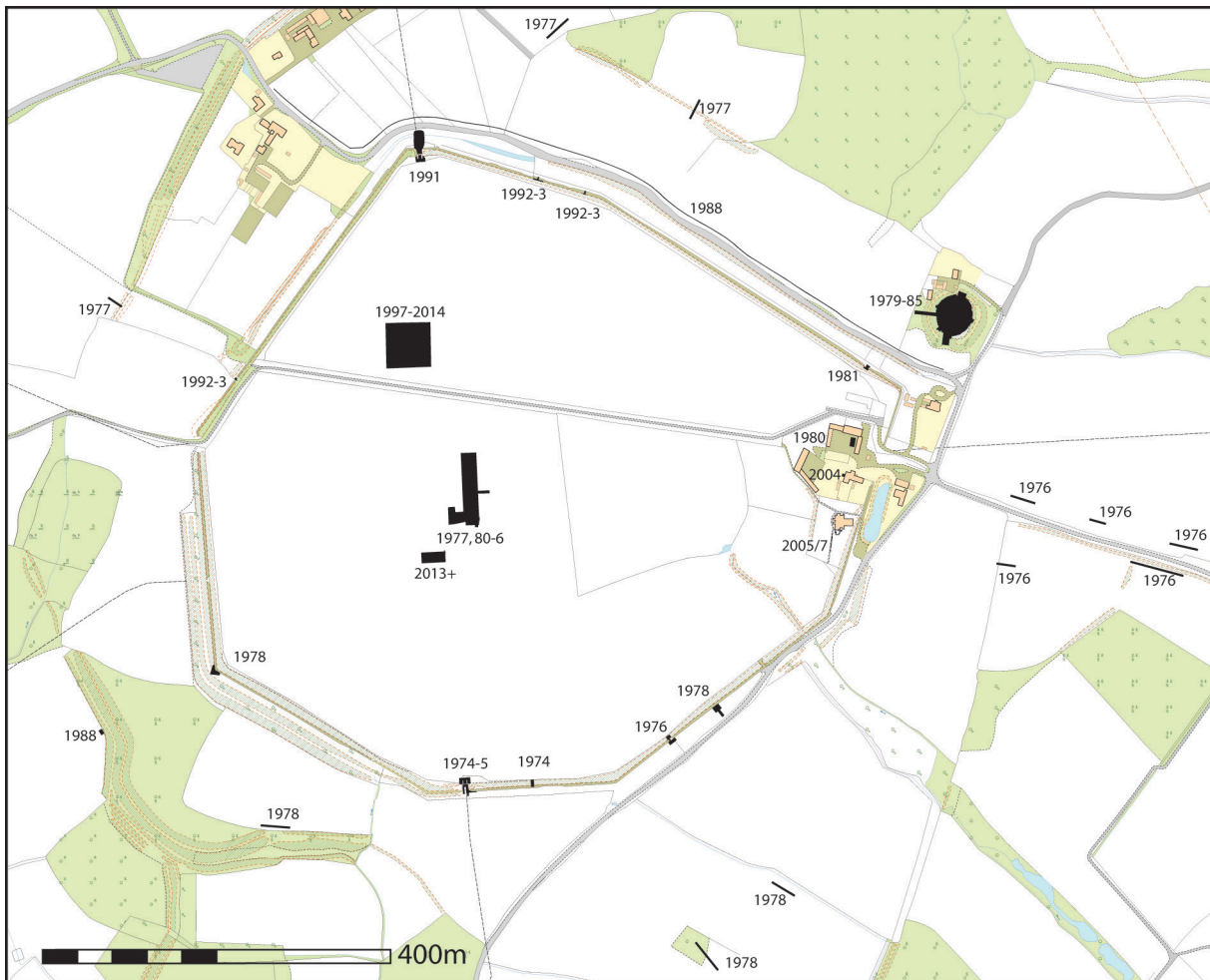


FIG. 3.11 Excavations by Mike Fulford, up to 2013.

used over the generations by different projects, far more than any Iron Age or Roman phenomena. The pattern also charts the rise of consumerism and the disposable nature of material culture, with the more recent campsite showing far stronger results than others, as tent pegs, bottle tops and other paraphernalia of modern camping are left and incorporated into the topsoil of the site. Curious differences can be seen. Richmond's excavation of the 'Church' left only modest traces, with debris contained within two wooden sheds and a caravan (see NMR aerial photo SU6362/167, 1961). Whereas, the spikes associated with the Basilica excavation are in rows, which are corroborated by aerial photographs of the site under excavation in the 1970s and 80s, where ridge-pole tents were camped in organised rows (e.g. NMR SJ6362/70, July 1983); the spikes would appear at the front of all the tents' entrances. This is rather different to the more haphazard arrangement of the site in the 1990s and 2000s. The halo of modern material masks the earlier remains almost totally in the area of the recent campsite (FIGS 5.4 and 5.13), so it is hoped that if there is any future work, then camping will be restricted to this one location so there is no detrimental effect to others. The cluster of spikes in front of the Amphitheatre represents a popular picnic spot when visiting the site, and that to the east of it the location of a former building.

Alongside these excavations the area supports a thriving local community, and on many of the farms and residences surrounding the walls evaluation and excavation work has also been undertaken by a variety of organisations, including Thames Valley Archaeological Services, Berkshire Archaeological Services, Southern Archaeological Services and Southampton City Council Archaeological Unit.

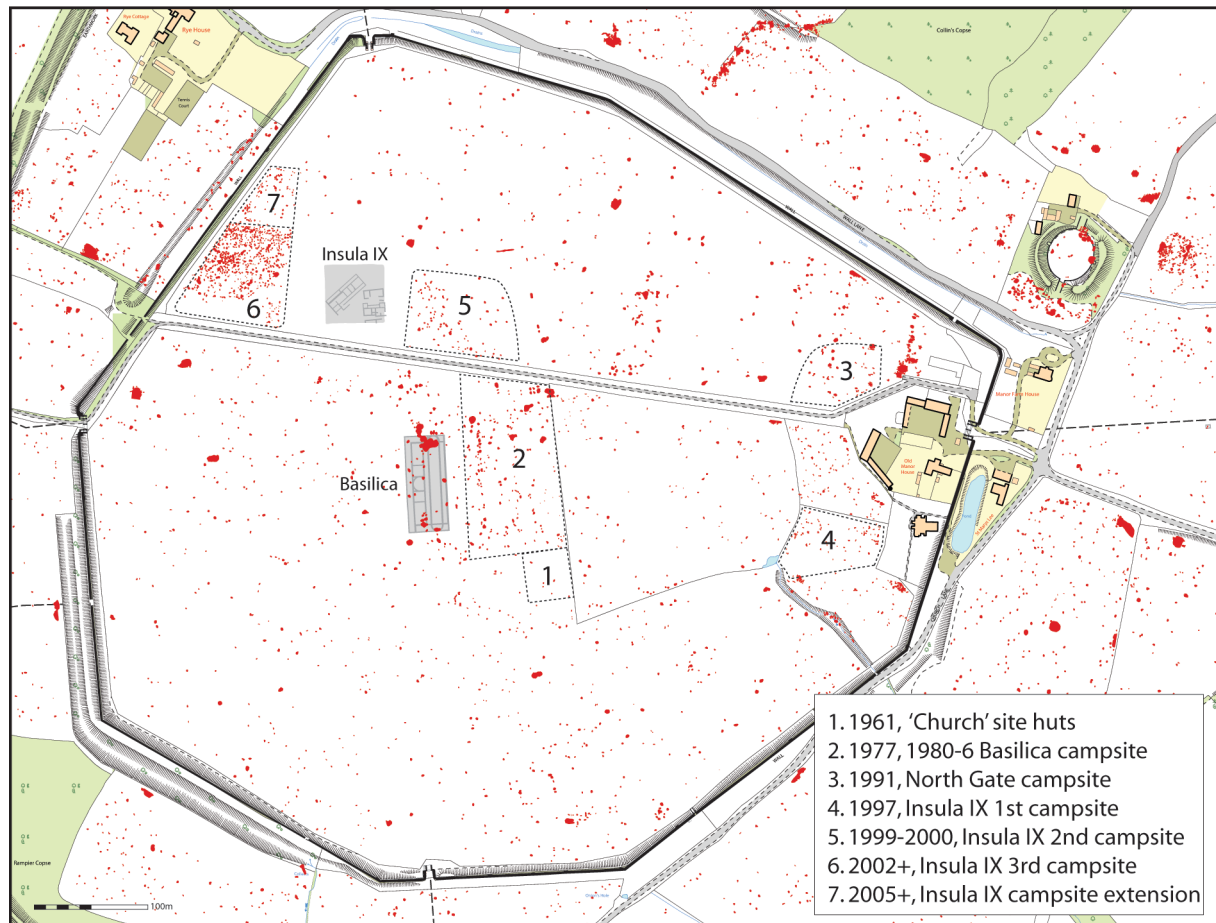


FIG. 3.12 The twentieth-century campsites: 'spikes' in the fluxgate gradiometry results.

### SUMMARY OF EXCAVATIONS

Table 3.1 briefly lists the intervention on and around the main site up to 2013. It only lists the key reports of each excavation; interim accounts, secondary reports and discussions are referred to in the Atlas. A database summary of the location of the archives of many of these is maintained on the National Record of the Historic Environment (Pastscape) website.

### WALKING THE FIELDS

The land around Silchester was the subject of one of the earliest systematic surveys around a Roman town. From 1969 to 1981 fieldwalking took place every season by the *Calleva* Fieldsurvey Group in a project written up by Mark Corney (1984). Many fields were walked on multiple occasions, some up to 11 times — 22 fields covering 113 ha in total. Linewalking was the main method, with grids being set out over concentrations. The aim was to walk all land within 500 m of the wall, but in practice much to the north was inaccessible or under pasture. Some areas at a greater distance to the south were also walked, particularly around the Roman road junction at Latchmere Green, where the Winchester and Chichester roads diverge, which revealed a small settlement close to where a Later Iron Age mirror burial was discovered a few years later along with material from an electricity cable trench (Fulford and Creighton 1998; Brading 2011). Overall, about 162 kg of Iron Age or Roman pottery was recovered and building material was recorded. Corney divided this material up into five broad chronological categories to report on it, and a summary of the data is included here in the Atlas so it can be interpreted alongside the other evidence from each field.

At the end of Corney's work he hoped the survey could carry on using new refined methods,

TABLE 3.I. SUMMARY OF EXCAVATIONS IN AND AROUND SILCHESTER

1710s	<b>?Betham:</b> Onion Hole and a large mosaic in southern area and lots of coins (Hearne 1813, 189, 195; 1885, 165; 1889, 438)
1730s–50s	<b>Stair:</b> Forum and street plan (Ward 1744–5; 1748)
c. 1780	<b>Curtis:</b> mosaic extraction within ‘Watch Field’ (Chandler 1821, 20)
1821	<b>Unknown:</b> East Gate (Bartlett 1854)
1833	<b>Coles:</b> <i>Mansio</i> bathhouse and ‘villa’ (Kempe 1833)
c. 1850	<b>Maclauchlan:</b> reference to him digging (Anon. 1898)
1864–78	<b>Joyce:</b> various including the Forum (Joyce 1876b; 1881a; b)
1878–84	<b>Monro and Langshaw:</b> various including the <i>Mansio</i> bathhouse (Hilton Price 1887)
1890–1908	<b>The Antiquaries</b> (Fox, St John Hope, Stephenson, Davis and Jones): entire interior (Fox and St John Hope 1889–91; 1890; 1893a; 1894; Fox 1892; 1895; St John Hope and Fox 1896; 1898a; 1899a; 1900; 1901; St John Hope 1897a; 1902; 1903a; 1905a; 1906; 1907a; 1908; 1909a; St John Hope and Stephenson 1910)
1909	<b>The Antiquaries</b> (Stephenson and Challenor-Smith): Town Wall earthworks and kilns (St John Hope and Stephenson 1910)
c. 1909–12	<b>Karslake:</b> Rampier Copse and the Beeches (Karslake 1910; 1914; 1920); and later Little London tilery (Karslake 1926)
1938–9	<b>Cotton:</b> North Walls, Rye House gardens and outer earthworks (Cotton 1947)
1952	<b>Boon:</b> section through the Outer Enclosure during road widening (Boon 1969, 16)
1954–8	<b>Boon:</b> various Inner and Outer Earthworks (Boon 1969)
1961	<b>Richmond:</b> the ‘church’ (Frere 1976)
1967–8	<b>Collis:</b> Wall near South Gate (Collis 1983)
1974–6, 78	<b>Fulford:</b> Wall, South Gate, Sluice-Gate, North-East Gate, Outer Earthwork (Fulford 1984)
1977, 80–6	<b>Fulford:</b> Basilica (Fulford and Timby 2000)
1979–85	<b>Fulford:</b> Amphitheatre (Fulford 1989c)
1980, 95, 2004–5, 7	<b>Fulford:</b> Manor Farm and St Mary’s Church (various small interventions, not all yet published)
1987	<b>Fulford:</b> Church Lane Farm (Fulford 2011)
1988	<b>Fulford:</b> location of siliquae hoard (Fulford <i>et al.</i> 1989)
1988	<b>Ford, Fulford and Reid:</b> Rye House bungalow (Fulford <i>et al.</i> 1997, 145–54)
1988	<b>Fulford, Timby and Williams:</b> water main (Fulford <i>et al.</i> 1997, 154–66)
1991–3	<b>Fulford and Ripon:</b> North Gate and Town Wall (Fulford <i>et al.</i> 1997)
1995	<b>Creighton and Fulford:</b> Latchmere Green, Mirror Burial (Fulford and Creighton 1998)
1997, 99	<b>Berks. Arch. Services:</b> Drake Cottage, footings (Entwhistle 1998; 2000)
1997–2014	<b>Fulford and Clarke:</b> Insula IX (Fulford and Clarke 2002c; Fulford <i>et al.</i> 2006; Fulford and Clarke 2011a); publication on-going
1993–4	<b>Southern Arch. Services:</b> electricity cable, Latchmere Green (Brading 2011)
1997, 2006, 8	<b>TVAS:</b> Chitty Farm, evaluations (Hammond 2006; Mundin 2008; A. Ford 1997; S. Ford 1997; 1998)
1999	<b>Berks. Arch. Services:</b> car park (BAS 2000)
2001	<b>Berks. Arch. Services:</b> Bramley Frith Enclosure, survey (BAS 2001)
2002–3	<b>TVAS:</b> Little London Road, evaluation (Taylor 2002) and excavation (Moore 2011)
2009	<b>Southampton City Council Archaeology Unit:</b> watching-brief while erecting information board displays (Elliott and Garner 2009)
2012–13	<b>TVAS:</b> St Mary’s Lee, evaluation (Porter 2012) and watching-brief (Porter 2013)
2013	<b>TVAS:</b> Rye Cottage, watching-brief (Mundin 2013)
2013+	<b>Fulford and Clarke:</b> Insula III

continuing further out, and followed up with small-scale excavation (Corney 1984, 292). The fieldwalking did, though not the excavation. Between 1981 and 1989 University of Reading undergraduates were sent out to conduct fieldwalking projects in the area. 42 fields covering 321 ha in total were covered, radiating up to 2 km away from the town centre. The quality of recovery was variable as would be expected with a project carried out by 93 different students, and the material remained unpublished until the evidence was collated over two decades later by Ford and Hopkins (Ford and Hopkins 2011). Though less controlled than the *Calleva* Fieldsurvey Group's work, they did recover flints and also Saxon and medieval pottery. Overall the patterns produced were very similar to those Corney had published. However, they did manage to walk some fields much further to the north, and show how rapidly the concentration of Roman ceramics tailed-off from the Town Wall; the most significant extensions to existing knowledge were probably the information about flint scatters and the medieval material.

### AERIAL PHOTOGRAPHY

While the earliest observation of a cropmark at Silchester dates back to 1541 (see above p. 10; Fagan 1959), within the town it was with St Joseph's photographs after the Second World War revealing the Inner Earthwork that aerial photography first started to impact on work here; this discovery initiated Boon's campaign of excavations.

Many new images taken in 1970 were added to the National Monuments Record (now Historic England Archive), and along with some images from the University of Cambridge collection, a provisional transcription of these was worked into the field scatter plots of Corney's fieldwalking survey (Corney 1984).

A step-change in photographic reconnaissance was the plotting of all the aerial imagery from in and around the town as part of English Heritage's National Mapping Programme, in 1989–

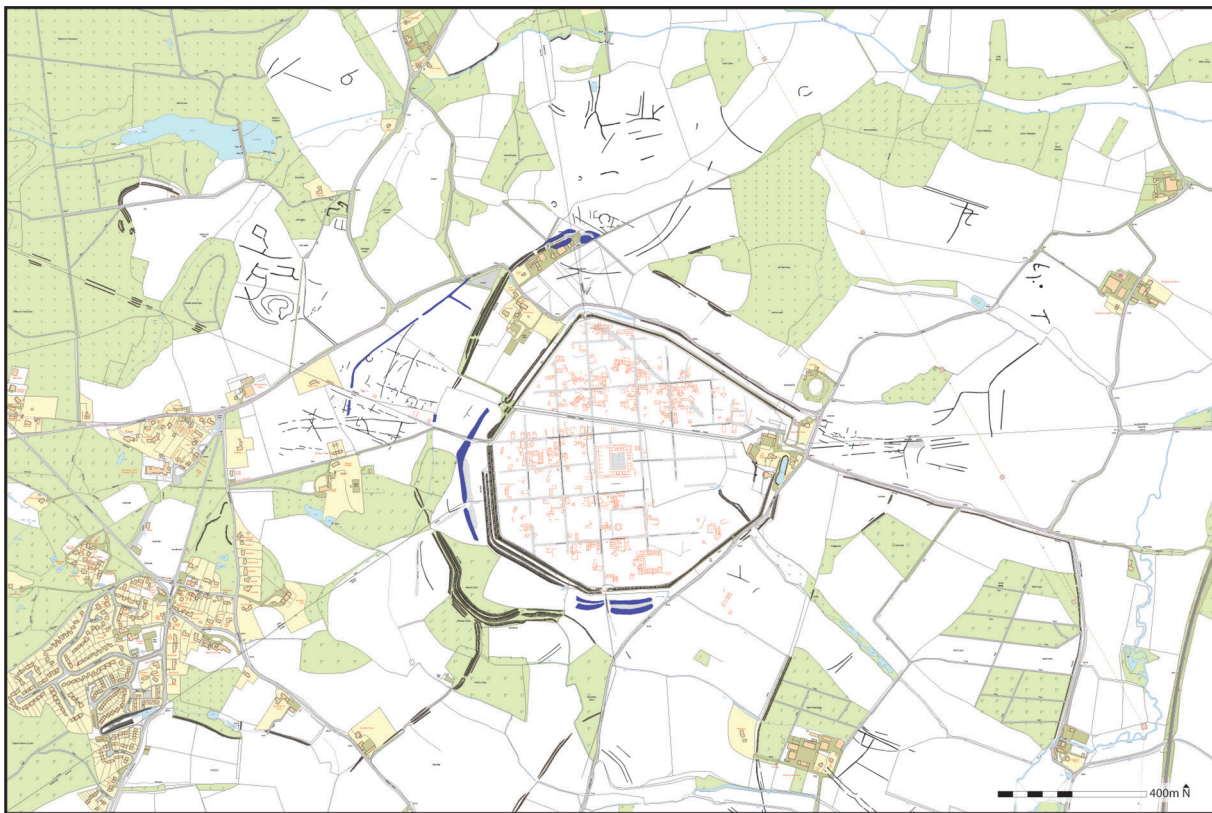


FIG. 3.13 Aerial photographic features from the National Mapping Programme (NMP, based on Bewley and Fulford 1996) and the upstanding earthworks.



FIG. 3.14 The Environment Agency LiDAR data around Silchester, supplied by their Geomatics Group. The data show a composite of surveys (created November 2012) predominantly at 1 m resolution.

95. Grahame Soffe, Moraig Brown and Carolyn Dyer transcribed all the features, directed by Robert Bewley, Roger Featherstone and Rowan Whimster (Bewley and Fulford 1996). In all 340 ha were surveyed and transcribed at 1:2,500. Within the wall it added some buildings to those on the Antiquaries' plan, but the main impact was in the detail provided of the enclosures either side of the road running out from the East Gate. These had been schematically plotted by Boon (1974, foldout plan), but now were rendered in more detail. The plot also refined the course of some of the other earthworks, and poured a little cold water on Boon's conjectured extension of the street-grid to the north of the town beyond the walls.

Since the mid-1990s a significant amount of the land has come out of cultivation to the north, west and south, and is now hay meadows, grazing fields or paddocks. New revelatory aerial photographs are not to be expected; but there has been the development of LiDAR. The area has been covered by the Environment Agency work, though as they are more interested in flood-management, the top of the gravel terraces is not their highest priority so the coverage is patchy. But the corrected 1 m raster-resolution data for the area are available for much of it (with gaps) and have been acquired for this work. It shows little unexpected in the woods, though it does reveal particularly well the remains of banks on either side of the Roman roads to Old Sarum in the south-west and to *Spinis* (conventionally interpreted as Woodspeen) in the north-west (FIG. 3.14).

### THE DEVELOPMENT OF GEOPHYSICS

Innovation in geophysics was also evident at Silchester early on. In the 1950s archaeology was starting to experiment with these techniques and George Boon was able to entice over from Oxford the early pioneers to help him trace the newly discovered Inner Earthwork. While the ditch's pathway was clear from aerial photographs in the northern half of the town and trenches had proved its existence, it was somewhat more elusive in the south-east quadrant of the town.



Humphrey Case from the Ashmolean Museum experimented with several resistivity traverses across its suspected path in Insulae XXIX/XXI and XXXV/XXXIII. The first traverse showed an area of low resistance, which quite possibly could have been the Inner Earthwork, while the results from the second traverse were equivocal, which is fortuitous as the results of our geophysical survey suggest they were measuring too far to the west and the actual earthwork lay further east (Boon 1969, 3). This survey was followed up a few years later by Martin Aitken testing his new Proton Magnetometer in much the same area. Unfortunately within the walls the results were far too confusing for this early equipment because of all the superimposed layers of activity. If his sample interval was approximately every 2 m, as he had been using at other sites such as Water Newton, then the resolution would certainly have been too low to make much sense of things (Boon 1969, 4; Aitken 1959, 206).

The use of geophysics then ceased for a generation. The site was too complicated and the Great Plan meant it was thought unnecessary, until the early 1990s when pressure to find a new solution to car parking led to Geophysical Surveys of Bradford (GSB) being commissioned to conduct a couple of surveys to the west of the town in LP 4172 (Geophysical Surveys of Bradford 1991; 1992). The results revealed the road going west, enclosure ditches and many pits, but at a resolution that was hardly better than the aerial photographs which had already

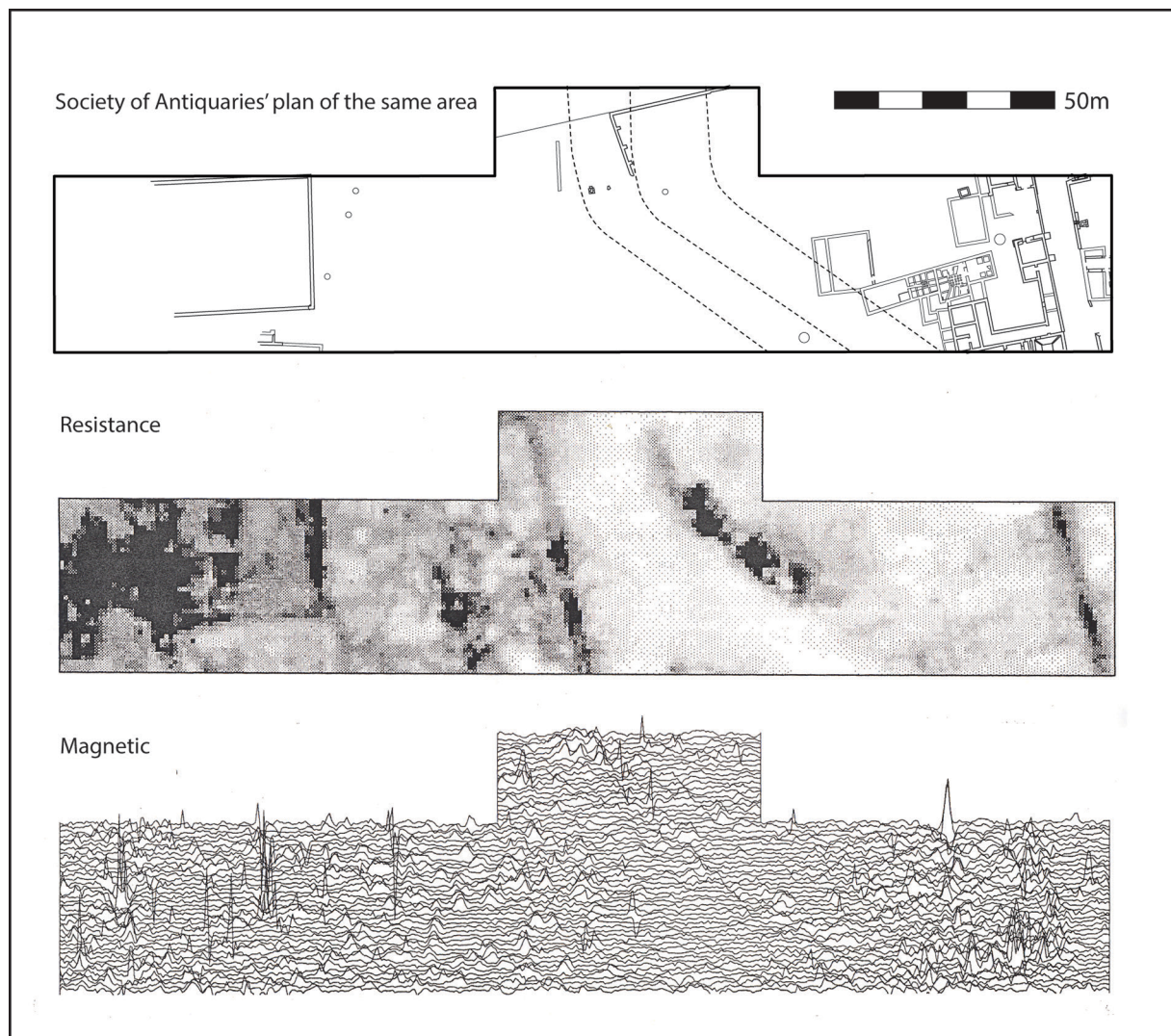


FIG. 3.15 1993 survey by Geophysical Surveys of Bradford (93/75) compared to the Antiquaries' Plan (Insulae XXVII and XXXVI).

been plotted by Boon. Nonetheless GSB were producing top quality work for the time and they were asked to conduct a small survey within the town on the border of Insulae XXXVI/XXXIII (FIG. 3.15; Geophysical Surveys of Bradford 1993). As can be seen, their results revealed the Inner Earthwork and features already known from the Antiquaries' excavations, but again the clarity was very poor in comparison to the Victorian plans to hand.

Three factors could improve results: increased resolution, advances in equipment and improvement in printing and visualisation technologies beyond the dot-matrix printer. In 2000 an English Heritage team came to experiment with work at twice the resolution of the GSB surveys, though using essentially the same equipment (FIG. 3.16; Martin 2000). They covered a much larger area surrounding the Forum (Insula IV) and the area to the south covering the 'circular' temple (Insula VII). The form of interpretation was fairly rudimentary, but not uncommon in geophysical reports then or now: the main linear features were picked out as well as some particular areas of positive or intense magnetic activity. In comparison to the Antiquaries' plan this was still exceptionally crude, yet a few new features were revealed.

The existence of Hodge's Great Plan, with the additions from aerial photography, led to the perception that large-scale geophysical survey was totally unnecessary. It was thought it would not show anything that was not already known. Silchester could be used as a test-bed so that techniques could be trialled against the results from the Great Plan, such as some more work by English Heritage testing a new Ground Penetrating Radar array — but the work was entirely technique-development-based rather than to answer archaeological questions (Linford 2001).

Yet this was also the period when large-scale surveys of Roman towns were taking place elsewhere. In 1990–1 the entire Roman town of Itálica had been surveyed integrating new features from the geophysical survey data with detailed surface prospection (Creighton *et al.* 1999). In Britain other greenfield Roman towns were receiving attention. The Wroxeter Hinterland Project (1994–9) included the surveying of the entire interior of the town (White and Gaffney 2003; Gaffney and Gaffney 2000; White *et al.* 2013). At this point Silchester started to get left behind.

Techniques continue to develop, and this project brings the use of geophysical survey up to date with where techniques were in 2000–10. 217 ha of the land in and around Silchester were surveyed with hand-held fluxgate gradiometry with some other smaller areas also sampled using other techniques. In the current decade advances in GPS enabled devices mounted on or behind vehicles are transforming the scale of coverage possible, which means that it is data interpretation that remains the most time-consuming element.

The future of using Silchester as a test-bed looks secure. The site has been used to experiment

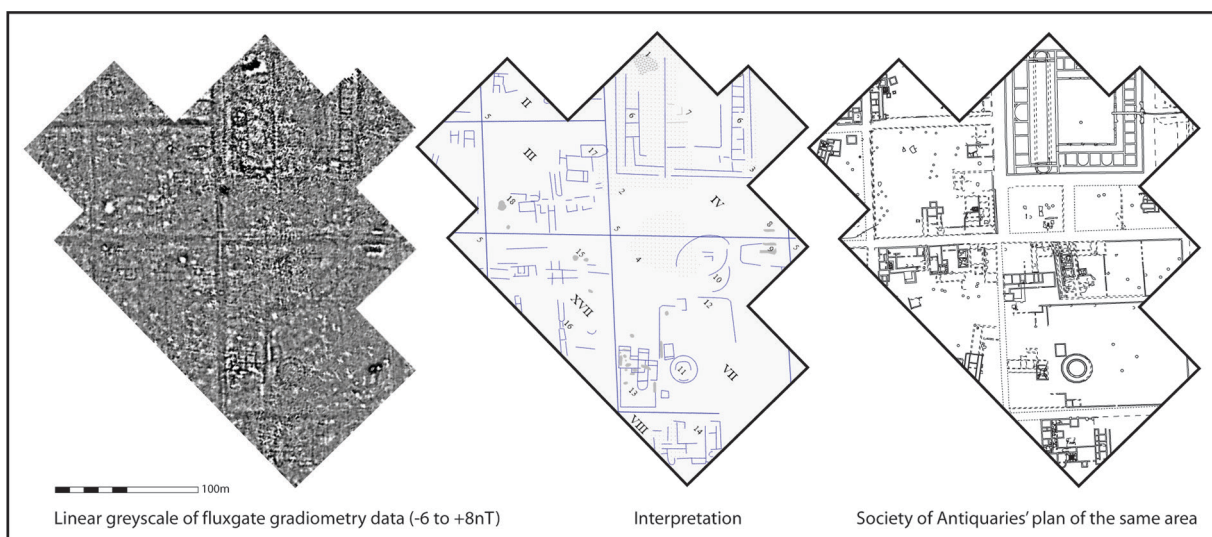


FIG. 3.16 2000 survey and interpretation by English Heritage (Martin 2000) compared to the Antiquaries' plan of the Forum area.

with Gamma-ray detection as a technique, with the Science and Defence Laboratory doing some total-emission detection in 2002–4 (led by Mike Gooding), followed up by myself (with Stuart Black and Matt Berry) in 2009 and Nuvia in 2010 (led by Mike Davies). Meanwhile English Heritage has been experimenting further with developments in GPR, in particular using a stepped-frequency, continuous wave (SFCW) radar system recording the amplitude and phase over a bandwidth between 50 and 1250 MHz in 2 MHz steps (Linford *et al.* 2010; Sala and Linford 2012).

### SUMMARY OF GEOPHYSICAL WORK FOCUSED ON THE CITY

TABLE 3.2. SUMMARY OF GEOPHYSICAL WORK AT SILCHESTER

1955	?	Earth resistance (transects) Humphrey Case (Boon 1969, 3)	Tracing the Inner Earthwork
1958–9	?	Proton magnetometry M. J. Aitken (Boon 1969, 4; Aitken 1959, 206)	Tracing the Inner Earthwork
1991	0.8 ha	Earth resistance (RM4 or 15; 1.0 x 1.0 m)	Field 4172
	1.8 ha	Fluxgate Gradiometry (FM36; 0.5 x 1.0 m) GSB (Geophysical Surveys of Bradford 1991)	Field 4172
1992	0.9 ha	Earth resistance (RM4 or 15; 1.0 x 1.0 m)	Field 4172
	0.9 ha	Fluxgate gradiometry (FM36; 0.5 x 1.0 m) GSB (Geophysical Surveys of Bradford 1992)	Field 4172
1993	1.1 ha	Earth resistance (RM4 or 15; 1.0 x 1.0 m)	Insulae XXXVI/XXVII
	1.1 ha	Fluxgate gradiometry (FM36; 0.5 x 1.0 m) GSB (Geophysical Surveys of Bradford 1993)	Insulae XXXVI/XXXIII
1997	0.5 ha	Earth resistance (RM15; 0.5 x 0.5 m) University of Reading (Creighton 1997)	Insula IX
2000	5.0 ha	Fluxgate gradiometry (FM36; 0.25 x 1.0 m) English Heritage (Martin 2000)	Insulae III, IV, VII
2000	0.4 ha	GPR (PE1000; 450 & 900MHz; 0.05 x 0.5 m) English Heritage (Linford 2001)	Insula VII
2002	1.3 ha	Gamma-ray (total emission, <i>c.</i> 1 m)	Forum
2004	4.8 ha	Gamma-ray (total emission, <i>c.</i> 1.25 m) Defence Science and Technology Laboratory (unpublished)	Forum
2006	0.5 ha	Earth resistance (Geoscan RM15; 0.5 x 0.5 m) Fluxgate gradiometry (Geoscan FM256 0.25 x 0.125 m) (Fry 2007)	Insulae IX, II, III Insulae IX, II, III
2005–9	217 ha	Fluxgate gradiometry (Bartington; 0.25 x 0.5 m)	City and vicinity
2007–9	<i>c.</i> 1 ha	Earth resistance (MSP40; 0.25 x 0.5 m)	Various locations
2009	5.0 ha	GPR (GeoScope multi-Hz; 0.075 x 0.075 m) English Heritage (Linford <i>et al.</i> 2010)	SW Interior of city
2009	7 & 1.2 ha	Caesium vapour magnetometry English Heritage (unpublished)	SW Interior of city and Western cemetery
2010	n/a	ERT & GPR (GSSI 400MHz) across defences (Fry 2010)	Various location
2010	0.7 ha	Gamma-ray (total emission, <i>c.</i> 0.25 m) Nuvia (unpublished)	Insulae II & IX