CHAPTER 7

THE TOWNS OF THE MIDLANDS AND THE NORTH

By Paul Bidwell

INTRODUCTION

The towns of the Midlands and North described here are of various origins and in at least two instances of uncertain status. Lincoln (*Lindum*) was a *colonia* which, after the Lower Enclosure was added to the original defended area in the late second century, had a walled area of 39 ha. Leicester (*Ratae Corieltavorum*) was a *civitas* capital, with a walled area slightly larger than that of Lincoln; the town perhaps became the seat of a provincial administration in the fourth century. Chester (*Deva*) was a legionary fortress; there are no signs that its *canabae* developed into a town large enough to be designated a *colonia* or *municipium* as at many other long-lived fortresses. The status of Brough-on-Humber (*Petuaria*), which had a walled area of only 5.6 ha, is uncertain (Wilson 2003b, 261–3). Finally, Carlisle (*Luguvalium*) is thought to have been the *civitas* capital of the Carvetii though proof of this is lacking. Three other *civitas* capitals — Wroxeter, Aldborough and Caistor-by-Norwich — are not considered here because they have been largely unaffected by modern development, and Corbridge, possibly a *civitas* capital, is excluded for the same reason. York is the subject of another paper in this volume.

Any assessment of the effectiveness of PPG 16 must acknowledge that at many towns it turned on the taps of developer funding when there was much less that needed funding than before 1990, at least as far as excavation in the historic cores of cathedral cities was concerned. At Lincoln, for example, 67 large sites were dug by the archaeological unit in the 15 years between 1972 and 1987 but only 'another 10 or so subsequently' in the following decade (Jones *et al.* 2003, 5). There was a similar or possibly greater fall in the number of sites excavated in Carlisle (excluding the Millennium excavations of the fort which did not result directly from the provisions of PPG 16) and Chester (excluding the research excavations at the amphitheatre). Circumstances at Leicester have been entirely different: in the last decade, the regeneration of the modern city has led to excavations on a scale only matched by those in London. Brough-on-Humber, much smaller than the other towns discussed here, has only seen one large-scale excavation.

There has also been a shift in the location of archaeological work, with much more activity in the areas beyond the historic cores (see Appendix). Once cities had been supplied with new retail facilities in their centres, new development opportunities were found in the Victorian fringes. In the 1970s and 1980s, when so much of the archaeology within the walls of Roman towns was under threat, the outer areas, unless known to be cemetery sites, probably seemed of less importance. It is fortunate that, when the attention of developers turned from ancient High Streets to the run-down Commercial Roads and London Roads of their cities, PPG 16 supplied mechanisms for evaluating the archaeological potential of these poorly-known areas.

This survey concentrates on topics where the most important advances since 1990 have been made, which are very much a product of where developments have been located. Not a great deal that is new can be said about the beginnings of the towns and even less about their endings. It is increasingly clear that in the late Iron Age the area on the west side of the river Soar at Leicester was occupied by 'a significant settlement of high status'; recent finds include fragments of clay trays used for casting coin blanks (Morris *et al.* 2011, 15). The other towns considered

here were preceded by or developed alongside Roman military occupation, as discussed below, and indeed the town at Leicester, it seems, was also preceded by military occupation, though its character and extent remain elusive, as does its relationship to the Iron Age settlement. Various factors, not least the truncation of the latest Roman and early post-Roman levels by subsequent building activities, have obscured the final phases of the towns.

THE EXTRAMURAL AREAS

The essential base-line for assessing results from the extramural areas is Esmonde Cleary's study — a research assessment and framework *avant la lettre*, though also much more — which was published late enough (in 1987) to include most of the work by archaeological units before the appearance of PPG 16. His model for the development of these areas at the larger towns postulated the existence of a 'blank band' beyond the insulae which was possibly reserved for expansion, and then an outer zone where the cemeteries were located. It should be noted that at first most of the larger towns in Britain had no defences, and the term 'extramural' at this early stage refers in effect to the areas beyond the street grid. Along the roads radiating from the core area of occupation, there was some ribbon development, but what effect that might have had on the planning of the early cemeteries was unclear (ibid., 174–6). The original arrangements might have been disrupted by two series of events: first, the erection of defences around the towns, and then, more decisively according to Esmonde Cleary (ibid., 174–6), the development of late Roman inhumation cemeteries which, because of their size, impinged on some areas previously used for other purposes. These changes would have required spatial reorganisations and presumably large-scale alterations in the legal titles to land (cf. ibid., 194–6, on the legal and administrative aspects of the extramural areas).

Work since 1990 has added much supporting detail to Esmonde Cleary's model. Inevitably, other aspects of it have been contradicted. A parallel to his blank band is the 'clear strip' some 150 m in width around the legionary fortress at Chester which was partly reserved for what are described as official buildings (FIG. 1) — for example, the amphitheatre and the Watergate Street baths — but was otherwise used for transient activities (Carrington 2012, 308–9). The investigation of quarry-pits for sandstone at Gorse Stacks in 2005–7 illustrated the nature of some of these activities, which might also have included pottery-making in the Flavian to early Hadrianic period (Cuttler *et al.* 2012). At other towns, for example Lincoln and Leicester, it is in these blank bands that we might expect to find the amphitheatres and other buildings such as *mansiones* (cf. Jones 2011, 72–3 for the possible location of the amphitheatre at Lincoln).

Boundary ditches have been encountered in most of the excavations in the extramural areas. They are usually laid out at right angles to the roads radiating from the towns. Some were plots occupied by strip buildings, but many seem to have been allotments or small fields with few re-maining traces of activity. At Leicester a number of adjacent sites have been explored along the roads running south of the town to *Tripontium* and Godmanchester in the direction of Colchester, and west to Mancetter (Cooper and Buckley 2003, 37–8 with references to reports published in the 1990s; see also Finn 2004 for the Bonners Lane site). Occupation extended for a distance of 350 m from the south gate. The boundary enclosures at all the excavated sites were 'contemporary with, and correspond[ed] to, the urban street grid'. Buildings found on the plots had generally been abandoned by the end of the second century. The only exception was at Bonners Lane and in its vicinity, where occupation dating to the later third or fourth century was preceded by an iron-working hearth and a possible corn-drier or kiln; split or fragmented long bones of cattle found in pits on the site were possibly debris from the preparation of glue (Finn 2004, 12–15, 132). At most of the sites, the boundary ditches were maintained until at least the late fourth century, and in some of the areas excavated at Newarke Street they eventually defined an inhumation cemetery. Similar land divisions along the roads approaching towns have also been recorded at Carlisle (Botchergate: Giecco *et al.* 2001; Zant *et al.* 2011b), Brough-on-Humber (Hunter-Mann 2000), Lincoln (Jones 2003 *et al.*, 121; and in the last year or so to the west of Newport, opposite Bishop Grosseteste University, information from M.J. Jones), and Chester (Hayes 2005; Carrington 2012, 304).
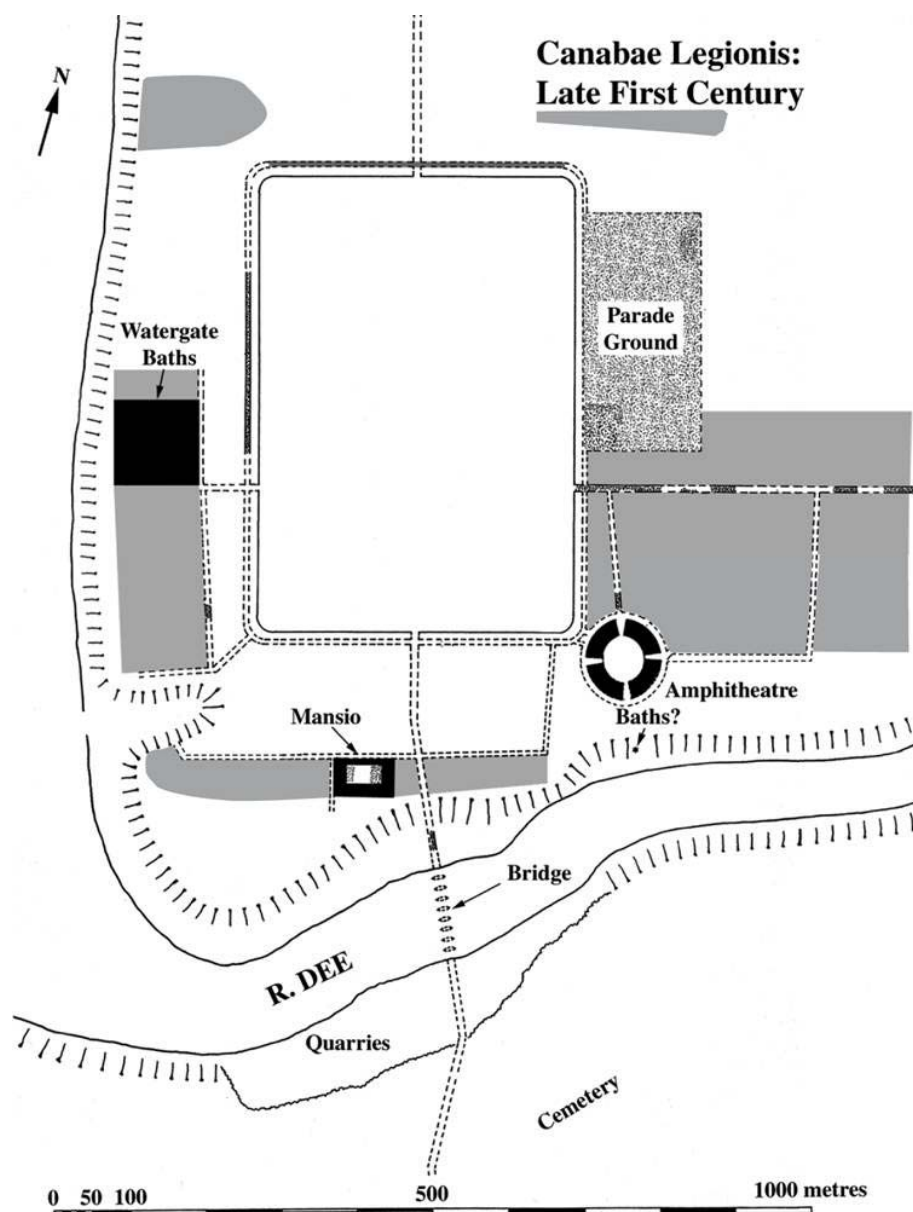
FIG. 1. The fortress at Chester and its immediate environs. (© *David Mason*)

The plans of the buildings that occupied some of these plots are often fragmentary but generally seem to have represented strip-houses. Perhaps the best-preserved examples are at Lincoln (FIG. 2) where in 1976 a series of such houses was excavated west of Ermine Street at St Mark's church in the transpontine suburb of Wigford (Steane 2001, 219–86). Similar buildings were found at St Mark's Station in 1986 (ibid., 179–218; Jones 2011, fig. 52) and in 1994–6 (Jones *et al.* 2003, 107). In 1982 this settlement was traced as far as Monson Street, 800 m south of the Lower City (Steane 2001, 17–36; Jones *et al.* 2003, fig. 7.55), where in 2009 stone and timber buildings were succeeded after the late second century by at least two pottery kilns and then inhumation burials (Wilson 2010, 369; and recently more kilns and burials at Anchor Street (information from M.J. Jones)). Other building types are yet to be identified; whether the fragmentary plans at Brough-on-Humber are those of aisled structures seems doubtful (Hunter-Mann 2000).

Esmonde Cleary characterised the extramural settlements as mainly commercial and industrial. This is certainly borne out by more recent discoveries, not least by the excavation of a hearth for smelting lead ore at Botchergate, Carlisle (Zant *et al.* 2011b, 77–9, 95–8, 108–13). The ore used
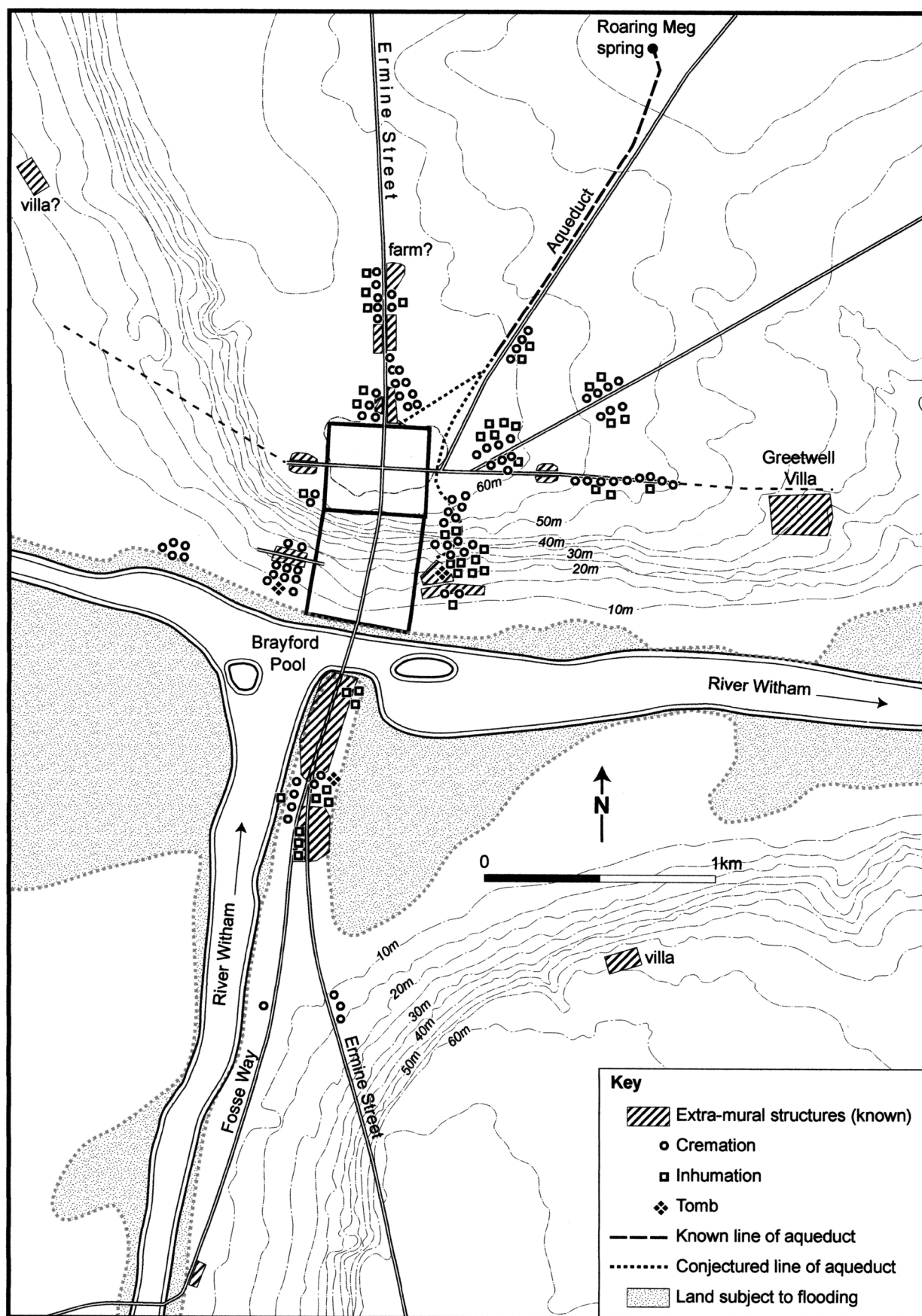
FIG. 2. The *colonia* at Lincoln in its wider setting. (© *Michael Jones*)

in this very noxious process would have been transported a considerable distance, either from the Lake District or more probably from the North Pennines, perhaps from Tynehead, some 40 km from Carlisle, where similar ores are known.

At some point along the approach roads, the cemeteries and commercial and industrial activities would have given way to an agricultural landscape. At Lincoln, this change occurred at least 800 m south of the *colonia* at Monson Street. To the north, stone buildings were found in 1995 at Bishop Grosseteste College *c.* 600 m beyond the walled area; they were perhaps part of a villa estate or farm which was separated from the town by a cemetery (Jones *et al.* 2003, 121). The existence of another villa 1.8 km north-west of the *colonia* at Long Leys Road (FIG. 2) has been confirmed by recent discoveries (Jones *et al.* 2003, 121; Wilson 2011, 352–3; Jones 2011, 101); there was no activity on its site until the mid- to late second century when boundary ditches were dug, with stone buildings following in the early to mid-third century. A third, very elaborate villa has long been known at Greetwell, *c.* 2 km east of the *colonia* (Jones 2011, 101–2). Whether these villas mark a zone of transition on the outskirts of the extramural areas at Lincoln is uncertain. Carlisle provides a stark contrast: an unpublished excavation in 1994 at the Infirmary, 1 km north-east of the town, explored a roundhouse settlement which though apparently occupied into the second century, produced very few Roman finds (Esmonde Cleary 1994, 263; McCarthy 2002, 101–2).

During the fourth century, occupation and cemeteries in the extramural areas had seemed to Esmonde Cleary (1987, 198) 'as extensive or larger than they had ever been'. This now seems not to have been the case at Leicester where, except in part of the southern suburb (Finn 2004; Fitzpatrick 2006, 406), extramural occupation seems to have diminished 'after a spurt in the early to mid-second century' (Cooper and Buckley 2003, 37). At Lincoln some buildings were occupied or rebuilt in the third or early fourth centuries but in other areas they were superseded by inhumation cemeteries, as at Monson Street. It is telling that at the towns discussed here few new areas of settlement have been identified in the later Roman period. The cemeteries, it seems, replaced rather than displaced the activities of the living. At Carlisle the only occupation that can be regarded as extramural or at least very much on the fringe of the town, which was at Botchergate, came to an end in the second century, after which the area reverted to its former use as a cemetery (Zant *et al.* 2011b). Activities outside the fortress at Chester were closely tied to the fortunes of the legion, but it is worth noting the apparent diminution in activity in the eastern *canabae* in the third and fourth centuries (Carrington 2012, 310). Finally, at Brough-on-Humber occupation east of the town had come to an end by the early fourth century (Hunter-Mann 2000).

THE LOCATION AND DEVELOPMENT OF CEMETERIES

The dead dominated the extramural areas, their tombs and graves lining the roads leading to the towns, but the location of their cemeteries changed over time. At Canterbury and Chichester (Esmonde Cleary 1987, 175), and also at Colchester (Fulford, Ch. 5), the earlier cremation cemeteries seem to have been farther out from the core areas than the later inhumation cemeteries, and the same distribution of burials also occurs in the environs of York (Ottaway 2011, 367–8). Until recently, Leicester displayed a reversal of this pattern (Cooper and Buckley 2003, 39), but there have been recent discoveries of cremations on sites more distant from the town (information from Lynden Cooper). What effect changes in the location of cemeteries had on the settlement and agricultural areas outside the towns is uncertain. One problem is that much more is known about the later cemeteries than the earlier, as at Leicester where by 1996, 200 inhumations and only 60 cremations had been recorded (Cooper 1996), with a further 128 inhumations found in the next few years (Cooper and Buckley 2003, 38), comprising 97 at Clarence Street (Gardner 2005) and another 31 at Newarke Street (Derrick 2009). The total number of inhumations now exceeds 400, including 58 from Western Road, the radiocarbon dating of which showed that some burials were of later first- and second-century date (Booth 2013, 308, and information from Lynden Cooper). At Newarke Street (Cooper 1996) and elsewhere, the late cemeteries were established on sites where there had previously been domestic occupation or, probably

in some instances, cultivation within small plots. A particular complication in a modern urban environment, where usually only limited areas are designated for excavation by way of mitigation, is indicated by the likelihood that the inhumations at Bonners Lane were associated with the adjacent extramural buildings and were not part of a general cemetery for the townspeople (Finn 2004). It will sometimes be impossible to know with what sort of cemetery isolated finds of burials or groups of burials were associated. There could also be changes in the extent of earlier cemeteries, as shown by excavations at Botchergate in Carlisle in 1998–9 and 2001 (Zant
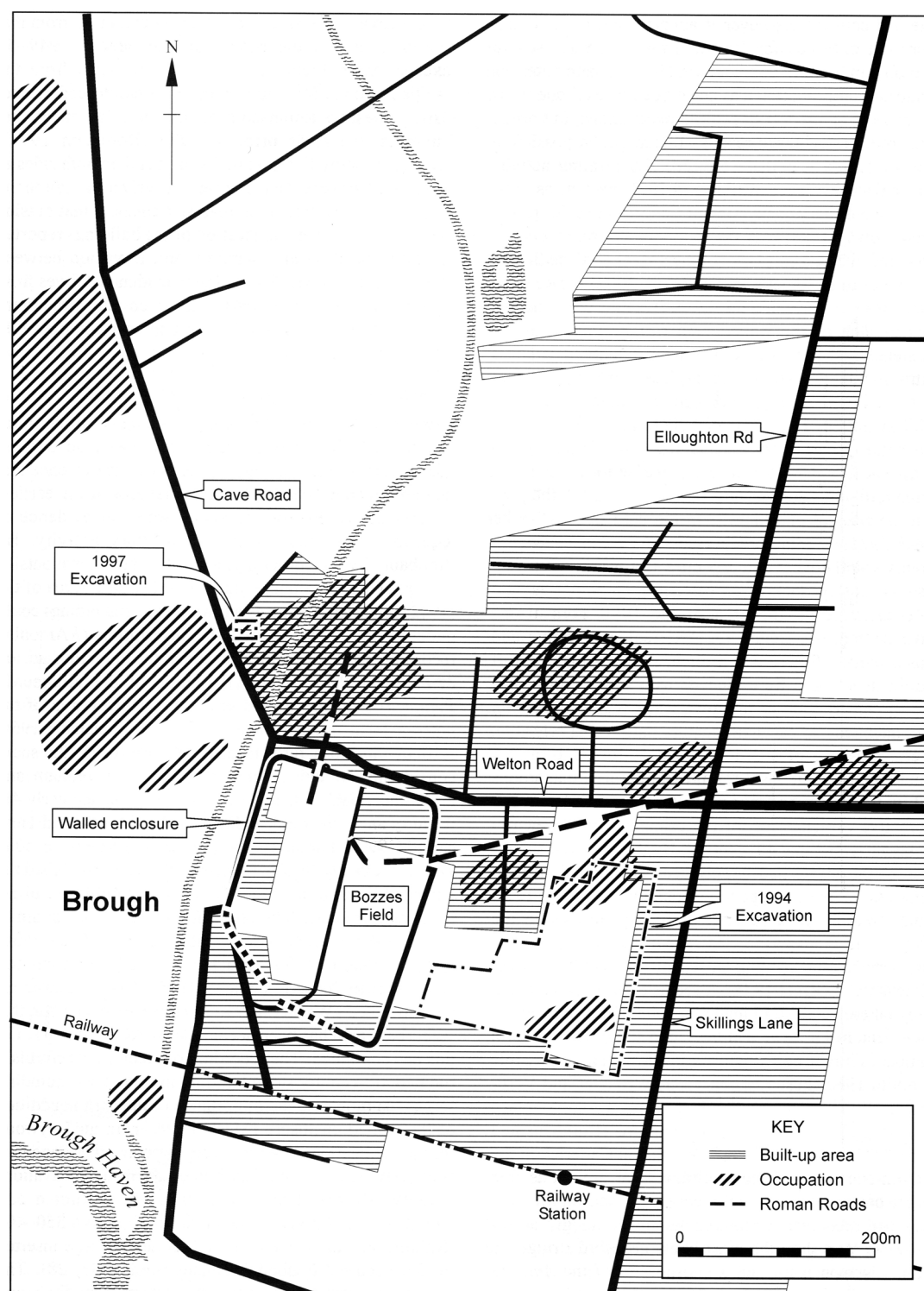

FIG. 3. Brough-on-Humber. (*By kind permission of Pete Wilson*)

et al. 2011b, also referring to an unpublished excavation on an adjacent site in 1998–9). The site, bordering the east side of the main road approaching from the south, was used as a cremation cemetery in the Flavian–Trajanic period but was then given over to industrial activities, including the lead-smelting which has already been mentioned; by the early third century it was back in use again as a cemetery.

At Lincoln and Chester there has been little excavation in the cemetery areas since 1990, although very useful analyses of previous discoveries have been published (Lincoln: Jones 2011, Jones *et al.* 2003, 113–18, fig. 7.59; Chester: Mason 2012a; Carrington 2012). At Brough-on-Humber (FIG. 3), four burials preceded or were associated with the settlement immediately east of the town (Hunter-Mann 2000, 2.8.1). The date of its abandonment, which had taken place by the early fourth century, is much the same as that of many military *vici* in the North (Bidwell 1991, 12). Another shared characteristic is the absence of any signs that, during what remained of the Roman period, cemeteries had encroached on the abandoned areas to any great extent, despite the fact that the site at Brough-on-Humber was close to the road leading from the east gate. At many forts, the disappearance of the *vicani* and reductions in the size of units presumably meant that there was still plenty of space left in the third-century cemeteries. The abandonment of the area east of the town would certainly be in accordance with Wacher's argument (1995, 398–9) that by the later Roman period occupation within the walled area of Brough-on-Humber had become entirely military in character.

For a more detailed survey of town cemeteries, see Pearce in this volume (Ch. 8).

THE DEFENCES

It is only at Leicester, following earlier work (Buckley and Lucas 1987), that much has been learnt about the form and date of the town defences (though see Colyer *et al.* 1999 for work mainly before 1990 on the defences of the Lower City at Lincoln). The rampart explored in 1997 on the north side of the town at Cumberland Street had timber strapping (Cooper 1998). This excavation also established that the town wall was cut through the front of the rampart; it was previously thought possible that the rampart and wall had been built at the same time. Subsequent work at Bath Lane and West Bridge Wharf traced the same sequence, establishing the line of the defences on the west side of the town, where the defences had supplemented the natural boundary formed by the river Soar (Burnham 2004, 287; cf. Cooper and Buckley 2003, 37). Excavations on the northern defences at Sanvey Gate examined a substantial length of the wall and rampart, and an internal tower or staircase (Fitzpatrick 2006, 406). At Carlisle, the question is whether the Roman town was ever provided with defences and, if so, at what date (FIG. 4). It has long been thought that the medieval town wall followed the course of a Roman predecessor which was proudly shown to St Cuthbert by the townspeople in the late seventh century, though the wall might actually have been that of the fort (McCarthy 2002, 153). There have been few chances to examine the town wall and the results have not been clear-cut: at Rickergate in 1998–9, the poorly-preserved remains were judged likely but not certainly to be medieval (Zant *et al.* 2011a). A complication was the discovery in 1981–2 in the Southern Lanes of an unfinished rampart and 'possible ditches', thought to date to the early third century but on an entirely different line to that of the later town walls (McCarthy 2000, 44–7, 59, figs 38 and 47).

The building of defensive circuits, though probably the largest and most long-lasting public works at any town in Britain, had little influence, it seemed to Esmonde Cleary (1987, 165–72), on the subsequent development of areas beyond the new ramparts and walls. He argued that in general all the areas that had already been built up were enclosed, apart from isolated buildings and ribbon development along the roads leading to the towns. There was no major dislocation of property holdings and no widespread tendency for occupation to retreat within the defensive circuits. Circumstances now appear to have been different at Leicester. The cessation of occupation in the suburbs, except at Bonners Lane which has already been noted above, was attributed by Cooper and Buckley (2003, 37–8) to the building of the defences. Another result of this construction programme was to disrupt property holdings around the core of the town. At Bosworth House, Southgates, to the west of the south gate, the rampart sealed timber buildings
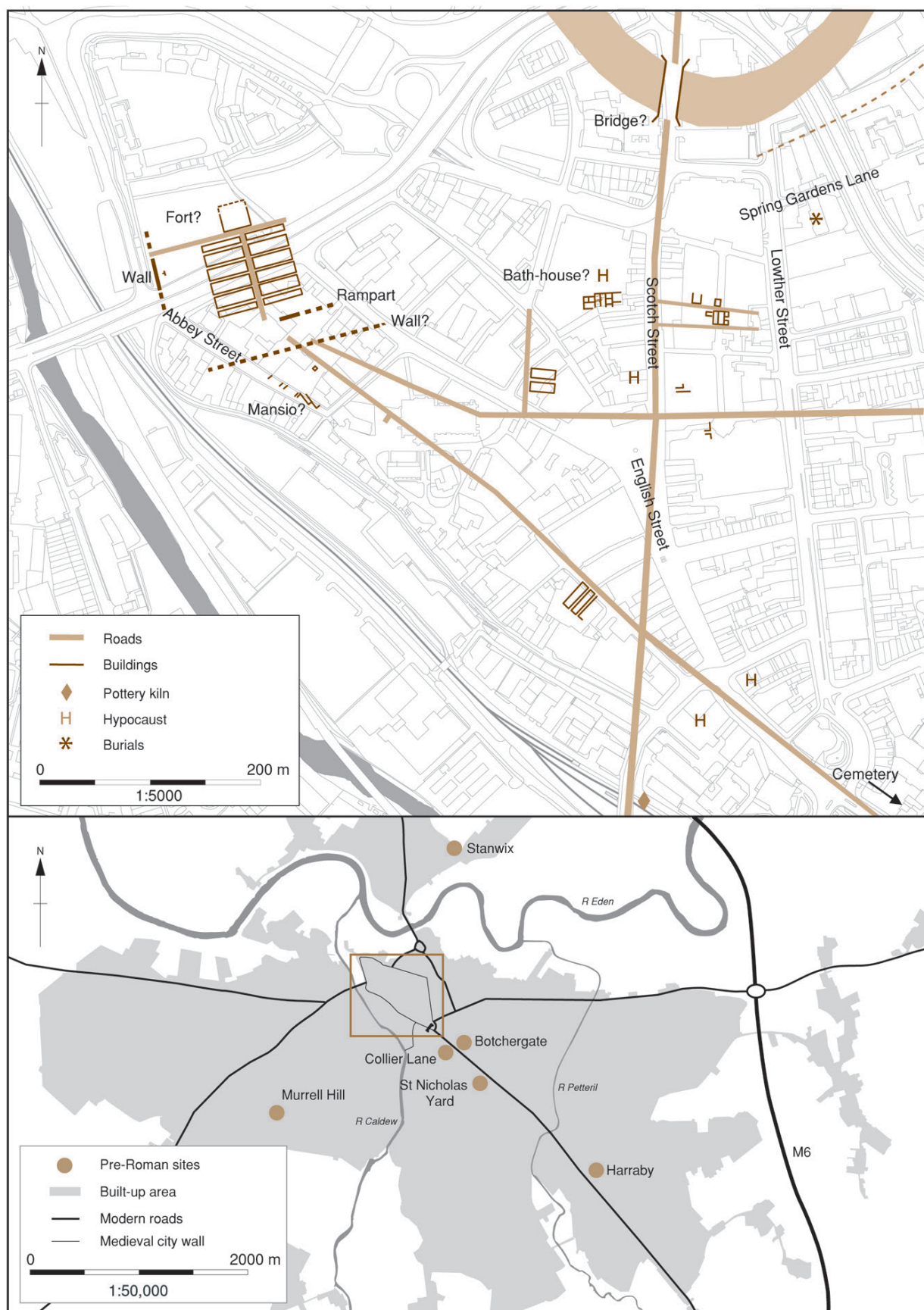
FIG. 4. The fort and town at Carlisle. (© *Oxford Archaeology*)

occupied apparently until the late second century (Booth 2011, 358); the northern defences at Cumberland Street sealed previous occupation and a much earlier excavation near by had found a timber building under the rampart (Cooper 1998). Beyond the south gate, at Oxford Street, early Roman occupation around an east–west crossroads suggested that the street grid might have originally extended beyond the area later enclosed by defences (Booth 2009, 242). At Lincoln the defences of the Lower City, which were an addition to the original circuit of the *colonia*, cut through a stone house with painted walls south of the east gate (Burnham 2004, 283); a little further to the north what was probably part of the same house had been excavated by Wacher in 1973 (Wilson 1974, 421–2, figs 7–8; see also Colyer *et al.* 1999, 27–9, for timber buildings of two phases succeeded by cremations under the rampart at The Park on the west side of the defences).

   None of these observations, except perhaps at Bosworth House in Leicester, is necessarily of buildings along the main roads out of the towns. They show that the building of the defences caused much more dislocation of long-established occupation than was previously apparent.

PUBLIC BUILDINGS AND PUBLIC INFRASTRUCTURE

Exploration of public buildings since 1990 has been mainly confined to Leicester where the results have been spectacular. First, though, the publication of earlier work on the basilica and forum at Lincoln should be noted (Jones *et al.* 2003, 65–81; Steane 2006, 113–211; Jones 2011, 65–71). Also, in 1989 there was further work on the Watergate Street baths immediately west of the fortress at Chester (Mason 2012a). They were probably for use only by certain groups in the legion but their area seems to have been as large as that of some public baths in towns.

   The *macellum* at Leicester was first encountered by Wacher in 1958 (Richmond 1959, 113–14, fig. 10; Wacher 1995, 352). The part which he uncovered consisted of the western end of a large basilican hall apparently colonaded and the adjacent corner of a courtyard which was built in the late second or early third century. It was at first thought to have represented the basilica and forum of the town, but following the identification of that complex on an adjacent insula, the remains found in 1958 were plausibly re-interpreted as those of a *macellum*. A small evaluation in 2001 (Meek 2002) contacted what was possibly an internal colonnade on the north side of the courtyard which Wacher had seen in 1958. A much larger piece of work in 2007 yielded remarkable results (Booth 2008, 295–8, figs 16–18; Morris *et al.* 2011, 22–3). Towards the end of the Roman period, hearths had been cut into the street at the eastern end of the basilican hall; they were sealed by layers of earth and rubble containing Early to Middle Saxon pottery which also covered the remains of a wall along the western edge of the street. Over these layers was the articulated collapse of what appears to have been part of the eastern gable wall of the basilican hall of the *macellum*. The wall had been built of granite rubble laced with tile courses and incorporated a large relieving arch which had taken the weight above the lintel of a window or door. Taking account of the missing lower portion, the fallen masonry seems to represent a wall at least 16 m in height. A particularly interesting feature was the stub of a second arch which had projected at right angles from what would have been the inner face of the wall when it was standing. Its position seems to have been roughly in line with the northern side of the nave of the hall and suggests that it had been divided from its aisles by arcuate rather than trabeated colonnades. This is vital new information about an important development in the Roman architecture of the Western provinces. There are many early Imperial examples of trabeated colonnades in basilicas and many arcuate colonnades from the late Roman period, but very little to establish when the latter first began to appear.

   Also at Leicester, excavations at Blackfriars, Bath Lane, have revealed a large aisled hall. The aisles are defined by stone and concrete piers, two preserving plinths of millstone grit (information from Lynden Cooper). The purpose of the building is uncertain.

   The absence of any new religious sites from the list of discoveries since 1990, though striking, is surely fortuitous. Turning to public infrastructure — meaning water supply and structures concerned with communications and transport, such as roads, bridges and quays — there is little to report. At Carlisle the possible embanked conduit of an aqueduct was found west of Botchergate in 1997 (McCarthy 2002, 85, 87, fig. 43), and a study of water and effluent management at Lincoln has been published by Jones (2003). Investigations of the waterfront at

Lincoln which came to an end in 1991 (Jones *et al.* 2003, 97–104) illustrated the great potential of the waterlogged deposits.

DOMESTIC BUILDINGS AND URBAN DEVELOPMENT

Since 1990 it is only at Leicester that there have been town-centre excavations on a large scale. The results have been remarkable and rank alongside the most important research on Romano-British urban development which preceded PPG 16. The sources of the following account of excavations connected with the Highcross development are interim statements (mainly in Fitzpatrick 2006, 406–10, figs 16–18 and Booth 2008, 295–301) and chapters from the draft of the final report kindly made available by N. Cooper. Much else of importance has emerged about town life at Leicester — for example, the remains of the so-called delicatessen at Castle Street (Score *et al.* 2010) and an apsidal building on the west side of the town, originally interpreted as an early bath-house and now regarded as a town-house (Booth 2008, 301–4, fig. 22; information from Lynden Cooper) — but the results of the work at Highcross are pre-eminent.

Before the early second century, Roman activity was concentrated along the riverside, which had been the focus of occupation in the late Iron Age. In the north-east quarter of the town, this early stage saw the digging of quarry-pits and a few other pits which were filled with domestic refuse; only one building has been encountered. In the next phase, parallel ditches marked out the line of the streets, but they seem only to have been metalled after enough time had passed to allow turf to develop over their lines. At Vine Street, in the south-west corner of Insula V, there were three small rectangular buildings with stone foundations which probably supported timber

FIG. 5. Vine Street, Leicester. (a) The early masonry phase; (b) The urban courtyard house.
(© *University of Leicester Archaeological Services*)

superstructures. They were surrounded by metalled yards and fence lines which enclosed small fields or stock pens. Micromorphological analysis showed that soil from these areas was mixed with pig slurry (see Morris *et al.* 2011, 29). In *c.* A.D. 160–170/200 these buildings were levelled and three detached row-houses were built around a metalled yard (FIG. 5a). To the north there seems to have been a small courtyard house and to the east another house, possibly aisled, with a bath-suite which was probably not completed and was converted into a workshop making bone pins and needles. The new buildings represented a complete replanning of the insula which ignored the property divisions of the previous phase.

The three row-houses had a short life and parts of them ended up as hay-stores and open latrines. In the early third century their floors were removed and material was dumped to raise their surfaces to the same level as the surrounding streets. They now became part of a large courtyard house measuring 40 m by 39 m (FIG. 5b). Its principal range to the north, an entirely new building, contained five main rooms, some with hypocausts; the central room, which had an apse, was identified by the excavators as a dining-room. The kitchen seems to have been in the south-west corner of the house. Few of the original floor levels survived and the walls had been robbed, but thousands of loose tesserae and numerous fragments of wall-paintings, some figurative, show that the house was richly decorated (for the source of the chalk tesserae, see Tasker *et al.* 2013). In the mid-third century another range of heated rooms was added to the north, and to the east of the new range was a portico which might have overlooked a walled garden (FIG. 6a). Renovations in the early fourth century included the laying in the portico of tessellated pavements with tile insets in front of the doors, and new schemes of wall-painting. By the mid-fourth century, the north range had been demolished (FIG. 6b). Other ranges housed
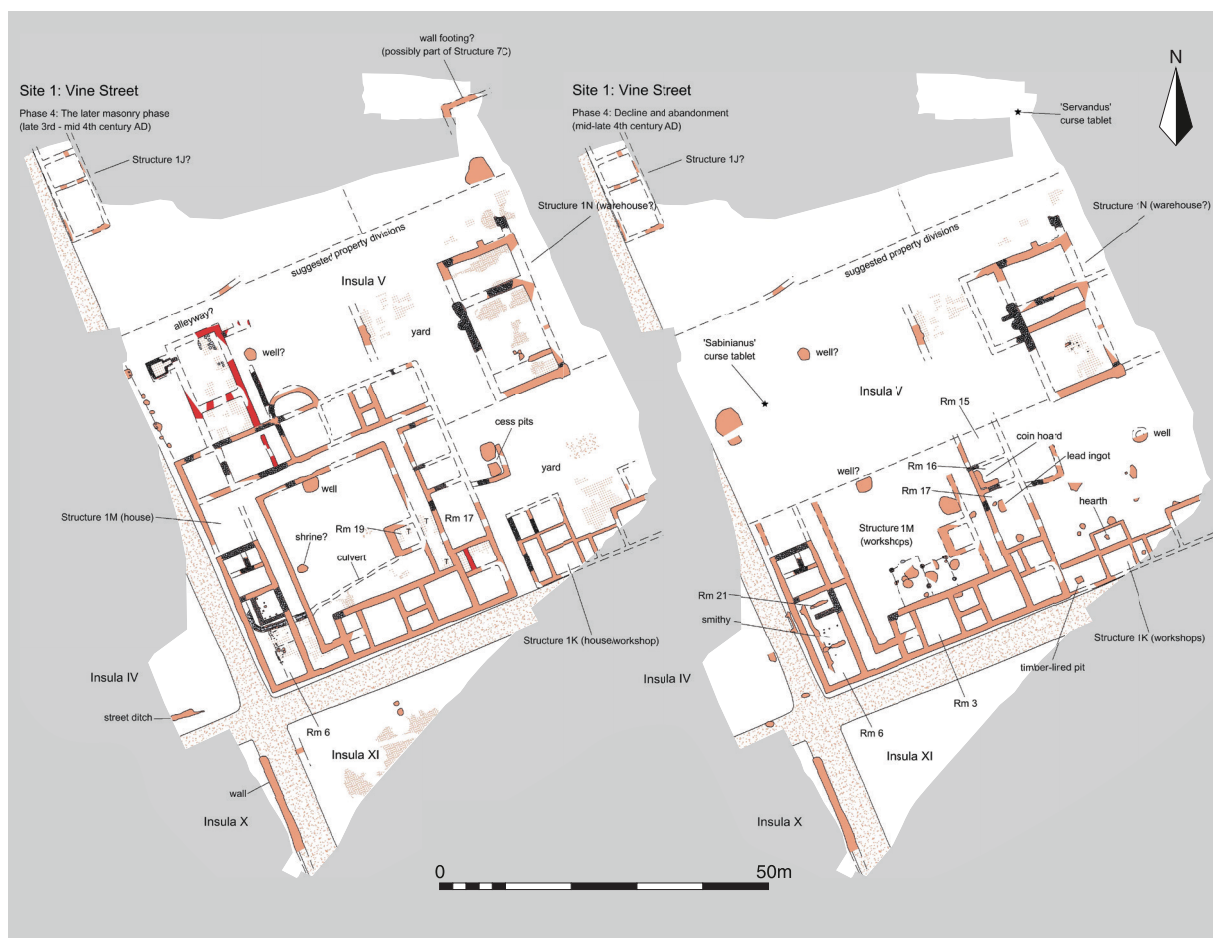

FIG. 6. Vine Street, Leicester. (a) The later masonry phase; (b) Decline and abandonment.
(© *University of Leicester Archaeological Services*)

workshops making bone and copper-alloy objects and one room became a smithy. The latest Roman deposits had been truncated, but there were few late coins from the site of the house.

Fragments of other buildings were explored to the east and north. Building 1N (FIG. 6a) dates from the early fourth century (Fitzpatrick 2006, 410, fig. 16; Booth 2008, 301, fig. 20). With massive walls and an overall width of 12 m, the building consisted originally of just two rooms with floors of plain concrete. It was perhaps a large warehouse or granary. At a later stage, the north room was divided into two and a walled courtyard was built to the east. Coins from this area, running down to the House of Theodosius, were later than those from the courtyard house.

The excavations produced some extraordinary finds which say something about the identity of those who lived on the site. From Roman demolition material near the north-east corner of the site came a lead curse tablet: in addition to Servandus, the person making the curse, it named sixteen men and three women, their names of Roman and Celtic derivation, one of whom had stolen a cloak belonging to Servandus (Tomlin 2008, Tablet 1). They were from the *paedagogium*, a term which Tomlin thought most likely to mean the slave-quarters. In his words, 'the implication is that in Roman Leicester, … the slaves of a single household numbered no fewer than twenty persons, including the owner of the cloak, Servandus. No doubt he suspected all his colleagues, and by listing them provides this unique roll-call of the household'. A second curse tablet was found in the robber trench of the wing added to the back of the principal range (ibid., Tablet 2). It was directed at two men and a woman who had stolen silver coins from Sabinianus. According to the curse, they were to be victims of 'a god [that] will strike down in this *septizonium*'. Part of a *septizodium* at Rome appears on the Marble Map, where it seems to have taken the form of a *nymphaeum* with an 'elaborate columnar screen, three orders high'; its architectural purpose was to mask buildings behind it (Boëthius and Ward-Perkins 1970, 273). Three other examples are known, one in Sicily and two in North Africa. The name *septizodium* or *septizonium* refers to the seven planetary deities after whom the days of the week were named. Leicester too, we now know, had one of these shrines, though doubtless on a more modest scale than in the Mediterranean areas.

Equally unexpected was the recovery from the site of two lead sealings of the Twentieth and Sixth Legions (Tomlin and Hassall 2007, nos 15–16). In 2005 another sealing of the Sixth Legion was found in an evaluation trench to the east of the site (ibid., no. 17); on its reverse was a mould-impression from a seal of the Third Legion Cyrenaica which was at Bostra (Bosra) from the reign of Hadrian until the end of the Roman period. It seems likely that this sealing was associated with the posting of a centurion from the legion in Syria to York. Five other military sealings were already known from Leicester (Clay 1980): one of the Twentieth Legion found south of the forum with second-century material (*RIB* II, 2411.79); one of the Sixth Legion and another of the *ala Augusta Vocontiorum*, both from a context of the mid-second to early third century at an extramural site west of the town (*RIB* II, 2411.69 and 90); and two of *cohors I Aquitanorum* (*RIB* II, 2411.95–6), found with two other apparently civilian sealings (*RIB* II, 2411.286 and 297) on a site adjacent to the find-spot of the two legionary sealings. *Cohors I Aquitanorum* was at Brough-on-Noe, near the Derbyshire lead-fields, by A.D. 158 but had moved to the coastal fort at Brancaster by the early third century. Legionary and auxiliary sealings are almost entirely unknown at other towns in Britain (and, with the exceptions of Brough-under-Stainmore and South Shields, rare finds at military sites). The presence of eight at Leicester, scattered across intra- and extramural sites, surely means that at least in the late second and earlier third century army supply was very prominent in the mercantile life of the town.

FORTS, FORTRESSES AND ROMAN TOWNS

At Lincoln, and probably also at Leicester, military occupation preceded the establishment of Roman towns. Further north, the Roman army was an enduring presence. At Chester, of course, the civilian settlement depended on the fortress. The last sizeable intervention in the interior of the fortress was at Bridge Street in 1988 where a sequence of unidentified buildings was found to the west of the baths (Garner 2008). In passing, recent publications of earlier excavations must be noted, not least because all three reports are relevant to the study of public architecture

in towns. The plan of the fortress baths (Mason and Petch 2005) has some resemblances to those of the baths at the fortresses at Exeter and Caerleon. They in turn have close parallels in the legionary fortress at Vindonissa and in the town of Avenches (both in modern Switzerland) which demonstrates that this specific type of plan was equally at home in military and civilian contexts. Excavations which explored the Elliptical Building have also been published (Mason 2000). The report argued that it served as some form of monument to imperial power, but Fulford (2005) has put forward a more prosaic but far more compelling identification of the building as a *macellum* — an example of a civilian building-type in a military context. Finally, work in 1978–1990 on the fortress defences has been reported on by LeQuesne (1999). The north wall to the east of the North Gate survives to the height of the cornice which marked the level of the wall-walk, 4.7 m above the foundation level. Holbrook (1999) has compared the Chester fortress wall to the town walls at Gloucester and Cirencester, finding similarities in the form of the cornices and parapets at Chester and Cirencester.

The presence of a pre-Hadrianic fort at Carlisle had been long suspected, but its site was not discovered until the 1970s. By the mid-1980s, it was clear that the fort had continued in existence after the building of Hadrian's Wall and of Stanwix, the largest and least-explored of all the Wall forts, on a site less than 1 km north of the Carlisle fort. In 1997–2001, large areas in the centre and south-western quadrant of the Carlisle fort were excavated in advance of the Millennium Project. This was an ambitious scheme designed to link the medieval castle to the town centre, from which it had been sundered by a dual carriageway built in the early 1970s; it was during the building of this road that the fort had been discovered. The Millennium Project, much reduced in its scope when actually carried out, was not a commercial development but its archaeological aspects conformed broadly to the principles of PPG 16. Building of the original timber fort began in A.D. 72/3, with extensive alterations following in A.D. 83–4 and about a decade later. Much of the dating evidence for these phases depended on dendrochronology, and organic finds preserved in these levels across the fort included leather, wood, and ink writing-tablets equal in interest to those from Vindolanda. A new timber fort was built *c.* A.D. 105 and was partly adapted to industrial uses when Hadrian's Wall was built (Zant 2009). In *c.* A.D. 140, when the frontier was advanced into Scotland, the second fort was demolished; there was little activity on the site until the early third century when a new military base was built in stone. Part of the headquarters building was explored; its plan was of conventional type and included a forecourt and a veranda along its street frontage, also a feature of the early third-century headquarters building at Vindolanda. It remained standing until the end of the Roman period. Two aspects of the Carlisle fort are of particular relevance to urban economies in the North. First, the town was almost certainly a *civitas* capital, perhaps achieving that status as early as the reign of Hadrian, and yet it sat alongside a military base. There was a similar arrangement at Corbridge, possibly also a *civitas* capital, where two legionary compounds, later amalgamated, lay at the heart of the civilian settlement. Elsewhere in the North-Western provinces, forts or other military bases are only found in major towns where it was necessary to accommodate soldiers placed at the disposal of the provincial governor, as at London. That cannot have been the purpose of the military bases at Carlisle and Corbridge. Another aspect of the base at Carlisle might well point to one of its functions. From the area of streets around the headquarters building there were 250 coins, mainly Constantian issues of the 330s and 340s with some later coins running down to the House of Valentinian. A similar distribution of 248 coins, generally of the same date-range as those at Carlisle, was found on the *via praetoria* and in front of the headquarters building in the fort at Newcastle. They were not a dispersed hoard, and the scattering of coins was seen as the result of this part of the fort having been used as a market (Bidwell and Snape 2002), an interpretation which was followed in the Carlisle report. Corbridge and Carlisle stood on the most important roads running north beyond the Wall, and Bidwell and Snape argued that there was also a road running north from Newcastle. At Newcastle and Carlisle, there were markets in the forts under the most direct military supervision that was possible, and it seems probable that at least some of the trading was with the population north — and perhaps far north — of the Wall. Priscus, the fifth-century historian, describes a market in a fort near the Danube which was visited by traders from the Hunnic territories in the winter of A.D. 440/1 (*Fragments* 6.1). They

seized the fort, beginning the incursions of the Huns across Europe. Nothing quite so disastrous was likely on the northern frontier of Britain, but all transactions with those north of the Wall probably required constant regulation, and that would have been at least part of the duties of the units based at Carlisle and Corbridge. Cross-border transactions also probably played an important part in the economies of the two towns.

THE ARCHAEOLOGY OF TOWNS AND DEVELOPMENT CONTROL: NEEDS AND OPPORTUNITIES

Some of the sites described above are sufficient illustrations of the enormous potential of what remains of our Roman towns. Above all, the Vine Street sequence of houses at Leicester has produced as rich and varied a picture of Roman town life as from any previous excavation in Britain. Something more, however, needs to be said about the potential of extramural areas where since 1990 there has probably been more work overall than in the town centres. The results have emphasised that there was occupation on a considerable scale, particularly in the second century, that changes in land-use were common, and that the areas along the roads approaching the towns were usually parcelled out into enclosures defined by ditches, often long-lived and of a substantial size. Any advances in understanding the archaeology of towns, especially their economic organisation, can now be seen to depend on knowledge of their entire inhabited area and not mainly on the areas within their walls or street grids. One question which has not been raised in this survey is how the limits of extramural areas might be determined. A functional definition would be a zone in which all the activities directly serviced the day-to-day needs of the town-dwellers and those visiting the towns. Shops in strip-buildings could have served customers passing to and from the towns but were no doubt combined with workshops that also supplied the urban population. The extramural areas were also used for various industrial processes usually excluded from the core of the town such as pottery manufacture and lead smelting, the latter, as at Carlisle, a source of poisonous fumes. Agriculture and animal husbandry would also have been of great importance, supplying products with a short life such as milk, grazing for animals such as horses and draught oxen used by the town-dwellers, and fruit and vegetables. Finally, there were the cemeteries.

At none of the towns studied here are the limits of the occupation areas and cemeteries known. The furthermost extent of recorded finds from town centres is bound to be partly the result of modern factors such as the petering out of intensive development in the nineteenth and twentieth centuries, as shops and factories gave way to suburban housing, the building of which involved less ground disturbance. Even so, occupation and cemeteries are known to have extended over very large areas, at Leicester, for example, covering some 250 ha (though this includes the river Soar), which is more than five times the size of the walled area (Esmonde Cleary 1987, fig. 41). Relatively little of the extramural areas has been investigated, leaving some important questions unanswered, such as the relationships between the burial and occupation areas. Few large areas have been excavated and it is at present impossible to say whether the ditched enclosures were laid out in regular patterns and sizes or developed haphazardly as ownership or leases were granted to individuals. Attention has understandably been focused on areas bordering the roads approaching the towns, and little is known about the areas between the radiating spokes of those roads. Distribution maps show burials clustering along the roads, as at Lincoln (FIG. 2), but this may be a distortion produced by modern developments along the present-day London Roads and Commercial Roads which followed Roman routes. More interventions are needed in the areas between the Roman roads and beyond the known areas of occupation. Negative evidence will be important in defining the limits of the extramural zones.

The Historic Environment Records include the basic information on which programmes of archaeological mitigation can be based. At Lincoln the records are supplemented by the Urban Archaeological Database and the relational database known as LARA (Lincoln Archaeological Research Assessment, Jones *et al.* 2003), and at Chester, in addition to the Chester Archaeological Plan (Beckley *et al.* 2014) and an Urban Archaeological Database, there are specifically for the extramural areas a comprehensive published gazetteer and what amounts to a detailed research

assessment (Carrington 2012). No such studies of Carlisle and Leicester have been published, though general accounts of the towns were published about a decade ago (McCarthy 2002; Cooper and Buckley 2003). They figure in regional research assessments but, as might be expected in such wide-ranging documents, there is no detailed analysis of their topography and research potential (Brennand 2006; Taylor 2006). This is a particular problem for the extramural zones. The walled towns and their defensive envelopes are known quantities, but the limits of the areas of interest beyond these cores and the locations of occupation and cemeteries are at present uncertain. To understand fully the archaeological potential of these areas, we need to have as much information as possible about previous discoveries together with analyses of their significance. A great obstacle to progress is the lack of publication. There are many reasons why contracting organisations are sometimes unable to place the results of their work fully in the public domain, amongst them the intransigency or bankruptcy of clients, failure of planning authorities to insist on the complete discharge of all the planning conditions, the closure of archaeological units, and shortage of the skills necessary to bring projects to publication. On the other hand, often because of contractual obligations, projects which have been published tend to appear in print much more rapidly than before 1990 and with no diminution of quality (and the publication backlog still includes many projects undertaken before the introduction of PPG 16, some dating back to the 1950s).

The extramural areas are in many respects the natural territory of developer-funded urban archaeology — the setting for watching-briefs and small-scale evaluations which will always be much more numerous than in the smaller walled areas with their conservation zones. Site by site, the results of work in the extramural areas are often unspectacular, but cumulatively they are indispensable to our understanding of how towns worked. Ottaway's study (2011) of the environs of York is a model of what is required for the towns discussed in this paper. This sort of overview cannot depend on developer funding, and academic research grants will only sometimes be available in the right place and at the right time. A system is needed which recognises that there is always a stage beyond the successes and failures of developer funding if the full potential of urban archaeology is to be realised.

ACKNOWLEDGEMENTS

APPENDIX: SIGNIFICANT INVESTIGATIONS 1990–2013

Key: Documentation/References: F = final report; S = summary/interim; N = note; GL= grey literature report.
Note: this list excludes the excavations on the Chester amphitheatre which were not developer-funded.

Site	Year	Organisation	Principal Findings	Documentation	References
Brough-on-Humber *Extramural*					
Welton Road	1994	York AT	Enclosures, buildings, pottery production, isolated burials.	F	Hunter-Mann 2000
12 Cave Road	1997	NAA	Watching-brief on fourth-century (?) building.	GL	Mackey 1997
49 Station Road and 5 The Burrs	2004	Humber Field Archaeology	Part of possible projecting tower, defensive ditches and foreshore; ditch, timber then stone buildings in walled area.	N	*Britannia* 36 (2005), 414–15; 37 (2006), 396
Carlisle					
Cumberland Infirmary	1993, 1997	Carlisle Archaeology	Large-scale excavation of native settlement continuing into second century; few Roman finds.	N	*Britannia* 25 (1994), 263; 29 (1998), 382
40–78 Botchergate (Collier Lane)	1997	Carlisle Archaeology	Possible aqueduct embankment, cremations, rubbish dumps.	N	*Britannia* 29 (1998), 381–2
Carlisle Millennium Project	1997–2001	Oxford	Excavation of fort: *principia*, barracks, defences; occupation from A.D. 72/3 to early fifth century.	F	Zant 2009; Howard-Davis 2009
53–55 Botchergate	2001	Oxford	Buildings, lead-ore roasting hearth, burials.	F	Zant *et al.* 2011b
Mary Street/Tait Street	2001	Carlisle Archaeology	Buildings and cremations on outskirts of town.	GL	Giecco *et al.* 2001
Fisher Street	2002	CFA	Pottery kilns and associated structures.	F	Johnson and Anderson 2008; Johnson *et al.* 2012 (pottery)
Chester *Extramural*					
Rylands Garage, City Road	2004	Gifford	Industrial building, boundary ditches.	F	Hayes 2005
Gorse Stacks	2005–7	Birmingham Archaeology	Stone-quarrying pits producing a large assemblage of Flavian–early Hadrianic finds.	F	Cuttler *et al.* 2012
Various extramural sites	to 2009	Mainly Chester Archaeology	Numerous excavations and watching-briefs summarised in gazetteer.	N	Carrington 2012

Leicester *Intramural*

Site	Year	Organization		Description	Reference
Causeway Lane	1991	Leicester AU	F	Site covering adjacent corners of four insulae. Timber buildings from the late first century, stone buildings from the later second century.	Connor and Buckley 1999
Cumberland Street	1997	ULAS	F	Northern town defences consisting of rampart with timber strapping fronted by later stone wall.	Cooper 1998
Vaughan Way	2001	ULAS	S	Northern side of *macellum*?	Meek 2002
Bath Lane/West Bridge Wharf	2003	ULAS	S	Existence of defences on western (riverside) side of town confirmed. At Merlin Works, stone building with tessellated floor.	*Britannia* 35 (2004), 287
Castle Street	2005	ULAS	S/GL	Second-century building behind colonnade fronting street, cesspit produced debris from a Roman 'delicatessen'.	Score *et al.* 2010
Vine Street	2005–7	ULAS	N	Courtyard house preceded by buildings of two earlier periods, other buildings, curse tablets, lead military sealings.	*Britannia* 37 (2006), 406–10; 39 (2008), 298–301; Morris *et al.* 2011
Sanvey Gate	2005	ULAS	N	Northern town defences and internal tower or staircase.	*Britannia* 37 (2006), 406–8
Freeschool Lane/Highcross Street	2007	ULAS	N	Fallen gable wall of *macellum* basilica.	*Britannia* 39 (2008), 295–8; Morris *et al.* 2011
Bath Lane, Merlin Works	2007	ULAS	N	Activities relating to LPRIA settlement, early timber buildings, apsidal structure, western defences.	*Britannia* 39 (2008), 310–14
Blackfriars, Bath Lane	2010	Birmingham Archaeology	N	Trial-trenching contacted the town defences and stratified Roman deposits 2 m deep; one trench uncovered a large column base apparently *in situ*.	*Britannia* 42 (2011), 357–8
Bosworth House, Southgates	2010	ULAS	N	Timber buildings possibly of two phases under the town defences.	*Britannia* 42 (2011), 358

Leicester *Extramural*

Site	Year	Organization		Description	Reference
Newarke Street	1993	Leicester AU	F	On a site 110 m south of town defences, first-century occupation and 39 late fourth-century graves, many with nailed coffins and stone linings, clearly part of a large cemetery.	Cooper 1996

Site	Year	Organisation	Principal Findings	Documentation	References
Bonners Lane	1993–4	ULAS	Occupation continuing into the late third–fourth century, iron-working, possible corn-drier, processing of cattle bones.	F	Finn 2004
Clarence Street	2001	Herts Archaeological Trust	Cemetery established in the early third century; 91 graves excavated.	F	Gardner 2005
21–27/29–33 Newarke Street	2003	ULAS	Boundary ditches and 31 graves, some stone-lined, and two possible mausolea.	F	Derrick 2009
Grange Lane	2005	ULAS	Near Bonners Lane. First-century cremations and third- and fourth-century timber buildings	N	*Britannia* 37 (2006), 406
40–46 Western Road	2010 and 2012	ULAS	Extensive, mainly late Roman cemetery between the Fosse Way and river Soar; some notably early inhumations.	N	*Britannia* 42 (2011), 359; 44 (2013), 308
Lincoln *Intramural*					
Westgate	1992	Lincoln AU	Wall probably forming the western side of the forum separated by a street from parallel walls apparently associated with another public building.	N	*Britannia* 24 (1993), 288
Broadgate/Free School Lane	2003	Lincoln AU	Stone house with painted walls demolished to make way for Lower City defences.	N	*Britannia* 35 (2004), 283
Danesgate	2003	Archaeological Project Services	Part of a late Roman town-house in the Lower City, corridor(?) mosaic with a chequerboard design.	N	*Britannia* 35 (2004), 284
Lincoln *Extramural*					
St Mark's Station	1994–6	Lincoln AU	Fragments of four or five 'trader's houses', some occupied into the late fourth century.	S	*Britannia* 28 (1997), 423; Jones *et al.* 2003, 107
Anchor Street/Gaunt Street	2003	Lincoln AU/Mike Jarvis Archaeological Services	Large ditch, pottery kilns, cremations and inhumations in the southern suburb.	N	*Britannia* 35 (2004), 283; 39 (2008), 292
9–11 Monson Street	2009	Allen Archaeology	Timber and stone buildings succeeded by two pottery kilns and then burials.	N	*Britannia* 41 (2010), 368–9
116 High Street	2009	Allen Archaeology	Third-century pottery kiln in southern suburb.	N	*Britannia* 41 (2010), 369

Newport	2009	Archaeological Project Services	Boundary ditches and burials 600 m north of the *colonia*.	N	*Britannia* 41 (2010), 369
Land off Long Leys Road	2010	Allen Archaeology	Boundary ditches succeeded by a stone building with an apse and stone architrave, which taken with previous discoveries suggest a villa.	N	*Britannia* 42 (2011), 352–3

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