

Margidunum Roman villa and small town



Felix Oswald put aside a room at the University where he studied and displayed the Margidunum finds. Here he is studying one of the complete pots. Photo of an original in the University of Nottingham Museum by R. Aldworth, Bingham Heritage Trail Association.

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2 Project background and personnel

Background

This study was commissioned by Kellogg Brown and Root in connection with the proposed A46 Newark-Widmerpool (Notts.) Improvement. Fieldwork at Margidunum, carried out in April-December 2003, revealed the presence of a substantial villa-style building west of the roundabout. In the light of this discovery, and with the recognition that the fieldwork in question was just the most recent episode in a long series of intermittent investigations by various parties over 100 years, the need for a work of synthesis was clear. This report provides three main resources. First, a summary and synthesis of the results of all the previous archaeological investigations that have been carried out on the site. Second, an assessment of the significance of the results in the light of current knowledge of Roman villas and Roman small towns and their environs in Britain. Third, a predictive model against which the likely impact of any proposed works can be assessed.

Personnel

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Illustrations: S. Baker, R. Leary and as acknowledged.

3 Summary

For around 100 years archaeological investigations have been carried out in and around the Roman "small town" of Margidunum, principally by Felix Oswald and Malcolm Todd (see Gazetteer). The proposed dualling of the A46 between Newark and Widmerpool by the Highways Agency has led to their commissioning of an extensive programme of archaeological assessment and investigations along the route which has greatly enhanced the data set. The present document provides a synthesis of all work in and around Margidunum based on an SMR search, published excavations and unpublished developer reports; these last were prepared as part of the Highways Agency programme of works and provided by them. Data from additional unpublished reports by TPAU for other bodies, particularly Crown Estate at Bingham, have also been incorporated.

The results of this research are presented in figs 1-2 and in more detail where appropriate in fig. 3-6. A gazetteer of all the investigations is supplied and plans of their locations and of the major features which they revealed are included.

The main results of the major works at the "small town" and villa are discussed, and evidence relating to the immediate hinterland is presented graphically. Extensive comparanda for the morphology of the town, villa and landscape are presented, and on this basis a predictive model is described. This takes the form of a series of plans showing zones where different kinds of archaeological evidence might be anticipated.

All the dating in this report relies on published dating only, much of which needs to be reassessed in the light of more recent research into the chronology of Romano-British pottery.

3.1 Summary of characteristics of Margidunum villa/town landscape

- A scatter of hand-made pottery and a group of Iron Age sherds from a layer excavated to the south of the town indicates pre-Roman Iron Age activity of an uncertain character.

- Geophysical anomalies to the north of the villa compound may indicate settlement of pre-Roman Iron Age or earlier Roman date.
- A mid-first century fort may have been situated to the north of the defended area and artefacts such as military metalwork and fine pottery suggest a military or official origin for the site. Activities included smithing and probably pottery manufacture. Early buildings were of timber.
- Roadside urban settlement has been defined along the Fosse Way and up the A6097 extending some 800m from the town centre and some 200m from the road (Fig. 1).
- The dated pottery indicates a similar spread of activity throughout the Roman period.
- The roadside settlement is characterised by ditched enclosures surrounding rectilinear buildings with stone footings associated; these are associated with domestic and industrial features such as hearths, pits, wells and workshops (Fig. 3).
- Groups of simple strip buildings with stone footings were also found, set side by side at right angles to the road (Fig. 3).
- First-century timber buildings were replaced in the second century by stone-footed buildings (Fig. 6).
- There is evidence of elaborate mid-first century buildings with stone pilasters, window arches and glazed windows, in the form of stratified finds of plaster fragments, window glass and worked stone items.
- More elaborate stone buildings with concrete floors were sited slightly back from the roadside. Some of these had window glass, painted wall plaster and one had under-floor heating (Fig. 4).
- From a careful review of the excavated evidence, it has been possible to suggest widespread occupation in the town during the 3rd and 4th centuries (contra Todd 1969), although a reassessment of the pottery dating is overdue.
- A ritual focus is suggested in the eastern corner of the town and portable votive items suggest household shrines. Possible ritual deposits of animal bone have been identified (Fig. 3 L, M and N and fig. 5).
- Defences comprising ditches and a rampart were added, possibly in the late second century or early third with a stone wall and further ditches added later.

The defences surrounded only the centre of the town and houses were demolished to make way for it. Occupation continued outside the defences.

- Evidence for inhumation and cremation cemeteries have been identified and a human jawbone from the compound ditch suggest that human burials may also have taken place at the rear of the domestic compounds (Fig. 5).
- Geophysical anomalies and associated fieldwalked brick, roof and hypocaust tile, *opus signinum* (Roman concrete), possible tesserae and roof slates indicate a large villa compound; this comprised a courtyard and at least one domestic range with hypocausts and probably a bath house (Fig. 1).
- Enclosures to the north of the main villa courtyard are aligned with features previously detected by a geophysical survey conducted on behalf of Wessex Archaeology (Fig. 1, magnetometer survey 1993). The anomalies found in 1993 resemble enclosures found adjacent to other villas such as Lockington, and identified as a possible tenant village or a pre-villa settlement.
- Some evidence for Saxon activity is present and some of the geophysical anomalies north of the villa compound may belong to a Saxon settlement (Fig. 1).

3.2 Summary of investigation into villa characteristics

(See Appendix 1)

- Excavations of villas have, in the past, been restricted to the domestic ranges producing mosaics, painted plaster and other fine embellishments. This hinders comprehension of their economic basis, and where extensive investigations have taken place the villa ranges have been found to be integrated with the surrounding agricultural landscape and often articulated with what went before in the Iron Age and what came after in the Saxon period.
- Comparison with other cropmarks of villas and excavated villas in the East Midlands (Figs. 8-10, 12, 16-18) suggests that, although the villa courtyard is as large as some of the very sumptuous villas known from the Cotswolds, the domestic range may have been quite modest.

- The small number of extensive surveys which have been published indicates that villa buildings in the East Midlands are often in ditched or walled compounds together with other buildings. Further non-domestic compounds may lie outside the domestic compound and further buildings and structures exist outside these compounds (Figs 9-10, 14-15, and 17-18).
- Buildings within the domestic compound may include (Fig. 12):
 - a second domestic range to accommodate an extended family group or bailiff
 - shrines
 - bath-houses
 - a range of ancillary buildings
- Outside the courtyards further accommodation for bailiffs, tenants, additional bath houses and shrines may be present (Figs 9-10, 14 15 and 18).
- Burials are commonly found outside the domestic courtyard where excavated.
- Roads and tracks servicing the villas are attested, as are ancillary agricultural and industrial features such as barns, animal enclosures, metal working complexes, corndriers, ovens and kilns for tiles and pottery (Figs 9-10, 14 15 and 18).
- Wells, pipes and water tanks demonstrate the need for a ready supply of water for heating and bathing in the villa ranges.
- Earlier ditched enclosures of great complexity, probably of Iron Age and early Roman date, are known from some sites.
- Cropmark and geophysical evidence have disclosed adjacent enclosure complexes on some sites, which are often interpreted as earlier settlements or contemporary settlement of tenurial status.
- Several villa sites in the East Midlands and elsewhere have evidence for post-Roman occupation and burial of Saxon or possibly British character. At Margidunum a Saxon brooch and a small number of definitely Saxon sherds along with handmade sherds of possibly Saxon date found during field walking in the vicinity of the town and villa raise the possibility of Saxon settlement and/or cemeteries.

3.3 Summary of investigation into town characteristics

(See Appendix 2)

The major components identified at Roman small towns are:

- Forts preceding urban activity.
- Iron Age settlements have sometimes been found occupying the urban area prior to its development.
- Roads and lanes, often irregular, either side of major routes
- Where the full layout of domestic settlement is known it was commonly dominated by
 - strip buildings with back yards at right angles to the main roads with lanes between.
 - rectilinear buildings set in larger enclosed areas with ancillary features such as ovens and wells and smaller buildings
 - Developed rectilinear buildings, sometimes in a large plot, set back from the main road. These have more elaborate plans and are sometimes embellished with painted plaster-work, glass windows, slate and ceramic roof tiles and hypocausts.
- Plots are defined by ditches and/or fences and typically tend to be larger towards the edges of the urban spread and the urban/rural interface can be indistinct. They are commonly situated along the main roads, sometimes with lanes between giving access to the rear of the plots.
- Central areas are occupied by temples and shrines, official buildings or open spaces interpreted as periodic market places.
- Temples and shrines have also been found as an adjunct to domestic building or as part of a *mansio* area outside or inside defences. Portable evidence (votive material) for temples or shrines is common.
- *Mansio* complexes (inns for the imperial post) have been found just inside the defences by a road, outside of the defences, and in the central focus.
- Industrial features. These can be divided into
 - cottage industries and small-scale crafts such as gem cutting situated in yards and plots behind domestic block

- those positioned near raw material and necessary resources such as clay and stone such as quarry pits, though masons' yards for more skilled craftsmanship may have been situated elsewhere.
- Larger-scale operations of a more commercial character
- noxious trades, such as tanning, situated on the outskirts away from domestic settlement.
- Defences comprising ditches, ramparts and town walls.
- Cemeteries typically situated on the edges of the settlement along the roads with late burial in or near the fortifications and at the backs of yards on the edges of settlements. Infant and ritual burials are found within the towns.
- Post-Roman or early Saxon settlement and/or cemeteries have been found on the margins of Roman small towns.

Variable characteristics include status: that "small towns" can be 'official' is suggested by the inclusion of some settlements in the Antonine Itinerary, an official road handbook for travellers on government business. Granaries for the storage of tax in kind have been identified and open market places have been identified in the suburbs. Milling has been suggested and forged coins and a goldsmith's weights (at Waternewton) indicate other more exotic activities at some towns.

4 The Margidunum landscape

References to the Gazetteer details are given throughout this report as G with numbers in brackets.

4.1 The fort and early occupation

Although the derivation of the name *Margidunum* is uncertain (discussed in Rivet & Smith, 1979, 413-14), the second element, *dunum*, is generally accepted as 'fort'. Unless *Margidunum* was a renaming of an existing settlement, the name would imply that the site was fortified at its foundation and Oswald's excavations, principally northwest of the Fosse Way, yielded four metal objects with specifically military affinities (Webster, 1958, 88). Todd's small exploratory trenches (Fig. 5 fort ditch, G50, described in Todd 1969, 17-21), to the north of the defences and west of the Fosse Way, revealed two

ditches containing Claudio-Neronian pottery, of which the larger, ditch I, could be interpreted as a defensive feature. It measured 5.5ft (1.7m) deep and 9ft (2.7m) wide, and was V-shaped in section with a cleaning channel at its base (*ibid*, fig. 4); it terminated in a butt end within the trench, about 11m west of the present Fosse Way, and was orientated east-west. The character of ditch II, with its different profile and much shallower depth of 2ft (0.6m), does not lend itself to a defensive function. Todd's cutting 39 produced a *pilum* head and length of shaft found in the earliest levels (*op. cit.*, 92). This evidence, together with the enormous mass of high-quality Claudio-Neronian pottery recovered from Oswald's excavations suggest the existence of a fort in the very near vicinity, although no traces of military buildings have so far been found (Todd 1969, 17). If Todd's ditch belongs to a fort, it would lie to the north of the town and the early features excavated by Todd and Oswald represent a fort annexe, perhaps for industrial use. The nature of this early occupation is far from certain but a purely civilian origin, rather than a military or official function, would make the characteristics of the artefacts, particularly the pottery, most unusual. The frequent mention of slag in the report has suggested the possibility of a military supply depot but the non-retention policy of the previous excavators precludes quantification and scientific study of this feature of the settlement. Todd identified an artefact scatter associated with slag at the junction of the Fosse Way and Newton Lane (Todd 1969, fig 10) and linked it with the military occupation of the site. There is some evidence for on-site pottery production, in the form of wasters and kiln furniture and this may well belong to military potters such as those brought to Derby (Little Chester). Suitable clay is available near the site so a kiln complex may have been situated outside the fort, perhaps to the north along the Fosse.

4.2 Urban settlement: extent and chronology

The spread of Roman pottery of all dates along the A46 and A6097 shows that the settlement at Margidunum was extensive throughout the Roman period (Fig. 1). The pottery spread along the Fosse Way is uneven in density but tails off around 7-800m away from the town centre. Comparison with other surveys (Fig. 25, Esmonde Cleary 1987, fig 15 and Burnham and Wachter fig. 44 Towcester, fig. 97 Bourton on the Water) suggests discontinuous artefact spreads or occupation would not be unexpected. The spread of field-walked material up the A6097 together with geophysical anomalies (Fig. 1 and G 122) apparently at right angles to this road line

has suggested a Roman origin for it. This is supported by the name the *Street Way* recorded in 1612, and its being followed by a parish boundary (Appleton et al 1993, 6). The geophysical anomalies suggest track-ways or roads set at right angles to the line of the A6097 running between ditched compounds. Formerly classified as a linear-development small town, Margidunum can be re-classified as a road junction, development with the possibility that a developed and regular street network remains to be discovered. The defences were imposed and buildings (G 34-5) demolished to make way for them but occupation outside the walls seems to have continued to flourish, being particularly extensive north west of the town centre in the corner bounded by the A46 and the A6097, although the extent to the east may be partially masked by overlying alluvial and colluvial deposits (G 71, 76-7, Fig. 31). The siting of the Margidunum villa (Fig. 1, G 130) to the southwest may have restricted settlement more narrowly in this area to the road frontages.

Along the Fosse within the defences occupation seems to have been in strip buildings, (G 36-8) or in more spacious plots demarcated by fences and/or gullies (Fig. 4, G 15-16, 82-98, 115 and 120). Three such compounds were excavated by Oswald (1948, ditches 1-5 and 14 and 1952 ditches 4, 5, 9, 10, and 6). The compound ditches were dated by Oswald to the 1st century. Later pottery is present in some contexts within the compounds and a line of postholes cut into ditch 1 suggests fences may have replaced the gullies at a later date. Excavated gullies and ditches and geophysical anomalies in fields 7111 and along the A46 (Fig. 1) show that these compounds extended for some 800m along the Fosse outside the later defences, and at least some of the buildings within these extra-mural compounds continued in use as late as the third century.

Stratified and dated deposits indicate that timber buildings were present in the 1st century but deposits of painted plaster, roof tiles and window glass associated with pottery dated by the excavator to the first century provide evidence for more elaborate structures at an early date (Fig. 6). Oswald records painted plaster fragments, window glass, architectural stonework and roof tiles in stratigraphically early deposits suggesting that elaborate buildings existed in the first century (G6, 13 16-19). Further roadside settlement has been attested by small-scale excavation and non-invasive investigations in the suburbs along the Fosse Way and up Bridgford Street (Fig 6,

G66-8, 110, 121, 122 and 124). Some of these belong to an early, possibly military phase.

By the second century stone-footed buildings were normal; often these replaced earlier timber structures. The published finds demonstrate that occupation of buildings along the Fosse within the compounds began in the mid/late 1st century and continued as late as the fourth century. Parts of building complex G and F excavated by Oswald belong in the 2nd and 3rd or 4th centuries. Spreads of 3rd-4th century pottery over most of the area sectioned by Oswald indicate late occupation, as does the 3rd-century well (open at least as late as the mid-fourth century). To the north information is incomplete, but Todd mentions at least two stone-footed buildings outside the defences to the west seen during road works, and records a further fragment of walling to the north of the defences (G 39 Todd 1969 Building K, Fig. 3). Within the defences in the south-east a building situated back from the frontage was found by Oswald and Pryce in 1910 (G1); finds in this area included painted wall plaster, tesserae and tile. Several phases of activity were represented, continuing into the fourth century. Another grander house was found partially overlain by the counterscarp of the defences; it was dated by Todd to the mid-second century at the earliest (Fig. 3 G 34 and 35, building C and adjacent footings). Traces of a second house were found underlying the town wall (Fig. 3 footing D in cutting 40 site 2). A geophysical anomaly outside the south defences (Fig 1 G130) indicates the likely presence of another such building at this position. Better appointed buildings were often located a short distance from the roadside, so other groups like the courtyard building C and building group L-N may be expected in both intra-mural and extra-mural positions.

In the northern corner of the defended area, two buildings of unusual character were erected, at least one on the site of a timber building of 1st century date. Building L has several curious features which suggest a religious function – a pool, a plinth (probably for an altar) and three unusual burials. The second building was identified as a bath house. Black has doubted Oswald's interpretation of building M as a bath house on the grounds that the rooms are in the wrong order (1995, 58-9). Black additionally points out that the projections of the walls to northeast and southwest may be the remains of a walled courtyard in which the apsidal room would lie. It may be better

compared with a well-appointed domestic building at Catterick with a similar apse and hypocaust heating system (Wilson 2003, fig. 87). Another upper-class house was built nearby (Fig 3 building N), possibly after this building fell into disrepair, as it was associated with an abundance of fourth-century pottery. A pool was found to the east of this late house containing two head-pots, suggesting a continuation of a ritual function. As we shall discuss below the whole compound does not compare with the group of buildings commonly called *mansiones* although some sort of role similar to Black's second-class accommodation remains a possibility. The complex clearly had structures from the first until the late fourth century although it was not possible to reassess the precise phasing of each building's development as part of this project. The precision of Oswald's pottery recording suggests that some re-phasing would be possible if the groups were re-examined in the light of recent changes in pottery dating.

Behind the domestic and commercial buildings were hearths, ovens, wells and evidence of metalworking. A central paved area may mark an open market place or, less probably, a temple or administrative courtyard (G 43).

Todd (1969) and Burnham and Wachter (1987) have highlighted the lack of buildings dating to the fourth century despite the abundance of fourth-century pottery. The re-dating of the Oswald collection would go some way to changing this picture. On the available evidence (details in gazetteer, Figs. 6 and 7, several buildings were occupied in the late third and fourth century, including roadside buildings at complex G (G15), the latest levels of the paving excavated by Oswald and Pryce in 1911 (G1 and 3), and activity near building F (G15) represented by the "third-century well" which includes fourth-century pottery. The pool was clearly in use in the late Roman period. The presence of two near-complete face-pots suggests that the function was ritual rather than as a rubbish pit. The field-walked pottery indicated fourth-century activity along the Fosse in both directions (Fig. 1) and small-scale evaluation trenches have revealed further evidence for a hearth, flooring and possible cobbling belonging to the late third and fourth centuries to the south of the defences (Fig. 1 test pits 1992, G66).

4.3 Burial and ritual evidence

Evidence for burial has been recovered at several places (Figs 1 and 5). Todd encountered part of a late Roman inhumation cemetery cut into the ramparts of the

town during rescue excavation, and a further second-century cremation east of the town (G30-31, figs.1 and 3). Further fragments of human bone have been found (G 2 and 5, fig.5), and a group of three burials were excavated in pits under building L (Fig. 3, G 10). The fragments and the building L burials may have a ritual significance. A pit found with the skeletons of six dogs by Oswald at the back of one of his enclosures invites a ritual interpretation (Fig. 5 G4) Two figurines of the mother goddess were found amongst debris in the courtyard of building C (Fig. 3, G46) and represent domestic rituals. The putative altar base and the head-pots from the pool near buildings L, M and N suggest a ritual function for this area (Fig. 3 G 9, 11 and 12). Further cultic activity might be associated with sources of water, such as Newton Spring, and also the lake indicated by augering to the east of the defended area. Wessex Archaeology interpreted a geophysical anomaly to the west as a Romano-Celtic temple but it is rather small (c.4m x 6m) and it lies in an area poor in Roman pottery. A private shrine might be situated no great distance from the villa compound.

4.4 The surrounding rural landscape

Geophysical surveys on behalf of TPAU and Wessex Archaeology, in addition to revealing roadside compounds along the Fosse Way and the A6097, have revealed a complex of enclosures spreading from the north end of the villa enclosure to the A6097 (Fig. 1, G 79-80, 121-2, 130-2). Some of these are quite small (G79, 23m x 28m), a good deal smaller than the intra-mural compounds (c. 40m x 38m). The anomalies revealed by Wessex appear to be aligned with the villa compound and associated anomalies.

As well as the Fosse Way Roman roads and track ways have been detected by fieldwork, geophysical survey and aerial photography (fig.1). Aerial photography has indicated roads of possibly Roman date running east of the town, and a feature parallel with the A46 to the north which may be an earlier line of the Fosse Way. Track ways were seen in the geophysical survey by Wessex Archaeology in 1993 and further track ways were detected in 2003 by the same technology in field 7111 running orthogonally to the A6097. The date of these features is at present uncertain

but their relationship with the villa and the Roman pottery scatter respectively suggests a Roman date.

A secondary nucleus of find spots can be detected in field 7111. The pottery from this area had rather fewer fine wares than the cluster over the villa but was of a similar date range suggesting that this may be a tenant farmstead or village or a bailiff's house. Geophysical survey could clarify the nature of this area.

4.5 The villa site

The villa (Fig. 1 G130) is represented by a series of positive linear anomalies which may be interpreted as robber-trenches, indicating ranges of buildings around the northeast, northwest and southwest sides of a walled courtyard. Comparison between the surface material and the magnetic anomalies suggests that the northeast range is most eroded, as floor material has been recovered. To the northeast of the main buildings lies an area of co-aligned rectilinear lines. The full extent of the existing buildings is unknown, but a core area occupied by ranges of rooms is clear, measuring c.100x60m.

The main concentration of pottery and tile in field 4437b (Fig. 1, G128) occurs at the northern end of the intense reading recorded in the topsoil magnetic susceptibility survey and just north of it, and it is in this area that the box-flue tiles appear to be concentrated on the evidence of the preliminary artefact sort. A concentration of slate, concrete and plaster fragments also lies in the northern part of the major geophysical anomaly and just to the north suggesting there may be a difference in the nature of the underlying features between the northern and southern part of this anomaly. The metalwork, glass and bone/shell also lie in this part of the site.

Some slag, including tapping slag and a plano-convex fragment came from this general zone and may possibly be associated with first-century use of an area identified by Todd in 1968 as an artefact scatter at the junction of the Fosse Way and Newton Lane (Todd 1969, fig 10) and linked with the function of Margidunum at this time.

The anomalies to the north of the main villa compound follow a similar alignment to

those documented by Wessex Archaeology (Fig. 1); these may be further villa compounds, associated farm buildings and animal pens. Other possibilities include a settlement preceding the villa, a tenant farm or village and a later Anglo-Saxon settlement. The shared alignment would support interpretation as a contemporary settlement or associated farm structures and pens. Possible Iron Age pottery was present but the numbers were very low; Saxon pottery sherds were found outside the area occupied by the geophysical anomalies.

It has been suggested that these anomalies (Fig. 13) may represent Saxon settlement. To the north of this field Saxon pottery has been identified during field-walking and may indicate Saxon settlement or cemeteries in this field. Similarly small numbers of Iron Age sherds may indicate earlier settlement. The geophysical anomalies align with the anomalies to the north of the villa compound. These could belong to an earlier Iron Age settlement, the fields and agricultural compounds of the villa or a Saxon settlement next to the earlier villa.

5 Margidunum – the villa site

5.1 National comparisons

If comparison is restricted to the prominent rectilinear anomaly, the complex compares in size with some of the large courtyard villas of Roman Britain (Fig. 8). The concentration of roofing slate and tile, plaster fragments, *opus signinum* and hypocaust tile fragments suggests that the northern range may have included a bath house and more sumptuous accommodation. The geophysical blank in the centre of the complex is probably a central courtyard clear of features. The area to the north east of the prominent rectilinear complex looks very similar morphologically and may be part of the same domestic complex. Alternatively it may be a second ditched compound, ancillary and/or agricultural in character, attached to the principal villa compound.

In size the prominent compound A can be compared with sumptuous villas in Britain and Europe (Fig. 8) suggesting that in its final form at least it may be of remarkable

dimensions. If the traces to the north are contemporary and of the same character, then the extent of the complex seems remarkable. The materials recovered from field-walking do not however confirm this degree of luxury. Although small amounts of painted plaster, hypocaust and roofing tile and some window glass were picked up on the surface of the fields, the quantities were not commensurate with a 'palace' nearly as large as Fishbourne. The area covered by the building debris is of more limited extent and this compares more closely with villas of more modest pretensions (Fig. 10A, 16B and D, 18 B and C).

Concentration by excavators on the principal Romanised villa ranges for over a 100 years has resulted in slightly misleading morphological expectations. Recent, more extensive work has demonstrated that most villa complexes comprised a large compound enclosing a mix of domestic, agricultural, industrial and ritual structures. Although the spatial extent of the very large villas such as Fishbourne and Bignor may be compared with compounds surrounding isolated and barely Romanised corridor villas such as Marshfields, the characteristics of the enclosed buildings are quite different. Some villas in the East Midlands seem to have large courtyards but relatively small domestic blocks (Fig. 18 B Lockington and B Cromwell).

As excavators have expanded their attentions to the less obvious archaeology surrounding these easily found ranges, it has become clear that the house ranges were part of wider compounds which, when investigated, are often shown to be physically integrated with the surrounding landscape features. Examples of this are well known from Winterton where later work by Goodburn added considerably to the extent of the villa complex (fig. 9). The corridor house at Marshfield illustrated by Hingley isolated from other features, for the purposes of comparison (Fig. 19 h, from Hingley 1984), was in fact part of a larger complex defined by a wall enclosing other buildings (Fig. 10). The existence of an inhumation cemetery located outside and parallel to the enclosure wall emphasises the integration of the living and working compound with other aspects of life such as the ritual and funerary. Excavations at Cosgrove revealed a multi-phase house range including a bath range with a simpler building to the east which preceded and overlapped the more elaborate range in date (Fig. 9, Quinnell 1991). A substantial boundary wall was added but its precise route is uncertain. Traces of another building of uncertain type was located c.50m to the

south; in addition, a temple was located further to the east, and another building was found beyond that. In all the excavated structures cover an area of c. 130m x 130m. If the substantial wall enclosed all these a geophysical survey would probably give a similar result to that at Margidunum, with major anomalies expected over the bathhouse and main domestic range.

The courtyard arrangement visible at Margidunum is also apparent at Apethorpe, Great Doddington, Towcester and Whittlebury, Great Weldon (all Northamptonshire), in fragmentary form. Smith interprets Apethorpe (Fig. 10) as a unit villa made up of two or three separate villas ranges (1978, 174). There is a possibility that the less distinct anomalies to the north of the prominent anomalies at Margidunum correspond to these additional units which Smith interprets as part of an extended family residence. Comparison with Bradford-on-Avon and Gayton Thorpe, Norfolk, where two villa buildings appear side by side, and Beadlam, Yorkshire, where they appear at right angles, are examples of this arrangement (Fig. 12, Hingley 1984 fig 33). These are much smaller than the Margidunum villa. The larger examples invariably jointly occupy a single courtyard (Hingley 1984 fig 33 a-c), but examples of villas with multiple compounds do exist (Fig. 12, Hingley 1984 fig 44a-d.).

An excellent example of combining different methodologies to assess the full extent of a villa complex can be cited at Cotterstock, Northamptonshire (Fig 12, Upex 2001). Here it was possible to obtain a plan of an extensive villa complex with multiple courtyard arrangements spread over some 260m x 70m. Upex compares this with large villas such as Bignor, North Leigh and Rockbourne and comments on its relatively large size compared with others in the Nene Valley, while emphasising the limitations of the evidence from them in terms of what is known of their extent. The geophysical survey results at Cotterstock included high linear anomalies which, when trenched, revealed walls and floors as well as areas of high resistance interpreted as floors or layers of building debris. A similar courtyard arrangement, 120m x 75m, has been the subject of limited geophysical survey and excavation by Time Team at Turkdean, Gloucestershire (Esmonde Cleary 1998 fig. 12). This was of the double courtyard form but had a third range of rooms, possibly a bath house running up the hill for a further 120m, in addition to the bath-house in the main range.

Hingley has ably demonstrated the ubiquity of compounds in both villa and peasant holdings. The site at Orton Hall Farm has been classified as a non-villa settlement (Mackreth 1978) and occupies middle social territory with its the courtyard villa plan but a lack of buildings with any architectural elaboration. This serves as a reminder that not all large courtyard complexes are villas. The "main range" at Orton Hall, whether farm or villa, is surrounded by other ancillary buildings, posthole structures and a possible mill house. A similar situation presents itself at Radley-Barton Court Farm villa, Oxon; here a relatively modest villa building is set in an enclosure typical of Iron Age and Romano-British settlement of the Thames Valley. The degree of Romanisation may be more superficial than the plans and building debris might suggest. The principal and double compounds at the Margidunum villa compares with the peasant site at Hoveringham in size (Fig. 13). Artefacts recovered from field walking have so far indicated modest wealth and limited architectural complexity. This may be used to argue for a native inhabitant who has adopted grandiose building habits and new structural elements such as reception rooms and porticoes: these reflect new social habits while continuing the traditional spatial lay out of his compound while using the rectilinear courtyard plan. Future work on the villas of the Corieltavi might usefully compare the spatial inter-relationship of their component parts with that of local non-villa rural settlements, in order to examine this hypothesis further.

Thus when villa sites are investigated extensively, large courtyard arrangement are common, and more and more multiple compounds are being found as geophysical techniques are used. Goodburn realized as long ago as 1978 that extensive remains lay outside the traditional excavation area of the Roman villa including additional aisled buildings, an extra courtyard with ditched enclosures beyond with lesser post-hole buildings (Fig. 9, Goodburn 1978). Adjacent field systems are not uncommon with aisled barns and other buildings regularly interpreted as agricultural in function. As well as buildings such as bath-houses set away from the main villa complex, because of the risk of fire, post-hole buildings are commonly found within field systems and enclosure complexes of forms common in the Iron Age and Roman period (Fig. 14).

At Stanwick (Fig. 15) the villa is found south of a courtyard complex, interpreted as a bailiff's house, and is set in a landscape peppered with buildings and enclosures including round houses, some with corn driers, water tanks, wells, a latrine and a possible aqueduct. A watermill is attested by the finding of a huge quern. Some of the lesser rectangular buildings have evidence for craftwork such as bone pin and needle production and leather off cuts indicate the manufacture of shoes. Industrial areas are found at several sites. At Bancroft an industrial area lay to the north of the villa enclosure and a large midden area to the NNE (Smith 1997 fig 67). At Gatcombe extensive industrial works were found within the villa enclosure, a milling area is suggested alongside a bakery, and a separate bath house is suspected (Branigan 1977). If this site is an enclosed villa estate, it adds greatly to our knowledge of what we might expect outside the main villa buildings, the zoning of the site being of particular interest.

Even more important for this project, shrines or ritual spaces and cemeteries are being found outside the principal courtyards (Appendix 1 and Figs 9, 10 and 14). Cemeteries are common where investigations are extensive (Fig. 10). These are often located just outside the villa complex but at Chignall burials were located some distance from the villa buildings. Several villas have evidence for shrines or ritual pools within the villa courtyard (North Leigh, Bignor, Bancroft and Spoonley Wood, Smith 1997 figs 42, 67 and 70). Less expected are the numbers of shrines or ritual areas adjacent to villa compounds (at Marshfields, Keston, Stanwick, Hambledon, Smith 1997 fig 42, Bancroft, Smith 1997 fig 67, Castor villa, Green et al 1987 figs 2, 3, 6 and 8 and Mackreth 1978) and where no ritual building has been located, portable evidence suggests its existence at no great distance. An altar at Whittlebury, Northamptonshire, and sculptured heads and an antefix from Towcester villa have been taken as evidence for a temple (RHCME Northamptonshire Vol 4, 169). At Bancroft a gazetteer compiled of finds scatters and investigations in the area around the villa notes stone, tile, and *tesserae* associated with a group of model votive iron weapons, suggesting a temple site.

Rather than a contemporary ancillary compound, the northern anomalies may alternatively be considered as earlier or later enclosure complexes. Such complexes are often visible where field investigations have been particularly wide ranging (Figs.

15 and 18). Sites such as those at Stanwick and Wharram Percy are particularly sobering for the complexity of their pre-villa complexes underlying the villas (fig.15). To these may be added many more (Barton Court Farm, ●xfordshire, Winterton, Lincolnshire, Rudston, Beadlam, Dalton Parlours (all Yorkshire) and Stanwick, Northamptonshire) that it must be recognised that the landscape was organised to such an extent in the pre Roman Iron Age/Conquest period that virgin sites available for Roman villa building were rare. In addition it seems likely that the villa builders were either natives of high status, using their already developed estate land, or Roman officials, migrants, veterans and traders from southern England or elsewhere in the Empire, able to confiscate or otherwise acquire attractive land. In either case such attractive land would be unlikely to have escaped development in the pre-Roman Iron Age.

However, the particular position of this villa next to the Roman small town, perhaps succeeding a Roman fort, may have been dictated by official considerations such as its proximity to the road and the town - considerations which would, of course, not feature in the pre-Roman Iron Age use of the location. Villa sites such as Cotterstock, apparently lack any evidence for extensive pre-Roman domestic remains, for example, and it may be that the small quantities of hand-made and Conquest pottery sherds recovered from the villa during fieldwalking reflect the limited nature of pre-villa occupation on the site. Unfortunately the masking effect of the later floors and building collapse may also be responsible for this pattern.

Certain and probable Saxon pottery was identified during the field walking of the road corridor to the north of the villa site and investigations by Wessex Archaeology suggested Saxon enclosures (Gazetteer 79). The anomalies invite comparison with the excavated Saxon settlement at Catholme (Fig. 13): the oval anomalies may be caused by grubenhauser. The putative Saxon pottery does not overlie this area however, so this identification remains tentative. Unfortunately field conditions were not propitious when this area was fieldwalked in 2003 due to crop growth: the artefact scatter was correspondingly thin. A late Roman or early Saxon date has been suggested for the burials cut into the rampart of the town and recent excavations at the nearby town of Brough-on-Fosse has revealed extensive Saxon settlement adjacent to the Roman small town there. This possibility is further discussed below as part of the regional survey.

5.2 Regional comparisons

Whitwell counted some 24 class A (large) and B (smaller but with bath houses) villas in the area of the Corieltauvi, and Todd lists about 60, including humbler examples. The latest Gazetteer of British villas lists 48 sites in Nottinghamshire, 193 in Lincolnshire, 100 in Leicestershire, and 125 in Northamptonshire (Scott 1993) but these include scatters of building debris which may not belong to this category. Appendix 1 summarises the characteristic of villas for which we have sufficiently extensive archaeological evidence, although even in these cases the standard is low, frequently comprising excavations of mosaic pavements only. Where possible plans are shown in figs 16-18.

Todd classifies only Norfolk St, Scampton and Southwell as courtyard villas comparable to other large villas such as Bignor and North Leigh (Figs 8 and 17). The remainder he classifies as class 2, those with portico-houses and ancillary aisled halls and class 3, those with smaller portico-houses or isolated aisled halls (Fig. 16). As outlined above, it is becoming clear that even class 3 villas were often part of a larger compound and in some of the class 2 villas, the principal range is relatively modest. Corieltauvian examples of large compound villa complexes comprising individual structures of relatively modest appearance include Winterton, Great Weldon, Great Casterton and perhaps Apethorpe (Fig. 17). At Margidunum the geophysical anomaly tentatively identified as the domestic range can be compared with Winterton building G, the villa at Mansfield Woodhouse and the main range at Car Colston (Figs 16-17).

As more wide-ranging surveys of villa estates are carried out large compounds with a variety of structures and one or two modest principal ranges become the norm in the Corieltauvian countryside outside the *territorium* of the *civitas* capital and *colonia* at Lincoln, where more luxurious villas are attested. Winterton is an example of a large villa compound comprising a wide variety of building types from the elaborate Romanised home to structures of more banal domestic and agricultural use. At the small villa at Long Bennington a probable compound wall can be identified running off from the simple corridor villa. When compared with more extensively excavated

villas, this is likely to be part of a boundary enclosing the villa house, the circular building/temple and the variety of pits and hearths excavated near the building. Similarly at Great Casterton several ranges of different status were grouped around a courtyard, of which only a small part appears to have been excavated.

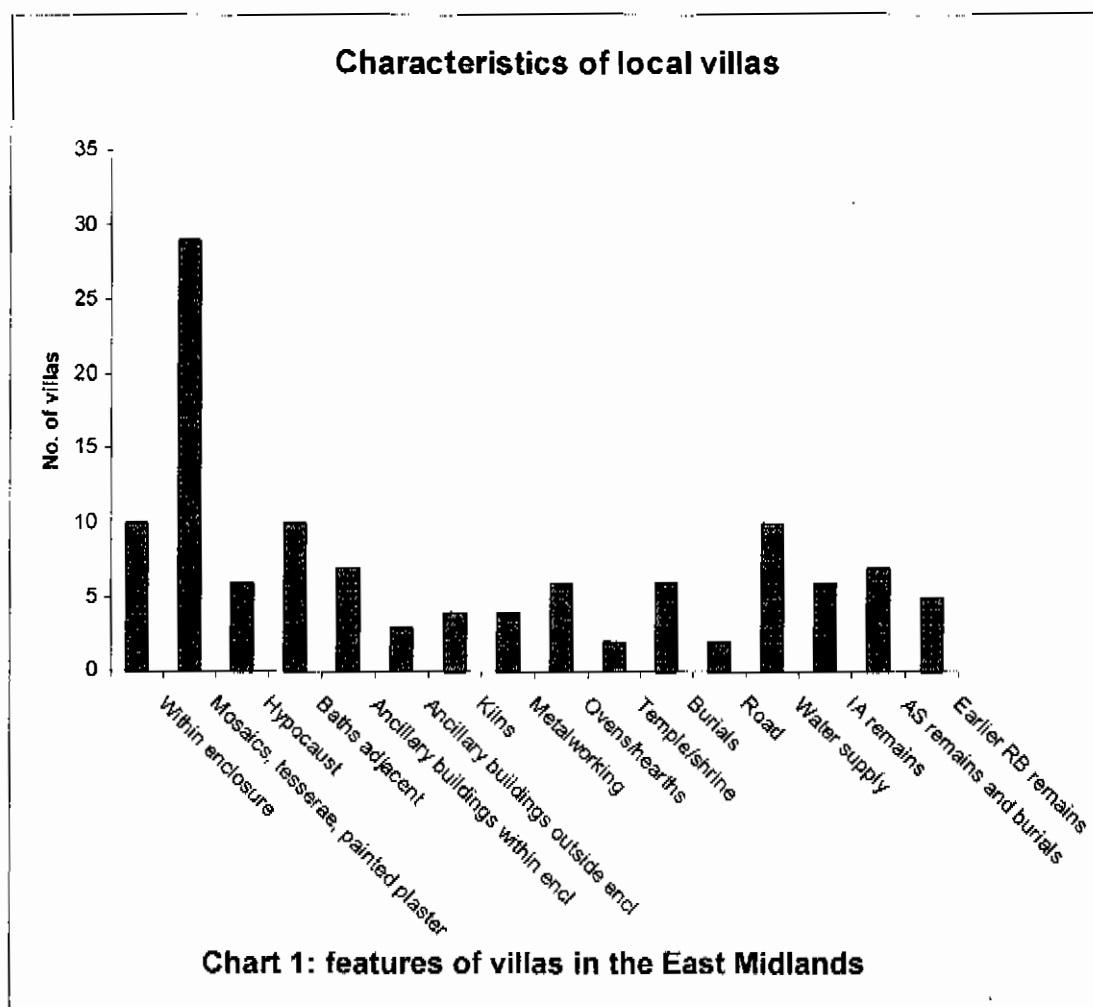
At both Mansfield Woodhouse and Norton Disney Smith (1997 Fig. 17) has identified "unit" villas, that is villas with two or more ranges of similar size and sophistication. These Smith suggests were occupied by an extended family, with each nuclear family occupying its own range. Such arrangement would, understandably, occupy a larger compound but lack the trappings of the wealthy courtyard villas and palaces such as Bignor and Fishbourne. It is, however, very difficult to make such correlations between the physical remains such as these and social groupings.

At Lockington and Cromwell non-invasive investigation by aerial photography and geophysical survey have revealed large enclosures with rather small villa ranges (fig.18) associated with other enclosure complexes. At Lockington field walking suggested that several buildings using tile and *tesserae* were in use, perhaps at different times. Aerial photography has identified further possible examples of large rectilinear compounds with relatively small villa ranges in Lincolnshire (Fig.18, Jones 1988 fig 14 Walesby fig 8 SK 813939 Newville Farm— Jones 1988, 22-24).

Significantly, a rectilinear enclosure of similar form but without the material culture associated with villas has also been identified on Otby Moor (Fig. 18 - Jones 1988 Fig 20 Otby Moor). Its similarity to the cropmarks at Cromwell has been noted and it serves to emphasise the need for care in equating large with sumptuous where excavation has not taken place. Jones also identified some less regular complexes associated with villa debris. At Glentham Cliff cropmarks of two complexes both yielding tile, including flue tiles, and *opus signinum* during field walking suggest components of a villa estate (Jones 1988 fig, 17). A similar association was found at Cross Lane Bridge (Jones 1988 fig 19). He suggests these may be villas which have developed from pre-Roman native settlements, and cites evidence in the form of early finds and possible round houses (at Glentham Cliff).

At several villa sites in the East Midlands enclosure complexes of irregular form have been found nearby. These lack evidence for Romanised structures and are termed

“native” or “tenurial” in character. This is evident at Lockington (fig. 18). North of the probable villa at Cross Lane Bridge an extensive cropmark of roughly rectangular overlapping rectilinear enclosures, including one enclosing two round houses, may represent a dependent village. Unfortunately without excavation these complexes cannot be chronologically related to the villas. The area to the north of the Margidunum villa could correspond to such settlements.



The zonal layout of the villa estate has scarcely been examined in the east Midlands (Chart 1) but such fragmentary evidence as exists suggests that the pattern found on extensively excavated sites elsewhere in Britain can be expected to exist in the area of the Corieltauvi also. Outside of the domestic range with its mosaics, painted plaster and hypocausts, evidence for ancillary agricultural buildings, detached bath houses, wells and aqueducts, burial grounds, industrial areas, temples, ancillary yards and road networks has been identified (Appendix 1, Chart 1) and, coupled with the recurrence of possible tenurial villages at sites known from aerial photography, indicates extensive settlement remains might be expected around the villa range.

5.3 *Mansiones*

Todd (1969, 54) and Wachter (1990, 37) suggested that Margidunum may have been a *mansio* or *mutatio* of the *cursus publicus* (inns and changing posts for the Imperial post) or the residence of a *beneficiarius* or *regionarius*, appointed by the governor for administrative duties. Esmonde Cleary (1987) suggested that the group of buildings in the northwest corner may be such a *mansio* or official residence on account of its relative opulence, and Black (1995) includes it in the list of Romano-British *mansiones*. However doubt must be cast on this attribution. At present there is no evidence that buildings L and M are contemporary with building N. Comparison with other buildings identified as *mansiones* reveals the Margidunum buildings as quite different, being smaller and lacking the common courtyard plan. An alternative would be some ritual function associated with the adjacent pool. This would also fit with Oswald's identification of a plinth or altar base in a prominent position within building L. Building N was dated to the fourth century by Oswald although earlier buildings on the site are likely. Burnham and Wachter note that a characteristic of excavated *mansiones* is their lack of material debris such as broken pottery, coins etc and suggest that this is due to their being kept clean for their guests (1990, 37). Building N, by contrast, had a large amount of ceramic debris on its floors. The association of temples and official buildings was common in Roman towns, so an official attribute is likely; but it is not necessarily a *mansio*.

The Newton "villa" is also unlikely to be a *mansio* complex. The apparent plan of the villa is considerably larger than most *mansiones*, even those in *civitas* capitals such as Silchester. The position of the building complex some distance from the town and well outside the defended area would be unusual. Most of the *mansio* complexes are located either at the town centre, as at Water Newton (Fig. 19), or, more commonly, set back from the road. At "small towns" only the *mansiones* at Wall and Cave's Inn lie outside the defences and in both cases the defences are of a distinct fourth-century type surrounding a small area with a special function; this is thought to be involved with control of traffic or connected with the movements of the late Roman army. In any case the defences at Wall and Cave's Inn seem to post-date the occupation of these *mansiones* so their positions relative to the defences is irrelevant.

6 Margidunum - the local centre

The review of evidence for the occupation of the small town of Margidunum (see above) can be used to produce a plan of the general morphology and zoning of the town, both inside and outside of the defences (Figs 1, 4 and 29). Several synthetic works on small towns have produced useful typologies and surveys (Todd 1970, Rodwell and Rowley 1975, Burnham 1987, Burnham and Wachter 1990, Esmonde Cleary 1987 and Smith 1987). Most usefully Burnham (1987) covered the morphology of Roman small towns and, in particular, examines the fragmentary evidence for details of zoning within the settlements and for locations of specific zones. It must be recognised that these patterns are at best fragmentary since excavation is usually limited by later settlement. It is difficult to know to what extent small towns adopted a common pattern. It is not easy to apply the patterns observable in the most complete examples to the more fragmentary ones - to fill in gaps in the unknown from the well known. Nevertheless patterns do emerge, although the precise disposition of the parts varies, and coupled with the evidence collected from Margidunum over many years, particularly from field walking and geophysical surveys, we can predict some zones with a degree of confidence.

6.1 National comparisons

Along the road frontages Burnham observes two patterns -

- Spacious plots along the roadsides with a range of rectilinear buildings and other features often associated with agricultural functions.
- Narrow strip buildings constructed end on to the road, sometimes with small properties at the back and often associated with commercial and industrial functions, although agricultural/horticultural characteristics are also known.

The spacious plots are sometimes restricted to the margins of the settlements (e.g. Ilchester, Fig. 27) on the interface of town and country. Occasionally the street frontages are occupied by other buildings as well such as circular buildings at Bourton-on-the-Water, a temple at Kenchester and larger more official buildings at

Water Newton (Fig. 19) and Godmanchester; but strip buildings are more common. The buildings so far excavated along the Fosse frontage at Margidunum suggest relatively spacious plots with buildings sometimes fronting the road and sometimes set further back. The fragmentary buildings H, I and J (Fig. 3, G36-8) seem to represent strip buildings set at right angles to the road in close proximity. The evidence of the "smithy", hearths, ovens and later slag deposits suggests a commercial/industrial zone within the defences behind the roadside buildings (Fig. 3 features within enclosures). Below and outside the defences, the stone-footed courtyard house and other evidence for masonry buildings along the roadside may indicate accommodation of a higher status, associated with estates around the town. Evidence for industrial activity at the junction of the Fosse Way with Newton Lane (Todd 1969, Fig. 10) may belong to either the military phase of activity or an industrial suburb (see below).

Burnham identifies the provision of a differentiated central area as a common phenomenon in towns generally (the forum-basilica). Although such distinctive structures are rare in small towns, larger buildings have been noted, as have temples or ritual spaces. These latter may take the form of open gravelled spaces which also served as periodic marketplaces and have been identified at Godmanchester, Irchester and Wycomb (where 1100 coins were found); one is also suspected on the grounds of aerial photographic evidence at Water Newton (Fig. 19, no. 3). The area of paving found by Todd east of the Fosse (G43) may have been used in this way. No buildings of high status have been found so far in the centre of Margidunum.

Houses of more Romanised character have commonly been found away from the main road frontages served by smaller roadways and lanes, and at Margidunum buildings L, M and N (Fig. 3, G6-8) may fall into this category. Alternatively such houses lie beside the main through road. The magnetic susceptibility anomaly outside the southern defences and building C (Fig. 2 Mag Sus. 2003, G34) may fall into this category. Buildings interpreted as *mansiones* occupy a similar position (see section 2.3). Study of extramural settlement patterns (Esmonde Cleary 1987) suggests that within the urban area the pattern of extramural settlement could be similar to that within the defences until the fringes were reached. Thus plots along the street frontages of a similar character to those found within the defences can be expected as

far as the pottery scatter reaches. Traces of such plots can be seen on the geophysical survey of the western Fosse frontage south of the town and along the A6097 (Fig. 1), while Todd's building C (Fig. 3, G34) and the nearby geophysical anomaly (Figs 2 and 4, G 130) may be in more spacious and well-to-do plots sited on the edge of the commercial zone as the main road left the centre of the town.

Bath-houses occur both inside and outside of the defences. Inside the defences they are commonly grouped with other elaborate buildings, frequently those identified as *mansiones* as at Chelmsford, Godmanchester and Wanborough. Solitary examples may have been public buildings, as has been suggested at Braughing, but others seem to be in a private location, for instance at Neatham (Burnham and Wachter 1990, 20 and 269). In other cases excavation has been limited to the bath-house structure and its immediate context is unknown. The putative bath-house at Margidunum, in a group with a possible temple and official building, fits this pattern. Temples are sometimes located in the centre of the towns. Another common location is near the *mansio* (Godmanchester, Water Newton, Chelmsford). Evidence at Margidunum has been put forward for a religious focus in or near building L. Burnham and Wachter (1990) and Black (1995) point out that in building M the order of the rooms is the reverse of that of a bath-house. Burnham and Wachter (1990) have suggested that this group of buildings may have functioned as an official complex so this interpretation would fit well with the patterning detected as characteristic of Roman "small towns". In that case, the "bath-house" may be reinterpreted as a high class domestic building with hypocausts associated with the ritual complex, replaced by building N in the late third to fourth century.

Public amenities such as theatres and amphitheatres are exceptional but the presence of finds such as a pottery theatre mask at Catterick and an inscription at Brough-on-Humber recording the gift of a new stage building commends caution before discounting their presence completely. The chariot race depicted on a mosaic in the Horkstow villa, Lincolnshire surely implies familiarity with such events, but the latter in particular is likely to have taken place only in a major town such as Lincoln.

Inside and outside the defences evidence of industrial and craft activity has been found in the yards behind strip houses. These included workshops in a wide range of

sizes serving the town or wider community as iron smelters and smiths, lead, copper and bronze workers, potters, bone workers, tanners and stone masons. In some towns large industrial areas developed on the margins, such as at Water Newton, Derby and St Albans. Smaller establishments were present in all the small towns and even highly specialised craftsmen such as goldsmiths and gem cutters have been identified (Burnham and Wachter 1990, 47). These might require no more than a small workshop in a strip building.

Beyond the frontages and lanes serving higher status or specialized building complexes such as temples, Burnham concludes that the town quickly merges with the surrounding rural enclosure patterns. Exceptions to this may occur when specialized industries were located around the fringes of settlement because of the need to take advantage of natural resources (water and timber supply, stone, clay etc as at Water Newton, Fig. 19) or for consideration of safety or personal choice (as the tannery at Alcester, Fig 26).

On the edges of the urban areas, areas of burial were common since their siting within towns was prevented by Roman law (see at Ashton Fig. 20). At settlements morphologically on the border of town and village, such as Hibaldstow (Fig. 24), burials have been found at the back of frontage plots. At others such as Ilchester many late burials within the plots may indicate a decline in standards in later Roman times within a contracting settlement.

6.2 Regional comparisons

The site invites comparison with other small towns of the Corieltauvi (Table 2). In nearly all cases archaeological investigation has been limited and in some cases remains to be fully published (Brown 1995). Nevertheless, if coupled with the data from Burnham and Wachter's survey of a larger group of small towns from all over Britain, the key features and zonal character that they detected can be identified in this regional subset, even if all components are not present in every case. At Water Newton, for example, we have a particularly extensive settlement with abundant archaeological evidence collected over many years using many techniques (Fig. 19).

This town is certainly of a different order to that at Margidunum and is a suspected *civitas* capital, based on the developed pottery industry of the Nene Valley. However the basic zones present at Water Newton are also represented in one form or another at most of the other small towns (Chart 2). The difference between the high and low status buildings may not be as pronounced at Hibaldstow, for example, but the same tendency for more elaborate domestic structures to be set back from the road can be observed (Fig. 24 plot VI). Although Sapperton is on the border of village and small town it shares the characteristic of having stone quarries apparently connected with road construction or repair with settlements such as Brough and Hibaldstow on the Fosse Way and Ermine Steet respectively.

The major components identified at these Corieltauvian towns are:

- Roads and lanes, often irregular, either side of major routes (Figs 19, 29, 24, 26 and 27)
- Where known, a temple complex has been identified as the focal point of the enclosed area but this central zone is often unexcavated (Figs 19 and 27).
- Where the full layout of domestic settlement is known it was commonly dominated by
 - strip buildings with back yards at right angles to the roads with lanes between, e.g. at Ashton, Sapperton and Hibaldstow (Figs 20, 21 and 24).
 - rectilinear buildings set in larger enclosed areas with ancillary features such as ovens and wells and smaller buildings e.g. at the edges of Ashton (Fig. 20).
 - Developed rectilinear buildings, sometimes in a large plot, set back from the main road, e.g. Hibaldstow (Fig. 24 IV).

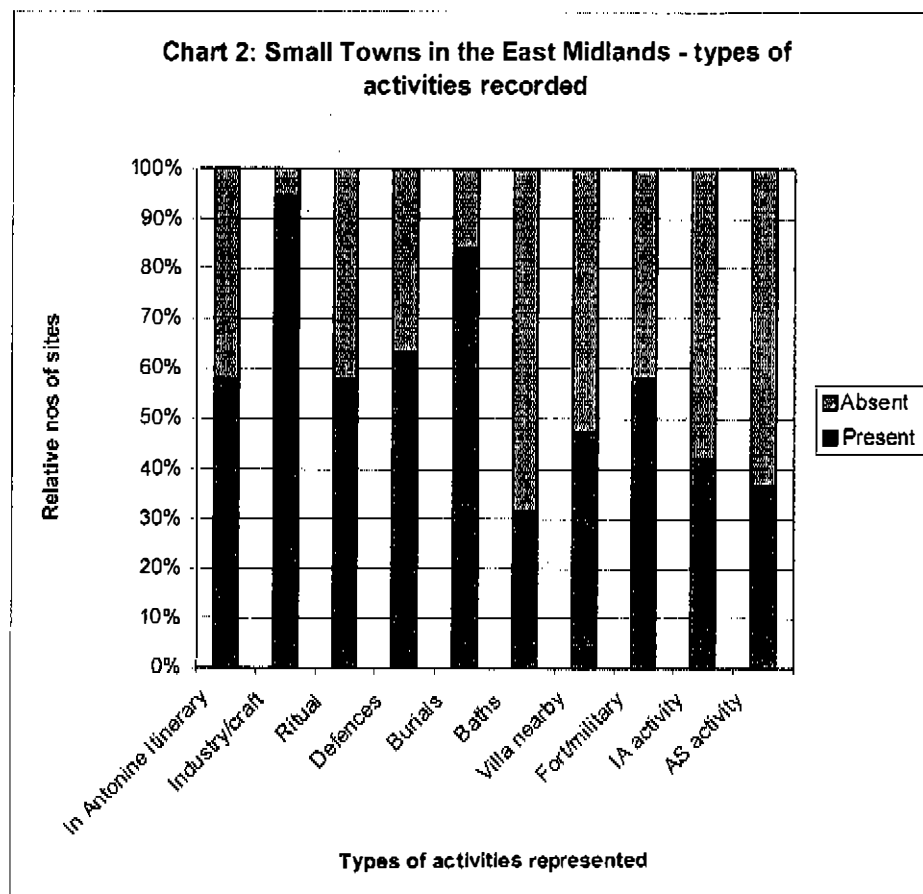
Plots typically tend to be larger towards the edges of the urban spread and the urban/rural interface can be indistinct.

- Temples and shrines (Figs 19, 21 and 27) found either in the centre of the settlement, as adjunct to domestic building or as part of a *mansio* area outside or inside defences. Portable evidence for temples or shrines is common (Table 2).

- *Mansio* complexes have been suggested for Thorpe, Great Casterton, and Derby just inside defences beside the road, at Towcester, Wall and Cave's Inn Tripointium outside of the defences and in the centre at Water Newton.
- Industrial features. These can be divided into
 - cottage industries and small-scale crafts such as gem-cutting situated in yards and plots behind the domestic block
 - those positioned near raw material and necessary resources such as clay and stone such as quarry pits at Brough and Alcester (Fig. 26), though masons yards for more skilled craftsmanship such as that represented at Ancaster may have been situated elsewhere.
 - larger scale operations of a more commercial character such as the kilns at Water Newton (Fig 19).
 - noxious trades such as tanning on the outskirts away from domestic settlement (Fig. 26).
- Cemeteries typically situated on the edges of the settlement along the roads (Figs 20 and 26) with late burial in or near the fortifications and at the backs of yards on the edges of settlements (Figs 23 and 24). Infant and ritual burials are found within the town.
- Nearly all the towns situated on main roads have defences in the form of ramparts and ditches, and, later, stone walls. The construction of the defences have been dated by Todd to the late second century with a stone wall added around A.D. 200 and, as has been noted above, several houses were demolished to permit their construction. The defences only protected the core of the town and, in that respect, contrast with other town defences of late second century date. Todd suggested that by the third and fourth century the town centre was virtually empty but this review of old and new evidence has refuted that. There are several small late defended centres in the East Midlands thought to date to the fourth century at Wall, Cave's Inn, Caistor and Horncastle. Oswald dated the wall at Margidunum to the fourth century on the grounds that pottery of that date was *embedded* in the concrete core. The illustrated pottery is certainly of late date and includes a fourth century Swanpool mortarium and late Nene Valley colour-coated wares. If this stratigraphy were correct, and we have no reason to doubt it, then a much later

date than that put forward by Todd must be accepted. Further detailed work on the defences would be essential if an on-line route were adopted.

Variable characteristics include the official status suggested by the inclusion of some settlements (and not others) in the Antonine Itinerary. Provision for the storage of tax in kind has been identified at Alcester in the form of a granary, as has a possible open market place in the suburbs. Milling has been suggested at Water Newton. Forged coins and a goldsmith's weight indicate other more exotic activities.



7 Villas and local centres: a study of their inter-relationships

7.1 The villa/town landscape

The importance of small towns as markets for rural produce and for imported goods, collection points for tax revenue in kind, administrative centres, and centres for religious complexes for the surrounding countryside is widely accepted. The inter-dependence of town and country is fundamental to the functioning of the Roman

administrative system and economy. In some cases, the town dwellers may have tilled the surrounding land for themselves or for the richer landowners living in the nearby villas.

Todd recognised that the small towns of Roman Britain often had a group of villas around them contrasting them with cities which have few villas nearby (Todd 1970, 124). Esmonde Cleary in his study of the suburbs of Roman towns observes that the nature of the relationship between town and country includes these administrative, economic, social and tenorial elements which are difficult to detect archaeologically (1987, 187). Millett has linked the growth of Roman small towns and the floruit of villas with changes in the tax collection whereby taxes were collected in kind at local centres such as the small towns rather in currency at the *civitas* capitals. This coupled with imperial discouragements of excessive urban munificence and municipal embellishment favoured the growth of smaller centres and allowed minor nobility to benefit financially from the administrative system. These changes released the wealth of the landowners for personal aggrandisement and major building projects at their country homes.

Todd recognised in 1970 (127) the need to examine the relationship of towns to farmsteads, villages and field systems as well as villas. Such far-reaching studies would be expensive but are being carried out where planning permits more wide-ranging studies or research funding is available (Wroxeter hinterland project, Shiptonthorpe, Holme on Spalding Moor: Halkon and Millett 1999 and Powesland 1998). There are very few extensive studies of Roman small towns, villas and the landscape in which they lie currently published. It has, therefore, not been possible to compare the Margidunum villa/town landscape in detail with other similar studies of town/villa landscapes.

Field systems outside Roman small towns, appearing as cropmarks (Figs 20 and 23) are often interpreted as contemporary agricultural landscapes farmed by the townsmen and/or local landowners.

In the area of the Corieltauvi villas have been noted around towns at Great Casterton (Great Casterton villa), Ancaster (Todd 1973, 80), Thorpe (at Elston and East Stoke),

Brough (at Norton Disney), Medbourne (Liddle 1995), Margidunum (at Margidunum, Car Colston and Bingham), Water Newton (Upex 2001 lists 10 villas), Ashton (Cotterstock, Upex 2001), Hibaldstow (Fig. 24, Smith 1987, 194), and Sapperton (Simmons 1995). In most cases, investigation has been limited to the villa structures and very little is known about the associated landscape.

7.2 The late Iron Age and Saxon landscape

It has been demonstrated above that in many cases the villas develop in a landscape that was occupied by Iron Age settlement sites or field systems (Figs 14 and 15), and given that they would tend to favour well-appointed sites this is hardly surprising. After the Roman occupation there is evidence at several East Midland villa sites for Saxon activity in the form of burials for example at Denton, Southwell and Drayton (Chart 1, Table 1). Similarly the Roman small towns have evidence for Iron Age occupation such as at Brough, and Saxon use such as settlement at Brough and Sapperton and burials at Ancaster, Great Casterton (Fig. 22) and Sapperton. The complexity of pre- and post-Roman settlement at Margidunum is not yet established but small amounts of hand-made pottery recovered in the course of field-walking, some of which has been identified as either Iron Age or Saxon, indicates some activity. Friable hand-made pottery sherds are less likely to survive long in the ploughsoil and so the small numbers may be misleading. A deposit of Iron Age date was excavated outside the town (G65) but its character was uncertain.

Late burials in the rampart are suggestive of very late or even post-Roman activity (Fig. 3) and the geophysical anomalies detected by Geoquest Associates on behalf of Wessex Archaeology compare with Saxon settlement remains at Catholme (Fig.13).

8 Predictive modelling

Any attempt to evaluate what might lie below the surface around Margidunum relies on evidence collected from the archaeological work carried out so far and comparison with other towns and villas nationally and in the region. These sources of data allow us to make suggestions as to what we might expect and how it might be preserved. We shall therefore consider the evidence in three ways:

- Are there zones of activity which we can predict?
- Where might we expect to find multiple "layers" of activity which will require more extended treatment and will subsequently take longer to excavate?
- Where might we expect well-preserved archaeological levels, including organic material?

For each type of assessment we will examine the possibilities using an appropriately zoned drawing of the site (Figs 28-30).

8.1 Roadside settlement

The archaeological zones comprise (Fig. 29):

- Roadside settlement dating from the 1st-4th centuries both inside and outside the town defences, set within ditched and/or fenced compounds. These were present as stratified deposits with multiple phases including timber and stone built structures, some with painted plaster, tiled roofs, window glass, concrete or clay floors and daub walls.
- Within the compounds of the roadside settlements, pits, wells, industrial deposits and ritual deposits exist and organic preservation will be high in some. Evidence for industrial activity was found by both Todd and TPAU during excavation and field walking in the area between the villa and the Fosse Way.
- To the north of the town remains of a fort may exist but this has been overlaid by later Roman urban sprawl. Features which could be found in association with this would be cemeteries, a bath-house, kilns and a military annexe. These have not been located by the fieldwork although the spread of pottery indicates the likely area. No concentrations of tile and brick have been found so the location of a bath-house within the roadside corridor is unlikely.
- The burial evidence indicates some possible cemetery locations but evidence from other towns suggests further cemeteries may be expected on all the outskirts of the pottery scatter, along the backs of the roadside compounds and around the villa compound (Chart 2 and Appendix 2).

- Quarries and industrial activity of an anti-social or agricultural nature might be anticipated on the edges of the settlement. The discovery of pottery and tile kilns within the road corridor and off road route seems unlikely given the absence of wasters from field-walking.
- Evidence from other villa sites indicates that tenant farms and villages may be situated near the villa and the geophysical anomalies to the north of the villa may belong to such a settlement (Fig.1).
- Temples and ritual complexes may also occupy a *temenos* (ritual enclosure) outside the town (chart 2) or adjacent to the villa but present fieldwork cannot predict its location. The lake or marshy area to the south-east of the town might have attracted ritual activity but the alluvial and lacustrine deposits may have covered the evidence.
- A separate bath-house might be expected near the villa and evidence from other towns indicates the possibility of an extramural bath-house. Field-walking has not detected the concentration of tile and brick which would be expected over such a structure so its position cannot be predicted. Alluvial and colluvial deposits might cover such deposits and so mask their position, particularly to the west of the Fosse Way.
- Roads and trackways may be encountered and some are visible on aerial photographs and geophysical surveys.
- Iron Age and Saxon settlements and cemeteries might be expected around the town and villa on the grounds of their presence at other similar sites in the East Midlands (Chart 2, Appendices 1 and 2).
- Field systems with scattered buildings and industrial features are likely to surround the foci of the town and villa. These are likely to contain significantly less archaeology than the roadside settlement or areas adjacent to the villa although unpredictable features such as temple complexes could lie undetected.

8.2 Multiple phases (Fig. 30)

In many areas we might expect to encounter a substantial thickness of multi-phase stratigraphy. The nature of these deposits vary and three types are suggested:

- **Type 1:** Along the roadside settlement is deeply stratified in several places. Some 350 years of occupation may be encountered within a relatively small area either side of the Fosse Way. The road itself has to some extent preserved the remains and keyhole excavations have encountered well-preserved fragments and large unabraded pottery sherds, even in the area of the roundabout (G 81- 107, 114-5, and 19-120).

In addition to the stratified urban deposits, military deposits may underlie these to the north of the town defences (G.50). Very little is known of the nature of the earliest Roman occupation of the site and these deposits are crucial to our understanding of the origin of the Roman "small town" and of the military history of the Conquest of this tribe. The dating and stratigraphic sequence of the town defences (G21-29 and 51-61) would also be encountered in this zone and is at present ill-understood.

In the area of the defences complex stratigraphy may be anticipated.

The magnetic susceptibility survey (Appleton *et al.* 2003) suggested some anomalies to the north-west of the town which were thought to reflect either earlier or current agricultural regimes or archaeologically significant areas of high susceptibility dispersed within the fields. These were not subjected to detailed magnetometer survey but the marked concentration of field-walked Roman pottery in this area confirms the suspicion that extensive extra-mural settlement may be expected in this area. The type 1 one in this area has been enlarged to cover the pottery spread and the magnetic anomalies. It should be noted that the limits of the magnetic anomalies extended outside the survey area. Consequently the limit of the type 1 zone is uncertain.

- **Type 2:** in some areas the zoning prediction suggests multi-phased activity spread over a wider area. North-west of the Fosse Way pottery scatters and geophysical evidence suggest the possibility of Iron Age and/or Saxon activity. This might result in a situation where a complex palimpsest of

settlement features is encountered. The remains encountered at sites like Stanwick (Fig. 15) serve as a warning of how complex such landscapes can be and the excavation on the A46 at Glebe Farm, Brough confirm that complex sequences of Iron Age, Roman and Anglo-Saxon settlements may be encountered.

- **Type 3:** around the settlement foci, field systems with an unpredictable range of features are to be expected. These may include outlying barns and stock enclosures and some of the undetected features of Roman life such as temple complexes and kiln concentrations. At present there is no evidence for the location of these latter types of features. Deep stratigraphy is unlikely. The area to the east of the A46 is included in type 3 but the overlying alluvial deposits may be masking a more complex zone of activity.

8.3 Zones of preservation

In some areas we have evidence for good preservation of archaeological layers and organic material.

- Outside the defences to the south, thick layers of alluvium exist. This can overlie and therefore protect the archaeological layers (G 70-3, 76-8, and 118). In some deposits organics were preserved.
- Features within the town had organic material preserved in them. These include the rampart ditches, wells, pits and the pools. Such deposits may be expected on the line of the defences, in the area of peat to the east of the road and in wells and deep pits within the roadside settlement.
- The area of occupation covered by alluvial deposits is rather unpredictable as the deposits may mask underlying archaeology but with greatly enhanced preservation.

Conversely, damage to some areas of archaeological potential has certainly been caused by later works. The key areas of damage are probably

- reconstruction and resurfacing of the A46 itself
- the construction of the roundabout

- the widening of the approach roads to the roundabout, particularly in the cuttings to the north-west and north-east
- the renewal of lighting and other structures on the road
- the extensive excavations, particularly those of Oswald.

In no case, however, can it be assumed that all archaeological remains in any of these areas have been destroyed. A small-scale re-excavation of parts of Oswald's excavation area showed that features still survive, some as excavated profiles and some unexcavated (Knight & Kinsley 1992, 30-31 and fig. 22), while excavations in the roundabout have also indicated that features and layers survive (Priest & Knight 1995, 1998; Zeffert, Knight and Badcock 1995).

9 Bibliography

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10 Figures

- Fig. 1 Location of archaeological investigations, finds scatter, cropmarks and geophysical anomalies, auger survey and extent of alluvium around Margidunum. 1: 8500
- Fig. 2 Location of archaeological investigations within and beside defended area. 1:2000
- Fig. 3 Details of major features excavated by Oswald and Todd showing predicted lines of town defences. 1:1500

- Fig. 4 Details of structural evidence recovered from Oswald and Todd's excavations and evaluations, test pits and watching briefs carried out in the 1990s and 2000s. 1:1500
- Fig. 5 Location and phasing of excavated section of town defences and burials. 1:1500
- Fig. 6 Broad phasing of structural evidence based on published dating. 1:1500
- Fig. 7 Oswald's sections showing evidence of early embellished buildings (J105 well Y with column drum, wall plaster in pit W J49 and window glass in Pit N F43) and late stone buildings (building G J101 and building F F39) within ditched compounds.
- Fig. 8 Margidunum villa geophysical anomalies compared with plans of courtyard villas. A Margidunum, B Woodchester, C North Leigh, D Chedworth, E Bignor, F Fishbourne All Hingley 1984.
- Fig. 9 Margidunum villa geophysical anomalies A compared with villas with excavated ancillary structures at B Cosgrove, Northamptonshire (after Quinnell 1991) and C Winterton, Lincolnshire (after Goodburn 1978)
- Fig. 10 Margidunum villa geophysical anomalies (C) compared with A villa block at Marshfields, the Cotswolds with enclosure wall and burials (after Blockley 1985) and B villa complex at Apethorpe (after RHCME).
- Fig. 11 Margidunum villa compound geophysical anomalies compared with villa compounds apparently with two house range at B Beadlam, Yorkshire, C Llantwit Major, S. Glam and D Gayton Thorpe Norfolk (all after Hingley 1984).
- Fig. 12 Margidunum villa geophysical anomalies compared with villas with multiple courtyards at B North Wraxall (after Hingley 1984, C Bisley with Lypiatt, Northants. (after RHCME) D Woodchester (after Hingley 1984), and E Cotterstock, Northants. (after Upcx 2001).
- Fig. 13 Margidunum villa A and settlement B geophysical anomalies compared with Iron Age/Romano-British farmstead enclosures at C Hovcringham and Anglo-Saxon settlement at D Catholme (Losco-Bradley and Kinsley 2002).
- Fig. 14 Roman villa at Chignall, Essex showing villa landscape (after Clarke 1998). Note cemetery next to enclosure south of Easement area and abundance of ditches, posthole buildings and other settlement features south of villa.
- Fig. 15 Excavation at Stanwick, Northamptonshire of villa landscape with underlying prehistoric settlement (after Neal 1989).
- Fig. 16 Margidunum villa geophysical anomalies compared with regional villa group. B Car Colston, Nottinghamshire (after Blagg 1970), C Denton, Lincolnshire and D Norton Disney, Lincolnshire.
- Fig. 17 Margidunum villa geophysical anomalies compared with large villas in the East Midlands (after Whitwell 1975) B Scampton, C Winterton, D Great Weldon E Mansfield Woodhouse, F Great Casterton,
- Fig. 18 A Margidunum villa geophysical anomalies compared with villas and associated cropmarks in the East Midlands. B Cromwell (after Whimster 1989), C Newville Farm (after Jones 1988), D Lockington (after Clay 1984), E Walesby, F Otby Moor, and G Glentham Cliff (all after Jones 1988).
- Fig. 19 Water Newton defended town and surrounding landscape (after Burnham and Wachter 1990).
- Fig. 20 Ashton (after Burnham and Wachter 1990).
- Fig. 21 Sapperton (after Burnham and Wachter 1990).

- Fig. 22 Great Casterton (after Burnham and Wachter 1990).
- Fig. 23 Horncastle (after Burnham and Wachter 1990).
- Fig. 24 Hibaldstow (after Burnham and Wachter 1990).
- Fig. 25 Towcester (after Burnham and Wachter 1990).
- Fig. 26 Alcester (after Burnham and Wachter 1990).
- Fig. 27 Irchester (after Burnham and Wachter 1990).
- Fig. 28 Predictive plan of fort and military annexe. 1:10000
- Fig. 29 Predictive plan of Romano-British urban and rural settlement 1:8000
- Fig. 30 Predictive plan of degrees of complex stratification of archaeological remains by area. Type 1: very complex stratification with more than three phases anticipated. Type 2: palimpsest landscape with vertical and horizontal stratigraphy possible over a wide area such as Iron Age settlement overlaid by Roman field system and ancillary buildings overlaid by Anglo-Saxon settlement. Type 3 relatively simple stratigraphy anticipated based on present evidence with field system, enclosures and scattered ancillary structures. 1:10,000
- Fig. 31 Predictive plan of areas underlying alluvial and colluvial deposits and deep features with preserved organics. 1: 8000
- Fig. 32 Plan of site with Gazetteer numbers. 1:8000
- Fig. 33 Plan of site with Gazetteer numbers 1:2000

11 Gazetteer (See Figs 32-3 for locations)

The gazetteer lists archaeological works old and new that have been conducted on the site and itemises details of the major features. The features are digitised in the Autocad drawing accompanying this report and the Gazetteer numbers are printed on figs 31-2.

No.	Evidence of feature type	Period	1st	2nd	3rd	4th	Results	Bibliographic reference	Nature of investigation	Location	Location subdivision
1	Stone building	RB		Y	Y	Y	Footings fragments and three layers of paving. Evidence of a building to the east of the Fosse way was excavated by Oswald and Pryce in 1910 (Pryce 1912, 6) in the form of roof tiles, slates, window glass, painted wall plaster, flue tiles and some tesserae as well as three successive areas of skerry paving set on mortar, concentrated nearest the Fosse Way frontage. The mortar of the middle layer of paving overlaid a layer of charcoal with many large nails suggesting the previous structure was of timber. A coin of Constantine was recorded above the lowest paving suggesting a fourth century date for the upper pavements. Oswald published fourth century mortaria from this area of paving (Oswald 1956, Pl VII d).	Pryce, T.D. 1911 Margidunum: A Roman fortified post on the Fosse way. JBAA 3-21.	Excavation	Margidunum town	
2	Inhumation	UNK					Human remains recorded on 1911 OS map.	OS map of 1911. Knight, D. and Kinsley, G. 1992 Archaeology of the Fosse Way Vol 2	Casual find?		
3	Evidence of timber building	RB	Y	Y			Three layers of paving. 4th century coin below top paving layer. Second paving layer above layer of charcoal and many large nails suggesting timber building. Possibly 1st or 2nd.	Pryce, T.D. 1911 Margidunum: A Roman fortified post on the Fosse way. JBAA 3-21.	Excavation	Margidunum town	

No.	Evidence of feature type	Period	1st	2nd	3rd	4th	Results	Bibliographic reference	Nature of investigation	Location	Location subdivision
4	Animal burial	RB	Y	Y			Dog pit. Pit found at back of enclosure with building F with skeletons of six dogs. Date uncertain but date of gully probably 1st or 2nd.	Oswald, F. 1927, Margidunum. Nottingham	Excavation, p. 19		
5	Inhumation	RB	Y	Y			Fragment of human bone (lower jaw) recorded by Oswald from ditch 9. Date uncertain but date of gully probably 1st or 2nd.	Oswald, F. 1927, Margidunum. Nottingham	Excavation, p. 22		
6	Stone building	RB	Y	Y	Y	Y	Building L. Oswald dated building L to the late first century but an earlier building is represented by layers of broken painted plaster, burnt daub and fragments of a coarser wall plaster. The west wall "rested on charred beams with much burnt daub" (Oswald 1941, 38). Alterations dating to the second century are recorded and the associated pottery dates to the third century at least. The layers predating these alterations included builders' debris, much wall plaster, iron slag and nails so clearly several phases of buildings with a degree of sophistication are represented (Oswald 1941 fig. 6). An abundance of late third to late fourth century pottery recorded from the upper layers of the building above the "marsh silt" demonstrate extensive occupation in or near the building (Oswald 1941, fig 5) and another layer of wall plaster and builders debris lay above a layer of peat with large stones. It is clear from Oswald's account that multiple phases of structures with painted plasterwork are represented and the wall footings represent a building which probably underwent changes from the late first to late second or early third centuries with further activity in the 4th.	Oswald, F. Margidunum. JRS 31, 32-62	Excavation, the "schola"	Margidunum town	

No.	Evidence of feature type	Period	1st	2nd	3rd	4th	Results	Bibliographic reference	Nature of investigation	Location	Location subdivision
7	Stone building	RB	Y	Y			Building M. This was identified as a bath house but details of its excavation was never published and its' sequence with the peaty marsh is not secure. At least two phases of flooring was represented and a post-hole below the earliest floor may represent an even earlier phase. Oswald dated the building to the late Flavian to Antonine period on account of stratified late Flavian pottery below the earlier floor and Antonine samian from floor of the stovehole and from the hypocaust.	Oswald, F. Margidunum. JRS 31, 32-62	Excavation, the "bath-house"	Margidunum town	
8	Stone building	RB				Y	Building N. This was a multi-phase structure with much late fourth century pottery on the floors but possibly dating from as early as the second century since pottery of the date was found under the entrance. The building had four rooms linked by a corridor and with projecting wings. Internal painted plaster work with a quarter moulding around the bottom was found. The floors were of opus signinum and the roof of Charnwood slate.	Oswald, F. Margidunum. JRS 31, 32-62	Excavation, the "late house"	Margidunum town	
9	Pool						Pool next to building M. The pool to the east of the baths was explored by Oswald because he initially thought the depression was part of the defences. On excavating part of it he found it was a "solution valley - a frequent occurrence in gypsum districts such as the Keuper marl". Oswald does not recount the excavation of this feature in detail but illustrations of the finds are scattered throughout his reports (Oswald 1956, Pl. V, Pl VII c, and include two face pots which, together with the curious inhumations from building L, its' central hollow and the unusual plaster of Paris plinth might favour a religious function for some of the components of this area of the site. The pottery included a late hammerhead mortarium.	Oswald, F. Margidunum. JRS 31, 32-62	Excavation	Margidunum town	
10	Inhumation		Y				3 burials in building L, found by Oswald stratigraphically earlier than the charred timber and burnt daub predating the stone walls of building L.	Oswald, F. Margidunum. JRS 31, 32-62	Excavation, fig. 9	Margidunum town	

No.	Evidence of feature type	Period	1st	2nd	3rd	4th	Results	Bibliographic reference	Nature of investigation	Location	Location subdivision
11	Pool	RB	Y	Y			Pool in middle of building L, this contained pottery dated to the late 1st-early 2nd century and underlay the 2nd century gravel floor of building L.	Oswald, F. Margidunum. JRS 31, 32-62	Excavation, fig. 9	Margidunum town	
12	Altar	RB					Plaster and concrete pedestal base in building L, possibly of altar. This rested on clay and the side showed the impression of a wooden mould.	Oswald, F. Margidunum. JRS 31, 32-62	Excavation, fig. 9	Margidunum town	
13	Evidence of improved building	RB			Y		Building debris including fragments of plaster under floor associated with 1st pottery in building L	Oswald, F. Margidunum. JRS 31, 32-62	Excavation, the "schola", fig. 5	Margidunum town	
14	Evidence of timber building	RB	Y				Charcoal and charred timber below wall of building L, with burnt daub	Oswald, F. Margidunum. JRS 31, 32-62	Excavation, the "schola", fig. 5	Margidunum town	
15	Stone building	RB	Y	Y	Y	Y	Building G. Oswald assigns a mid 1st century date to the earliest timber building dates reconstruction in stone to the late 1st century. Part of G is described as built over earlier cellars which are identified as pit Z (Oswald 1948). Oswald says in 1927 (p. 41) this "late house" yielded a coin of Crispus, son of Constantine along with characteristic pottery. Although the stratigraphic position of the coin and the pottery is not disclosed in this publication, the section across building G drawn by Oswald (1948) shows pottery dated by him to the third century underlying a section of paving apparently abutting a stone footing belonging to a rectangular structure which he seems to have exposed in its entirety. This part of building G at least must belong to the third or fourth century. In 1948 the stratigraphic position of the coin and more pottery dated by him to the 4th century is shown on the section (section J113) as above the level of the paving in this part of the complex. This strongly suggests that some of building complex G belongs to the fourth century.	Oswald, F. The Commandant's House at Margidunum. Nottingham	Excavation, the commandant's House complex	Margidunum town	

No.	Evidence of feature type	Period	1st	2nd	3rd	4th	Results	Bibliographic reference	Nature of investigation	Location	Location subdivision
16	Stone building	RB		Y	Y		Building F Gravel spreads dated to the Antonine period by Oswald are recorded south west and inside of building F and a gravel layer with pottery dated by Oswald to the 3rd century abuts the wall of building in Oswald's section (1948m pl III F38-9). The Claudian well lay below the compound ditch 6 south of building F. The redating of the Claudian well to the Flavian period and possibly later (Todd 1969, 22 and Samuels 1980, 134) would suggest, on the basis of Oswald's section, that this compound, building F and much of the paving in this area belongs to the second century and after. A pit dated to the first century contained window glass. Slag pits were found within the enclosure dated by Oswald to the first century.	Oswald, F The Commandant's House at Margidunum. Nottingham	Excavation, the "stable"	Margidunum town	
17	Evidence of improved building	RB	Y				Column drum in late 1st century well	Oswald, F The Commandant's House at Margidunum. Nottingham	Excavation, section		
18	Stone building	RB	Y				Late 1st century footings and floor levels in building G complex	Oswald, F The Commandant's House at Margidunum. Nottingham	Excavation, section		
19	Evidence of improved building	RB	Y				Window arch in ditch Z, predating wall and possibly draining into outer ditch	Oswald, F. 1952 Excavation of a Traverse of Margidunum, 45	Excavation		
20	Evidence of improved building	RB		Y	Y		Roofing tiles found in well R associated with 3rd century pottery	Oswald, F. 1952 Excavation of a Traverse of Margidunum, section	Excavation	Margidunum town	
21	Rampart	RB		Y	Y		Rampart	Oswald 1952, pl 1	Excavation		
22	Town wall	RB			Y		Town wall	Oswald 1952, pl 1	Excavation		

No.	Evidence of feature type	Period	1st	2nd	3rd	4th	Results	Bibliographic reference	Nature of investigation	Location	Location subdivision
23	Early defences	RB					● Outer ditch II	Oswald 1952 P11	Excavation		
24	Late ditch	RB			Y	Y	Outer ditch III	Oswald 1952, pl 1	Excavation		
25	Late ditch	RB			Y	Y	Outer ditch IV	● Oswald 1952, pl 1	Excavation		
26	Late ditch	RB			Y	Y	Outer ditch III	Oswald 1952 P11	Excavation		
27	Late ditch	RB			Y	Y	● Outer ditch IV	Oswald 1952 P11	Excavation		
28	Defences	RB			Y	Y	Outer ditch V	Oswald 1952 P11	Excavation		
29	Defences	RB			Y	Y	Outer ditch VI	Oswald 1952 P11	Excavation		
30	Inhumations	RB				Y	Rescue excavation inhumation cemetery	Todd, M. 1969 Margidunum Excavations 1966-8. TTS 73, 5-50	Excavation	Margidunum town	
31	Cremations	RB		Y			cremation, isolated second century cremation	Todd, M. 1969 Margidunum Excavations 1966-8. TTS 73, 5-50	Excavation	Margidunum town	
32	Timber building	RB AS				Y	Building A. Late clay floor associated with postholes overlying rampart. Sherds of mid-fourth century recorded from below the floor giving a <i>terminus post quem</i> (earliest date).	Todd, M. 1969 Margidunum Excavations 1966-8. TTS 73, 5-50	Excavation, p. 62	Margidunum town	
33	Stone building	RB		Y	Y	Y	Building B, clay floor associated with stone footings. Mid 2nd century pottery under floor and much 3rd-4th century sherds over floor. Several more fragments of clay flooring and walls adjacent.	Todd, M. 1969 Margidunum Excavations 1966-8. TTS 73, 5-50	Excavation, p. 58	Margidunum town	

No.	Evidence of feature type	Period	1st	2nd	3rd	4th	Results	Bibliographic reference	Nature of investigation	Location	Location subdivision
34	Stone building	RB		Y	P		Building C. Stone footed building with three rooms and courtyard, overlain by rampart. Stone lined pit outside. Served by road. Two more fragments of wall footings to north and south may belong to other buildings. Pottery from the walls suggests a date after AD150 and debris in the yard gave a date of mid-second to mid-third century for the occupation.	Todd, M. 1969 Margidunum Excavations 1966-8. TTS 73, 5-50	Excavation, p 63	Margidunum town	
35	Stone building	RB		Y			Building D. Battered pitched footings under rampart	Todd, M. 1969 Margidunum Excavations 1966-8. TTS 73, 5-50	Excavation, p 59	Margidunum town	
36	Stone building	RB		Y			Building H, fragments of stone footings excavated hurriedly with little detail	Todd, M. 1969 Margidunum Excavations 1966-8. TTS 73, 5-50	Excavation, p 59	Margidunum town	
37	Stone building	RB		Y			Building I, fragments of stone footings excavated hurriedly with little detail	Todd, M. 1969 Margidunum Excavations 1966-8. TTS 73, 5-50	Excavation, p 59	Margidunum town	
38	Stone building	RB		Y			Building J fragments of stone footings excavated hurriedly with little detail. Todd dated buildings H-J to the second century or later.	Todd, M. 1969 Margidunum Excavations 1966-8. TTS 73, 5-50	Excavation, p 59	Margidunum town	
39	Stone building	RB					Building K fragment of footings north of defences, location uncertain.	Todd, M. 1969 Margidunum Excavations 1966-8. TTS 73, 5-50	Excavation	Margidunum town	

No.	Evidence of feature type	Period	1st	2nd	3rd	4th	Results	Bibliographic reference	Nature of investigation	Location	Location subdivision
40	Timber building	RB	Y				Building O early timber building dated to the first century by Todd.	Todd, M. 1969 Margidunum Excavations 1966-8. TTS 73, 5-50	Excavation, p 23	Margidunum town	
41	Timber building	RB	Y				Building P early timber building slot dated to the first century by Todd.	Todd, M. 1969 Margidunum Excavations 1966-8. TTS 73, 5-50	Excavation, p 25	Margidunum town	
42	Timber building	RB IA	Y				Building Q early timber building slots, including curved slot dated to the first century by Todd.	Todd, M. 1969 Margidunum Excavations 1966-8. TTS 73, 5-50	Excavation, p 25	Margidunum town	
43	Cobbling	RB					Large area of cobbling recorded by Todd north of building J and lying under northern rampart	Todd, M. 1969 Margidunum Excavations 1966-8. TTS 73, 5-50	Excavation, p 25	Margidunum town	
44	Workshop	RB		Y	Y		Workshop deposit including iron artefacts, several whet stones and pottery dated to the mid 2nd century by Todd but including sherds such as a flanged bowl now dated to the mid to late 3rd century	Todd, M. 1969 Margidunum Excavations 1966-8. TTS 73, 5-50	Excavation, p 25	Margidunum town	
45	Evidence of improved building	RB					Layer of broken opus signinum next to building B	Todd, M. 1969 Margidunum Excavations 1966-8. TTS 73, 5-50	Excavation, p. 59	Margidunum town	
46	Ritual	RB		Y	Y		Two figurines of mother goddesses found in yard of building C	Todd, M. 1969 Margidunum Excavations 1966-8. TTS 73, 5-50, 63	Excavation		
47	Town wall	RB			Y		Town wall	Todd 1969	Excavation		

No.	Evidence of feature type	Period	1st	2nd	3rd	4th	Results	Bibliographic reference	Nature of investigation	Location	Location subdivision
48	Town wall	RB			Y		Town wall	Todd 1969	Excavation		
49	Town wall	RB			Y		Town wall	Todd 1969	Excavation		
50	Fort ditch	RB	Y				Fort? ditch	Todd 1969	Excavation		
51	Early defences	RB		Y			Early ditch I	Todd 1969	Excavation		
52	Early defences	RB		Y			Early ditch I	Todd 1969	Excavation		
53	Early defences	RB		Y			Early ditch I	Todd 1969	Excavation		
54	Early defences	RB		Y			Early ditch II	Todd 1969	Excavation		
55	Late ditch	RB			Y	Y	3rd-4th century ditch	Todd 1969	Excavation		
56	Late ditch	RB				Y	4th century outer ditch	Todd 1969	Excavation		
57	Early defences	RB		Y			Early ditch II	Todd 1969	Excavation		
58	Late ditch	RB			Y	Y	3rd-4th century ditch	Oswald 1952 PII	Excavation		
59	Later defences	RB			Y	Y	Upcast bank	Todd 1969	Excavation		
60	Early and later ramparts	RB		Y	Y	Y	Rampart I and II	Todd 1969	Excavation		
61	Early and later ramparts	RB		Y	Y	Y	Rampart I and II	Todd 1969	Excavation		
62	Fosse Way	RB					The Hump, possibly early line of Fosse Way	Knight, D. and Kinsley, G. 1992 Archaeology of the Fosse Way Vol 2	walkover survey		

No.	Evidence of feature type	Period	1st	2nd	3rd	4th	Results	Bibliographic reference	Nature of investigation	Location	Location subdivision
63	Cropmark	MOD					Linear cropmark. The coincidence of offset and field boundary suggests this may be relatively recent.	Knight, D. and Kinsley, G. 1992 Archaeology of the Fosse Way Vol 2	Aerial photographs		
64	Cropmark	RB					Parallel ditch cropmarks, probably road to east gate	Knight, D. and Kinsley, G. 1992 Archaeology of the Fosse Way Vol 2	Aerial photographs		
65	Pot scatter	IA RB	Y				Area 1 Iron Age pot and IA or early RB pebble spread over irregular features	Knight, D. and Kinsley, G. 1992 Archaeology of the Fosse Way Vol 2	Excavation		
66	Evidence of improved building	RB		Y	Y	Y	Area 3 Hearth on clay spread (associated with 2nd and 4th century pottery near laid limestone and sandstone spread.	Knight, D. and Kinsley, G. 1992 Archaeology of the Fosse Way Vol 2	Excavation		
67	Gully	RB	Y				Area 4 late 1st century gully	Knight, D. and Kinsley, G. 1992 Archaeology of the Fosse Way Vol 2	Excavation		
68	Evidence of improved building	RB	Y				Area 5 Demolition layer from mortar bound stone building with 1st century pottery	Knight, D. and Kinsley, G. 1992 Archaeology of the Fosse Way Vol 2	Excavation		
69	Road	RB		Y			Area 6 Fosse Way and drainage ditch to south east pottery of first half of second century. Undated stone packed feature below road	Knight, D. and Kinsley, G. 1992 Archaeology of the Fosse Way Vol 2	Excavation		

No.	Evidence of feature type	Period	1st	2nd	3rd	4th	Results	Bibliographic reference	Nature of investigation	Location	Location subdivision
70	Pottery scatter	RB					thin scatter of finds (1 RB sherd, 3 Med, 6 P-Med, 5 worked flint); no evidence for activity foci (though sites could lie beneath peat/alluvium)	Knight, D. and Malone, S. 1993: 'Construction of a gravity sewer between Newton and Wynhill pumping stations, Notts. Summary report on archaeological investigations' (TPAT)	fieldwalking of 15m pipeline easement	SW of Margidunum	
71	Alluvium	RB					deep alluvial deposits (up to 0.7m) and some waterlogged deposits. Some RB sherds from sieving (not detailed further in report); molluscan remains suggest lacustrine deposits.	Knight, D. and Malone, S. 1993: 'Construction of a gravity sewer between Newton and Wynhill pumping stations, Notts. Summary report on archaeological investigations' (TPAT)	6 test-pits along pipeline easement, E side of A46	SW of Margidunum	
72	Pottery scatter	RB					natural waterlogged deposits; evidence for a possible medieval plough-ridge; 3 probable RB sherds, 1 Med, 1 flint scraper	Knight, D. and Malone, S. 1993: 'Construction of a gravity sewer between Newton and Wynhill pumping stations, Notts. Summary report on archaeological investigations' (TPAT)	trench along pipeline easement, E side of A46	SW of Margidunum Trench 08	Trench 08

No.	Evidence of feature type	Period	1st	2nd	3rd	4th	Results	Bibliographic reference	Nature of investigation	Location	Location subdivision
73	Gullies	RB	Y	Y			c. 0.4m alluvium, above a series of intercutting gullies running approx. NE-SW, interpreted as R-B boundary parallel to Fosse Way; RB sherds from gullies (3 1st/2nd C and several abraded Samian)	Knight, D. and Malone, S. 1993: 'Construction of a gravity sewer between Newton and Wynhill pumping stations, Notts. Summary report on archaeological investigations' (TPAT)	trench along pipeline easement, W side of A46	SW of Margidunum Trench 09	Trench 09
74	Pottery scatter	PRE					Concentration of worked flint in field 229, N of Margidunum roundabout, extending a short distance E of Fosse Way into field 230C. Dense concentration of RB pottery in field 230C immediately E of roundabout, did not extend as far as 150m from Fosse Way or	Kinsley, A.G. 1993: 'Fieldwalking, earthwork surveys and geological mapping on the Fosse Way (A46) between Widmerpool and Newark, Notts. Interim Report' (TPAT)	fieldwalking	NE of Margidunum roundabout	
75	Defence earthworks	RB					Earthworks marked but not sharply defined due to constant ploughing. Consist of a central plateau defined by a ditch, rising to a counterscarp bank beyond.	Kinsley, A.G. 1993: 'Fieldwalking, earthwork surveys and geological mapping on the Fosse Way (A46) between Widmerpool and Newark, Notts. Interim Report' (TPAT)	earthwork survey	Margidunum	

No.	Evidence of feature type	Period	1st	2nd	3rd	4th	Results	Bibliographic reference	Nature of investigation	Location	Location subdivision
76	Alluvium						Extent of alluvium mapped; peaty alluvium restricted to area E of Fosse Way; W of road, ground rises sharply with thin colluvial layer	Kinsley, A.G. 1993: 'Fieldwalking, earthwork surveys and geological mapping on the Fosse Way (A46) between Widmerpool and Newark, Notts. Interim Report' (TPAT)	field mapping, inspection of ditch sections	Margidunum area	
77	Lacustrine clay						Extent of lacustrine clay estimated; approx 150m from N to S, filling a small basin	Kinsley, A.G. 1993: 'Fieldwalking, earthwork surveys and geological mapping on the Fosse Way (A46) between Widmerpool and Newark, Notts. Interim Report' (TPAT)	auger transects	between Margidunum and Bingham	

No.	Evidence of feature type	Period	1st	2nd	3rd	4th	Results	Bibliographic reference	Nature of investigation	Location	Location subdivision
78	Cropmarks	RB					Degraded, but slightly upstanding, soil mark or bank which may represent the west side of Margidunum. Building foundations plus ? ditched features lie within town. Ridge and furrow outside walls, no trace within.	Palmer, R. 1993: 'A46 Fosse Way: Newark to Widmerpool, Nottinghamshire. Aerial photographic enhancement' (Air Photo Services)	examination of all oblique and vertical aerial photographs	Newark to Widmerpool (including Margidunum)	
79	Geophys features	PRE RB AS					complex archaeological landscape including rectangular ditched enclosures (interpreted as Anglo-Saxon), possible round-houses, possible fired structures (hearths or kilns), a possible 3m-diameter ring cairn, small square building (possibly a Romano-Celtic	Noel, M.J and Hale, D.N. 1993: 'A46 Newark to Widmerpool: geophysical surveys stage 1' (Wessex Archaeology and GeoQuest Associates)	magnetometry survey	3 sites adjacent to A46 (only one close to Margidunum) Site 12 (W of Margidunum)	Site 12 (W of Margidunum)
80	Geophys features	UNK					apparent reduction in activity compared to stage 1 survey; concentrations of surface iron objects may reflect areas of recent waste disposal, landfill or building. A further two small enclosures and a number of ring cairns were identified.	Noel, M.J and Hale, D.N. 1993: 'A46 Newark to Widmerpool: further geophysical survey at site 12: stage 1.5' (Wessex Archaeology and GeoQuest Associates)	magnetometry survey	additional survey at site 12 (W of Margidunum), NW of the previous survey	

No.	Evidence of feature type	Period	1st	2nd	3rd	4th	Results	Bibliographic reference	Nature of investigation	Location	Location subdivision
81		RB					1155.00	Zeffert, T., Knight, D. and Badcock, A. 1995: 'Archaeological watching brief of fibre optic cable trenches excavated along the Fosse Way from Saxondale, Nottinghamshire to Swinderby, Lincolnshire' (TPAT)	watching brief during laying of fibre-optic cables	along E side of Fosse way, and across E edge of Margidunum roundabout	Margidunum
82	ditch	RB					1124 ditch	Zeffert, T., Knight, D. and Badcock, A. 1995: 'Archaeological watching brief of fibre optic cable trenches excavated along the Fosse Way from Saxondale, Nottinghamshire to Swinderby, Lincolnshire' (TPAT)	watching brief during laying of fibre-optic cables	along E side of Fosse way, and across E edge of Margidunum roundabout	Margidunum

No.	Evidence of feature type	Period	1st	2nd	3rd	4th	Results	Bibliographic reference	Nature of investigation	Location	Location subdivision
83	Ditch	RB					I151 ditch	Zefferi, T., Knight, D. and Badcock, A. 1995: 'Archaeological watching brief of fibre optic cable trenches excavated along the Fosse Way from Saxondale, Nottinghamshire to Swinderby, Lincolnshire' (TPAT)	watching brief during laying of fibre-optic cables	along E side of Fosse way, and across E edge of Margidunum roundabout	Margidunum
84	Ditch	RB					I126 ditch	Zefferi, T., Knight, D. and Badcock, A. 1995: 'Archaeological watching brief of fibre optic cable trenches excavated along the Fosse Way from Saxondale, Nottinghamshire to Swinderby, Lincolnshire' (TPAT)	watching brief during laying of fibre-optic cables	along E side of Fosse way, and across E edge of Margidunum roundabout	Margidunum

No.	Evidence of feature type	Period	1st	2nd	3rd	4th	Results	Bibliographic reference	Nature of investigation	Location	Location subdivision
85	Ditch	RB					I127 ditch	Zeffer, T., Knight, D. and Badcock, A. 1995: 'Archaeological watching brief of fibre optic cable trenches excavated along the Fosse Way from Saxondale, Nottinghamshire to Swinderby, Lincolnshire' (TPAT)	watching brief during laying of fibre-optic cables	along E side of Fosse way, and across E edge of Margidunum roundabout	Margidunum
86	Ditch	RB					I128 ditch	Zeffer, T., Knight, D. and Badcock, A. 1995: 'Archaeological watching brief of fibre optic cable trenches excavated along the Fosse Way from Saxondale, Nottinghamshire to Swinderby, Lincolnshire' (TPAT)	watching brief during laying of fibre-optic cables	along E side of Fosse way, and across E edge of Margidunum roundabout	Margidunum

No.	Evidence of feature type	Period	1st	2nd	3rd	4th	Results	Bibliographic reference	Nature of investigation	Location	Location subdivision
87	Gully	RB					1130 gully	Zeffert, T., Knight, D. and Badcock, A. 1995: 'Archaeological watching brief of fibre optic cable trenches excavated along the Fosse Way from Saxondale, Nottinghamshire to Swinderby, Lincolnshire' (TPAT)	watching brief during laying of fibre-optic cables	along E side of Fosse way, and across E edge of Margidunum roundabout	Margidunum
88	Gully	RB					1131 gully	Zeffert, T., Knight, D. and Badcock, A. 1995: 'Archaeological watching brief of fibre optic cable trenches excavated along the Fosse Way from Saxondale, Nottinghamshire to Swinderby, Lincolnshire' (TPAT)	watching brief during laying of fibre-optic cables	along E side of Fosse way, and across E edge of Margidunum roundabout	Margidunum

No.	Evidence of feature type	Period	1st	2nd	3rd	4th	Results	Bibliographic reference	Nature of investigation	Location	Location subdivision
89	Wall	RB					1133 wall	Zeffert, T., Knight, D. and Badcock, A. 1995: 'Archaeological watching brief of fibre optic cable trenches excavated along the Fosse Way from Saxondale, Nottinghamshire to Swinderby, Lincolnshire' (TPAT)	watching brief during laying of fibre-optic cables	along E side of Fosse way, and across E edge of Margidunum roundabout	Margidunum
90	Wall	RB					1136 wall and adjacent building debris	Zeffert, T., Knight, D. and Badcock, A. 1995: 'Archaeological watching brief of fibre optic cable trenches excavated along the Fosse Way from Saxondale, Nottinghamshire to Swinderby, Lincolnshire' (TPAT)	watching brief during laying of fibre-optic cables	along E side of Fosse way, and across E edge of Margidunum roundabout	Margidunum

No.	Evidence of feature type	Period	1st	2nd	3rd	4th	Results	Bibliographic reference	Nature of investigation	Location	Location subdivision
91	Wall	RB					1138 wall	Zeffert, T., Knight, D. and Badcock, A. 1995: 'Archaeological watching brief of fibre optic cable trenches excavated along the Fosse Way from Saxondale, Nottinghamshire to Swinderby, Lincolnshire' (TPAT) Zeffert, T., Knight, D. and Badcock, A. 1995: 'Arch	watching brief during laying of fibre-optic cables	along E side of Fosse way, and across E edge of Margidunum roundabout	Margidunum
92	Wall	RB					1141 wall	Zeffert, T., Knight, D. and Badcock, A. 1995: 'Archaeological watching brief of fibre optic cable trenches excavated along the Fosse Way from Saxondale, Nottinghamshire to Swinderby, Lincolnshire' (TPAT)	watching brief during laying of fibre-optic cables	along E side of Fosse way, and across E edge of Margidunum roundabout	Margidunum

No.	Evidence of feature type	Period	1st	2nd	3rd	4th	Results	Bibliographic reference	Nature of investigation	Location	Location subdivision
93	Ditch	RB					1144 ditch packed with gravel	Zeffert, T., Knight, D. and Badcock, A. 1995: 'Archaeological watching brief of fibre optic cable trenches excavated along the Fosse Way from Saxondale, Nottinghamshire to Swinderby, Lincolnshire' (TPAT)	watching brief during laying of fibre-optic cables	along E side of Fosse way, and across E edge of Margidunum roundabout	Margidunum
94	Ditch	RB					1147 ditch	Zeffert, T., Knight, D. and Badcock, A. 1995: 'Archaeological watching brief of fibre optic cable trenches excavated along the Fosse Way from Saxondale, Nottinghamshire to Swinderby, Lincolnshire' (TPAT)	watching brief during laying of fibre-optic cables	along E side of Fosse way, and across E edge of Margidunum roundabout	Margidunum

No.	Evidence of feature type	Period	1st	2nd	3rd	4th	Results	Bibliographic reference	Nature of investigation	Location	Location subdivision
95	Gully	RB					1153 gully	Zeffert, T., Knight, D. and Badcock, A. 1995: 'Archaeological watching brief of fibre optic cable trenches excavated along the Fosse Way from Saxondale, Nottinghamshire to Swinderby, Lincolnshire' (TPAT)	watching brief during laying of fibre-optic cables	along E side of Fosse way, and across E edge of Margidunum roundabout	Margidunum
96	Ditch	RB					1120 ditch	Zeffert, T., Knight, D. and Badcock, A. 1995: 'Archaeological watching brief of fibre optic cable trenches excavated along the Fosse Way from Saxondale, Nottinghamshire to Swinderby, Lincolnshire' (TPAT)	watching brief during laying of fibre-optic cables	along E side of Fosse way, and across E edge of Margidunum roundabout	Margidunum

No.	Evidence of feature type	Period	1st	2nd	3rd	4th	Results	Bibliographic reference	Nature of investigation	Location	Location subdivision
97	Ditch	RB					1119 ditch	Zeffer, T., Knight, D. and Badcock, A. 1995: 'Archaeological watching brief of fibre optic cable trenches excavated along the Fosse Way from Saxondale, Nottinghamshire to Swinderby, Lincolnshire' (TPAT)	watching brief during laying of fibre-optic cables	along E side of Fosse way, and across E edge of Margidunu m roundabout	Margidunum
98	Ditch	RB					1122 ditch	Zeffer, T., Knight, D. and Badcock, A. 1995: 'Archaeological watching brief of fibre optic cable trenches excavated along the Fosse Way from Saxondale, Nottinghamshire to Swinderby, Lincolnshire' (TPAT)	watching brief during laying of fibre-optic cables	along E side of Fosse way, and across E edge of Margidunu m roundabout	Margidunum

No.	Evidence of feature type	Period	1st	2nd	3rd	4th	Results	Bibliographic reference	Nature of investigation	Location	Location subdivision
99	Rampart	RB					1109 clay rampart	Zeffer, T., Knight, D. and Badcock, A. 1995: 'Archaeological watching brief of fibre optic cable trenches excavated along the Fosse Way from Saxondale, Nottinghamshire to Swinderby, Lincolnshire' (TPAT)	watching brief during laying of fibre-optic cables	along E side of Fosse way, and across E edge of Margidunum roundabout	Margidunum
100	Rampart	RB					1117 clay rampart layers	Zeffer, T., Knight, D. and Badcock, A. 1995: 'Archaeological watching brief of fibre optic cable trenches excavated along the Fosse Way from Saxondale, Nottinghamshire to Swinderby, Lincolnshire' (TPAT)	watching brief during laying of fibre-optic cables	along E side of Fosse way, and across E edge of Margidunum roundabout	Margidunum

No.	Evidence of feature type	Period	1st	2nd	3rd	4th	Results	Bibliographic reference	Nature of investigation	Location	Location subdivision
101	Wall	RB					1114 wall robber trench	Zeffer, T., Knight, D. and Badcock, A. 1995: 'Archaeological watching brief of fibre optic cable trenches excavated along the Fosse Way from Saxondale, Nottinghamshire to Swinderby, Lincolnshire' (TPAT)	watching brief during laying of fibre-optic cables	along E side of Fosse way, and across E edge of Margidunum roundabout	Margidunum
102	Wall	RB					1112 town wall	Zeffer, T., Knight, D. and Badcock, A. 1995: 'Archaeological watching brief of fibre optic cable trenches excavated along the Fosse Way from Saxondale, Nottinghamshire to Swinderby, Lincolnshire' (TPAT)	watching brief during laying of fibre-optic cables	along E side of Fosse way, and across E edge of Margidunum roundabout	Margidunum

No.	Evidence of feature type	Period	1st	2nd	3rd	4th	Results	Bibliographic reference	Nature of investigation	Location	Location subdivision
103	Wall	RB		Y	Y		1111 town wall associated with Antonine and 3rd or possibly 4th century sherds.	Zeffer, T., Knight, D. and Badcock, A. 1995: 'Archaeological watching brief of fibre optic cable trenches excavated along the Fosse Way from Saxondale, Nottinghamshire to Swinderby, Lincolnshire' (TPAT)	watching brief during laying of fibre-optic cables	along E side of Fosse way, and across E edge of Margidunum roundabout	Margidunum
104	Cropmark	IA RB					Aerial photograph	Knight, D. 1994 Archaeological assessment of Crown Estate Lands near Bingham, Nottinghamshire Fig. 23	Aerial photographs	Parson's Hill	
105		MOD					only modern road building layers encountered (trench cut into modern embankment)	Zeffer, T., Knight, D. and Badcock, A. 1995: 'Archaeological watching brief of fibre optic cable trenches excavated along the Fosse Way from Saxondale, Nottinghamshire to Swinderby, Lincolnshire' (TPAT)	watching brief during laying of fibre-optic cables	SW of roundabout	SW of roundabout

No.	Evidence of feature type	Period	1st	2nd	3rd	4th	Results	Bibliographic reference	Nature of investigation	Location	Location subdivision
106	Rampart and wall	RB				Y	rampart associated with S defences (compact red clay); limestone rubble bands interpreted as partially robbed footings of outer defensive wall. Details G 99-100.	Zeffer, T., Knight, D. and Badcock, A. 1995: 'Archaeological watching brief of fibre optic cable trenches excavated along the Fosse Way from Saxondale, Nottinghamshire to Swinderby, Lincolnshire' (TPAT)	watching brief during laying of fibre-optic cables	along E side of Fosse way, and across E edge of Margidunum roundabout, 1109-1115, 1118, 1111, 1112, 1114 and 1117	across E edge of roundabout
107	Ditch	RB					RB ditches and walls were identified, relating to activity within Margidunum. Details below	Zeffer, T., Knight, D. and Badcock, A. 1995: 'Archaeological watching brief of fibre optic cable trenches excavated along the Fosse Way from Saxondale, Nottinghamshire to Swinderby, Lincolnshire' (TPAT)	watching brief during laying of fibre-optic cables	along E side of Fosse way, and across E edge of Margidunum roundabout	NE of roundabout

No.	Evidence of feature type	Period	1st	2nd	3rd	4th	Results	Bibliographic reference	Nature of investigation	Location	Location subdivision
108	Pottery scatter	MOD					only modern road building layers encountered south west of roundabout (trench cut into modern embankment)	Zeffer, T., Knight, D. and Badcock, A. 1995: 'Archaeological watching brief of fibre optic cable trenches excavated along the Fosse Way from Saxondale, Nottinghamshire to Swinderby, Lincolnshire' (TPAT)	watching brief during laying of fibre-optic cables. General location details below.	along E side of Fosse way, and across E edge of Margidunum roundabout	N of Margidunum
109	Pottery scatter	RB	Y	Y	Y	Y	Sherds of RB pottery from cable trench, mostly unstratified, mid 1st to 3rd/4th C	Zeffer, T., Knight, D. and Badcock, A. 1995: 'Archaeological watching brief of fibre optic cable trenches excavated along the Fosse Way from Saxondale, Nottinghamshire to Swinderby, Lincolnshire' (TPAT)	122 sherds of RB pottery from cable trenches. 42 from trench 11 mostly unstratified, mid 1st to 3rd/4th. General location details below	along E side of Fosse way, and across E edge of Margidunum roundabout	Margidunum
110	Linear cropmarks	UNK					some linear cropmarks in Field 5335	Knight, D. 1994: 'Archaeological assessment of Field OS 3057, Chapel Lane, Bingham, and Field OS 5335, Moorbridge Lane, Bingham' (TPAT)	desktop assessment	N of Bingham	

No.	Evidence of feature type	Period	1st	2nd	3rd	4th	Results	Bibliographic reference	Nature of investigation	Location	Location subdivision
111	Road	RB		Y			Stratified deposits; pebble layer at base possibly part of Roman Fosse Way; flanked on SE side by a ditch yielding early 2nd C pottery.	Priest, V. and Knight, D. 1995: 'Report on archaeological investigations at the Margidunum roundabout, East Bridgford, Nottinghamshire' (TPAT)	investigation of 6 small trenches excavated for road signs. Trench 1	N edge of Margidunum roundabout, and along road to N. Trench 01	Trench 01 (NE of roundabout on E side of Fosse Way)
112	Pottery scatter	RB	Y	Y	Y		modern deposits and natural mudstone encountered; 2 RB body sherds from 04 (1 late 1st/early 2nd C, the other probably later RB)	Priest, V. and Knight, D. 1995: 'Report on archaeological investigations at the Margidunum roundabout, East Bridgford, Nottinghamshire' (TPAT)	investigation of 6 small trenches excavated for road signs.	N edge of Margidunum roundabout, and along road to N. Trench 02-06	Trenches 02-06
113	Ditch	RB	Y	Y	Y		Trench 11 Ditches and pit deposits from modern road construction; 8 RB sherds from topsoil in trenches 01-04 and 12, 2 of which were datable (late 1st C and 3rd C)	Priest and Knight 1998		Margidunum town	
114	Metalling	RB		Y			Stratified deposits (0.5m from surface) including a pebble layer interpreted as metallated surface of Roman Fosse Way and roadside ditch with pottery belonging to the first half of the 2nd century in trench 01.	Priest, V. and Knight, D. 1998: 'Report on a watching brief at Margidunum, East Bridgford, Nottinghamshire, March 1996' (TPAT)	watching brief on foundation trenches for new road signs	On and around Margidunum traffic island. Trench 01	Trench 01 (immediately N of roundabout)

No.	Evidence of feature type	Period	1st	2nd	3rd	4th	Results	Bibliographic reference	Nature of investigation	Location	Location subdivision
115	Ditch	RB		Y	Y		High density of intercutting Romano-British features, including several ditches and at least one pit in trench 11. Feature fills contained 2nd/3rd C sherds, with two (probably residual) late 1st/early 2nd C sherds.	Priest, V. and Knight, D. 1998: 'Report on a watching brief at Margidunum, East Bridgeford, Nottinghamshire, March 1996' (TPAT)	watching brief on foundation trenches for new road signs	On and around Margidunum traffic island. Trench 11+L9	Trench 11 (NE side of traffic island)
116	None	UNK					Trenches only to 0.6m depth; no archaeological deposits encountered	Priest, V. and Robson, J. 1998: 'Fosse Way Road Signs: report on archaeological investigations along the A46 from Leicestershire to Lincolnshire' (TPAT)	watching brief on foundation trenches for new road signs	Newark-Lincoln; no test-pits in Margidunum area	
117	Ring ditch	UNK					Possible ring ditch, apparently truncated by Fosse Way	Knight, D., Hunt, C. and Malone, S. 1999: 'Auger Survey of Crown Estate Lands near Bingham, Nottinghamshire' (TPAU)	air photographic assessment	between Margidunum and Bingham	
118	Alluvium						Wet-ground deposits: peat and alluvium; colluvium on slopes of basin; no evidence of sub-surface islands	Knight, D., Hunt, C. and Malone, S. 1999: 'Auger Survey of Crown Estate Lands near Bingham, Nottinghamshire' (TPAU)	auger survey	between Margidunum and Bingham	

No.	Evidence of feature type	Period	1st	2nd	3rd	4th	Results	Bibliographic reference	Nature of investigation	Location	Location subdivision
119	Pottery scatter	EB	Y	Y	Y	Y	61 out of 78 contexts were modern, 15 undated. On the S, W and NW sides of the roundabout a deposit of fly-ash deposited during construction of the roundabout appeared likely to preserve any archaeological remains below. 181 unstratified sherds of RB pottery and tile fragments were found.	Elliot, L. 2000: 'Margidunum, Bingham roundabout, Nottinghamshire. A report on the archaeological watching brief carried out during the renewal of the road lighting and cabling' (TPAU)	watching brief on lantern holes and cable trench	Trench 189	
120	Stone building footings	RB	Y	Y			2 contexts of probable RB date in trench 151, 0.85m below ground surface (form unclear in lantern hole); aligned skerry blocks possibly representing building foundations; oyster shell and 2 sherds RB pottery stratified	Elliot, L. 2000: 'Margidunum, Bingham roundabout, Nottinghamshire. A report on the archaeological watching brief carried out during the renewal of the road lighting and cabling' (TPAU)	watching brief on lantern holes and cable trench Trench 151	Margidunum roundabout. Hole 151+L17	hole 151 (SW side of roundabout)

No.	Evidence of feature type	Period	1st	2nd	3rd	4th	Results	Bibliographic reference	Nature of investigation	Location	Location subdivision
121	Geophys features	RB					Geophysical anomalies in field 6100	Appleton, E. Brown, J., Kinsley, G., Knight, D. and Leary, R. 2003: 'A46 Newark to Widmerpool improvement. Geophysical survey, fieldwalking and landscape interpretation at Margidunum, Nottinghamshire (TPAU)	magnetometry survey	Field 6100	
122	Geophys features	RB					Geophysical anomalies in field 7111	Appleton, E. Brown, J., Kinsley, G., Knight, D. and Leary, R. 2003: 'A46 Newark to Widmerpool improvement. Geophysical survey, fieldwalking and landscape interpretation at Margidunum, Nottinghamshire (TPAU)	magnetometry survey	Field 7111	

No.	Evidence of feature type	Period	1st	2nd	3rd	4th	Results	Bibliographic reference	Nature of investigation	Location	Location subdivision
123	Road	RB					Marked camber in field west of existing lay-by, continuing into arable fields to SE. May derive from agger of Roman road, or from a plough headland.	Appleton, E. Brown, J., Kinsley, G., Knight, D. and Leary, R. 2003: 'A46 Newark to Widmerpool improvement. Geophysical survey, fieldwalking and landscape interpretation at Margidunum, Nottinghamshire (TPAU)	walkover survey	potential archaeological sites on the off-line route. A6097 Margidunum-Gunthorpe	A6097 Margidunum-Gunthorpe
124	linear cropmarks	RB					two groups of linear cropmarks seen in crop, probably indicating robber-trenches along wall-lines (apparently not plotted?)	Appleton, E. Brown, J., Kinsley, G., Knight, D. and Leary, R. 2003: 'A46 Newark to Widmerpool improvement. Geophysical survey, fieldwalking and landscape interpretation at Margidunum, Nottinghamshire (TPAU)	cropmarks seen at ground level	field 8949 immediately W of Margidunum roundabout	

No.	Evidence of feature type	Period	1st	2nd	3rd	4th	Results	Bibliographic reference	Nature of investigation	Location	Location subdivision
125	Lithics	PRE					low density of lithic material across area; datable pieces Mesolithic-Bronze Age	Appleton, E. Brown, J., Kinsley, G., Knight, D. and Leary, R. 2003: 'A46 Newark to Widmerpool improvement. Geophysical survey, fieldwalking and landscape interpretation at Margidunum, Nottinghamshire (TPAU)	fieldwalking; lithics	six fields along off-line route, NW, W, SW of Margidunum	
126	Pottery scatter	PRE					fire-cracked pebbles and hand-made sherds in two clusters: fields 7111/0018 and field 4437b at NE end of villa	Appleton, E. Brown, J., Kinsley, G., Knight, D. and Leary, R. 2003: 'A46 Newark to Widmerpool improvement. Geophysical survey, fieldwalking and landscape interpretation at Margidunum, Nottinghamshire (TPAU)	fieldwalking; hand-made pot and fire-cracked sherds	six fields along off-line route, NW, W, SW of Margidunum. fields 7111/0018; field 4437b	fields 7111/0018; field 4437b

No.	Evidence of feature type	Period	1st	2nd	3rd	4th	Results	Bibliographic reference	Nature of investigation	Location	Location subdivision
127	Pottery scatter	RB	Y	Y	Y	Y	major concentration of building material over villa site; marked fall-off away from the Fosse Way and the villa. Brick and tile, box flue tiles, three possible tesserae, slate, <i>opus signinum</i> , plaster (two painted fragments), bent nails, fragments of stone	Appleton, E. Brown, J., Kinsley, G., Knight, D. and Leary, R. 2003: 'A46 Newark to Widmerpool improvement. Geophysical survey, fieldwalking and landscape interpretation at Margidunum, Nottinghamshire (TPAU)	fieldwalking; R-B building material	six fields along off-line route, NW, W, SW of Margidunum. field 4437b (villa)	field 4437b (villa)
128	Pottery scatter	RB	Y	Y	Y	Y	major concentration of material over villa site; also large quantities in 7111/0018 (though BM scarce). Strong bias towards late 3rd-4th C but with significant quantities of earlier material (1st-2nd C).	Appleton, E. Brown, J., Kinsley, G., Knight, D. and Leary, R. 2003: 'A46 Newark to Widmerpool improvement. Geophysical survey, fieldwalking and landscape interpretation at Margidunum, Nottinghamshire (TPAU)	fieldwalking; R-B pot	six fields along off-line route, NW, W, SW of Margidunum. Concentrations in field 4437b (villa) and 7111/0018	concentrations in field 4437b (villa) and 7111/0018

No.	Evidence of feature type	Period	1st	2nd	3rd	4th	Results	Bibliographic reference	Nature of investigation	Location	Location subdivision
129	Pottery scatter	MED					Low density background scatter consistent with manuring of arable fields from middens including domestic debris.	Appleton, E. Brown, J., Kinsley, G., Knight, D. and Leary, R. 2003: 'A46 Newark to Widmerpool improvement. Geophysical survey, fieldwalking and landscape interpretation at Margidunum, Nottinghamshire (TPAU)	fieldwalking: med/post-med pot	six fields along off-line route, NW, W, SW of Margidunum	
130	Mag sus anomalies	RB					Enhanced susceptibility over villa, at two locations adjacent to the Fosse Way (fields 6100 and 8949), and adjacent to RAF Newton air-base. (Peak in field 8949 apparently corresponding to cropmarks observed on ground)	Appleton, E. Brown, J., Kinsley, G., Knight, D. and Leary, R. 2003: 'A46 Newark to Widmerpool improvement. Geophysical survey, fieldwalking and landscape interpretation at Margidunum, Nottinghamshire (TPAU)	magnetic susceptibility survey	NW, W, SW of Margidunum	

No.	Evidence of feature type	Period	1st	2nd	3rd	4th	Results	Bibliographic reference	Nature of investigation	Location	Location subdivision
131	Geophys features	RB					Series of lines of enhanced response (robber trenches?) indicating ranges of buildings around a walled courtyard. Area of co-aligned rectilinear features to NE.	Appleton, E. Brown, J., Kinsley, G., Knight, D. and Leary, R. 2003: 'A46 Newark to Widmerpool improvement. Geophysical survey, fieldwalking and landscape interpretation at Margidunum, Nottinghamshire (TPAU)	detailed magnetometry survey	S of Newton Lane, W of A46 field 4437 (villa)	field 4437 (villa)
132	Geophys features	RB					occasional curvilinear marks and clear linear features parallel and perpendicular to Fosse Way.	Appleton, E. Brown, J., Kinsley, G., Knight, D. and Leary, R. 2003: 'A46 Newark to Widmerpool improvement. Geophysical survey, fieldwalking and landscape interpretation at Margidunum, Nottinghamshire (TPAU)	detailed magnetometry survey	S of Newton Lane, W of A46 fields 6100/3908 (W of Fosse Way)	fields 6100/3908 (W of Fosse Way)
133	Buildings	RB					Foundations, a "pavement", a "great building" and a number of coins.	Stukeley, W. 1724 Itinerarium Curiosum (First edition)	Antiquarian inspection		
134	Prehistoric artefacts	Late Bronze Age					Two Late Bronze Age socketed axes found in the vicinity of Margidunum	Stapleton, A, 1911 The exploration of Margidunum, Guardian 11/2/1911	Antiquarian inspection		

No.	Evidence of feature type	Period	1st	2nd	3rd	4th	Results	Bibliographic reference	Nature of investigation	Location	Location subdivision
135	Artefacts and burials	RB					Two possible coin hoards, human skeletons, tesserae, hypocaust tiles and other building material with pottery.	Standish, J. 1908 Margidunum Transactions of the Thoroton Society 12. 34-46	Antiquarian inspection		
136	Prehistoric artefacts	Prehistoric					A beaded copper alloy torc	Knight, D. and Kinsley, G. 1992 Archaeology of the Fosse Way Vol 2	Found south of the Fosse on the east side of the town		
137	Saxon brooch	Saxon					Anglo-Saxon brooch of square-headed small-long type	Standish, J. 1908 Margidunum Transactions of the Thoroton Society 12. 34-46	Antiquarian inspection		

12 Appendix 1 Attributes of villas in the East Midlands

County	Site	Villa type	Within enclosure	Beside enclosure	Mosaics, tesserae, painted plaster	Hypocaust	Baths adjacent	Ancillary buildings within enclosure	Ancillary buildings outside enclosure	Kilns	Metal working	Ovens/hearths	Temple/shrine	Burials	Road	Water features	IA remains	AS burials	AS remains	Earlier RB remains
Leicestershire	Barkby Thorpe	Buildings		Y to N	Y		Y								Y approach road					
Leicestershire	Barrow on Soar	Roof slates																Y		
Leicestershire	Cold Newton	Cropmark + geophysical anomaly: building stone, slate	Y (65mx75m) + pos outer courtyard																	
Leicestershire	Drayton	stone footings	? Ditch		Y	Y												Y		
Leicestershire	Empingham 1	Rectangular building	Y + courtyard		Y			Y	Y		Y - furnace	Y		Y		Y				

County	Site	Villa type	Within enclosure	Beside enclosure	Mosaics, tesserae, painted plaster	Hypocaust	Baths adjacent	Ancillary buildings within encl	Ancillary buildings outside encl	Kilns	Metal working	Ovens/hearths	Temple/shrine	Burials	Road	Water features	IA remains	AS buildings	AS remains	Earlier RB remains
Leicestershire	Empingham 2	Aisled building later in stone									Y	Y		Y		Y		Y - middle AS cut into building		
Leicestershire	Great Casterton	Aisled barn became courtyard villa	Y		Y	Y	Y	Y					Part of circular lead tank	OS town		Y		OS town		
Leicestershire	Norfolk Street	Winged corridor villa			Y							Y				Y				
Leicestershire	Lockington	Villa	Y	Y				Y aisled barn									Cropmark enc with fieldwalked Iron Age pot			
Leicestershire	Medbourne	Villa - corridor			Y		Y?										Y		Y	
Leicestershire	Sapcote	Villa - ask ULAS			Y															

County	Site	Villa type	Within enclosure	Beside enclosure	Mosaics, tesserae, painted plaster	Hypocaust	Baths adjacent	Ancillary buildings within encl	Ancillary buildings outside encl	Kilns	Metal working	Ovens/hearths	Temple/s shrine	Burials	Road	Water features	IA remains	AS burials	AS remains	Earlier RB remains
Leicestershire	Scaford	FW suggests courtyard or winged corridor type			Y	Y														
Leicestershire	Thistleton	2 villa buildings in fan courtyard	Y					raised house with mosaic												
Leicestershire	Tixover	Fragmentary plan			Y															
Leicestershire	West Langton	2 blocks- N-S block 20x48 and E-W block Y2-33x46m			Y	blue tiles									Y					
Leicestershire	Whitwell																			
Leicestershire	Wymondham				Y	Y								Y		Y				
Lincolnshire	Brattleby	building debris			roof tile											Y				
Lincolnshire	Burton	building debris			Y											Aqueduct				

County	Site	Villa type	Within enclosure	Beside enclosure	Mosaics, tesserae, painted plaster	Hypocaust	Baths adjacent	Ancillary buildings within encl	Ancillary buildings outside encl	Kilns	Metalworking	Ovens/hearths	Temple/s shrine	Burials	Road	Water features	IA remains	AS burials	AS remains	Earlier RB remains
Lincolnshire	Claxby	Villa			2					Y tile + Y pot										
Lincolnshire	Denton	Aisled building then in stone					Y Y00 yards to south west										2 ditches under N aisle - date unknown	Y		
Lincolnshire	Greetwell	Courtyard villa? Or winged			Y		Y									Y				
Lincolnshire	Kirmond-le-Mire				Y															
Lincolnshire	Long Bennin ton	corridor villa Y?						Y		Y tile	Y crucible pre building	Y	?				Y			
Lincolnshire	Newton and Haceby	corridor villa			Y		Y													

County	Site	Villa type	Within enclosure	Beside enclosure	Mosaics, tesserae, painted plaster	Hypocaust	Baths adjacent	Ancillary buildings within encl	Ancillary buildings outside encl	Kilns	Metal working	Ovens/hearths	Temples/shrine	Burials	Rad	Water features	IA remains	AS burials	AS remains	Earlier RB remains
Lincolnshire	Norton Disney	L shaped villa? Inside defensive ditches	Y - ditches contain 3rd c pottery but later levelled with material including painted plaster		Y		Y		Gatehouse?	? Wasters + two kiln props		Y				Y				Y - 1st C ditches, gullies and post holes
Lincolnshire	Roxby				Y															
Lincolnshire	Sapperton	Pot and building material																		
Lincolnshire	Scampton	courtyard villa			Y		7	6	Y					Y						
Lincolnshire	Stow	Corridor excavated			Y															
Lincolnshire	Torksey				Y?															
Lincolnshire	Walesby	Cropmarks+ excavation	Y			Y	?			Y?				cremation		Y				
Nottinghamshire	Barton-in-Fabis				Y				Y											

County	Site	Villa type	Within enclosure	Beside enclosure	Mosaics, tesserae, painted plaster	Hypocaust	Baths adjacent	Ancillary buildings within encl	Ancillary buildings outside encl	Kilns	Metalworking	Ovens/hearth	Temple/shrine	Burials	Road	Water features	IA remains	AS burials	AS remains	Earlier RB remains
Nottinghamshire	Car Colston	Winged corridor villa	Y																	
Nottinghamshire	Cromwell	Winged corridor villa	Y					Y - at least 2 ph buildings									Y?			Y?
Nottinghamshire	East Stoke				Y															
Nottinghamshire	Epperstone	Rectangular aisled villa			Y		Y										material			gullies
Nottinghamshire	Mansfield Woodhouse	winged corridor villa + aisled barn			Y	Y	Y?	probably				Y		Y to south, late RB stone sepulchres						Earlier ditched encl + hut circles - dated 1st and 2nd
Nottinghamshire	Shelford	pot			Y															
Nottinghamshire	Southwell	Courtyard villa			Y	Y	Y											Y		
Nottinghamshire	Styrupp with Oldcotes				Y															
Nottinghamshire	Thurgarton	Aisled barn									Y in room			Y in building						2 postholes

13 Appendix 2 Attributes of Romano-British towns in the East Midlands

wn	Fig.	On road	In Antonine Itinerary	Focus	Strip houses with yards	Rectilinear houses in enclosed plots	Developed, Romanised buildings on frontage	Developed, Romanised buildings back from frontage	Rectilinear building fragmentary plan	Industry/craft	Temple/ritual	Mansio	Bath house	Defences	Cemeteries/burials	Hinterland villa	Hinterland peasant settlement	Fort	Other	LA	AS
Thorpe		MAJ	Y	UNK	?			Y?, OD	ID	Bronze working, slag, lead working.	Sculpture found beside mortared structure + chi-rho casket, snail and three horned bull heads	Possible - late substantial building beside wall		Ditched then wall+ditch	Undated inhumation	Probable villa at Elston SK 760Y48 55	Cropmarks near Thorpe of IA or RB date	Y	Quarry pits for ?construction of Fosse Way	Circular and rectangular structures	AS metalwork
Brough		MAJ	Y	UNK		Probable from cropmarks				Quarry pits				Y	Inhumation including lead coffins		Field system to north-east	Parade helmet for ?construction of Fosse Way	Quarry pits for ?construction of Fosse Way	Pre defences enclosure system with possible round houses, pos LA	Settlement metalwork, probable cemetery
Littleborough		MAJ	Y	UNK					Y ID	Possibly pottery - waster mortarium found. Coppersmith and oculist implied by inscription				Y? uncertain date but probably Roman	Y-cremation s ?ID				NB there is only evidence for the late Roman town. The early remains are hidden by alluviation.	N	

wn	Fig.	On road	In Antonine Itinerary	Focus	Strip houses with yards	Rectilinear houses in enclosed plots	Developed, Romanised buildings on frontage	Developed, Romanised buildings back from frontage	Rectilinear building fragment on plan	Industry/craft	Temple/ritual	Mansion	Bath house	Defences	Cemeteries/burials	Hinterland villa	Hinterland peasant settlement	Fort	Other	IA	AS
Derby		MAJ	Y	UNK				Y- ID and OD	Y stone footed colonnaded buildings ID + OD and rectilinear buildings associated with industrial complex	Pottery kilns and metalworking		Pos	Y	Y	Y OD	Ockbrook, Barton-under-Needwood	?	Y		N	Burials
Ancaster		MIN	N	UNK	IS and OS - details not published					Stone masons?, pottery kiln	Inscriptional evidence			Y	Y			Y		Settlement	Cremation cemetery. Also cemetery with AS and RB burials
Horncastle	23	MIN	N	UNK					ID and OD					Y	C+ I, including lead coffins						
Medbourne		MIN	N	UNK		Probable			Y	Metalworking				N		Y				Settlement	Settlement and possible inhumation
Great Casterton	22	MAJ	N	UNK					Y	Pottery kilns, slag, bronze working		Y bath house	Y ID	Y	Cemetery AS and RB	Y		Y		IA pottery	Cemetery

wn	Fig.	On road	In Antonine Itinerary	Focus	Strip houses with yards	Rectilinear houses in enclosed plots	Developed, Romanised buildings on frontage	Developed, Romanised buildings back from frontage	Rectilinear building fragments on plan	Industry/craft	Temple/ritual	Mansio	Bath house	Defences	Cemeteries/burials	Hinterland villa	Hinterland peasant settlement	Fort	Other	IA	AS
Hibalds Low	24	MAJ	N	N	Y	Y		Y		Quarry,	Bronze figurine of Jupiter			N	Y - some at back of building plots	Y					
Towcester	25	MAJ	Y	Temple	Y		Y	Y ID and OD	Y	Smithing and pottery production. Also smithing and lead working in suburbs associated with round houses.	Temple	?	ID	Y	Y	Y		Implied by name, legionary sword mount and other metal work	Aqueduct		
Alcester	26	MAJ						Y ID and OD		Leather working, ?filery, metalworking and ?pottery shop	Epona graffito, Celtic horse goddess and altars+LY	? large 2nd building OD	? OD	Y	Y	N		Y	An empty gravelled area of suburbs thought to be open market. Unusually rich houses, possibly because no villas located in vicinity. Possible public granary.	Y	

wn	Fig.	On road	In Antonine Itinerary	Focus	Strip houses with yards	Rectilinear houses in enclosed plots	Developed, Romanised buildings on frontage	Developed, Romanised buildings back from frontage	Rectilinear building fragmentary plan	Industry/craft	Temple/ritual	Mansio	Bath house	Defences	Cemeteries/burials	Hinterland villa	Hinterland peasant settlement	Fort	Other	IA	AS
Sapperton	2Y	MIN	Y	?	Y (some with painted plaster walls at rear)					Stone quarry pits. Metalworking in yards of buildings. Soap making	Y altar found near large circular geophysical anomaly. Also one building with small apse in which three infant burials were found, possibly a shrine			N		Y				Pottery-settlement nearby	Possible grubenhäuser and late burial
Tripontium Caves Inn		MAJ	Y	UNK				Y OD	Y	Iron		Y? OD	Y ● OD	Y	Y				Military skillet		
Venona High Cross		MAJ	Y	UNK			IS?		Y	Iron	Probable			Y		Y					
Irchester	27	MIN?	N	Temple		Y	Y	Y		Pottery kiln,	Temple + fragments of sculptures from a temple				Y			?		Settlement	

wn	Fig.	On road	In Antonine Itinerary	Focus	Strip houses with yards	Rectilinear houses in enclosed plots	Developed, Romanised buildings on frontage	Developed, Romanised buildings back from frontage	Rectilinear building fragmentary plan	Industry/craft	Temple/ritual	Mansio	Bath house	Defences	Cemeteries/burials	Hinterland villa	Hinterland peasant settlement	Fort	Other	IA	AS
Durobrivae	Y9	MAJ	Y	Temple and courtyard buildings	Y ID OD	Y ID OD	Y ID OD	Y ID OD		Pottery kilns, iron and bronze working and leather working. Probable mosaic school. Goldsmiths weights and moulds for forged coins also present	Temple ID and possible shrine OD	Y ID		Y	Y	Y	Y	Y	Suburbs continue across river. Mill		
Ashton	20	MIN	N	?	Y	Y	Y			Metalworking	Lead tanks - one with chi-rho			N	Y					Artefacts present	
Mancetter		MAJ	Y	UNK					Y	Pottery, glass, metal				Y	Y			Y			
Wall		MAJ	Y	UNK					One timber building ID	Iron and copper working	Shrine possibly under mansio	Y OD next to baths	Y	Y	Y			Y			

14 Appendix 3: Summary of Key Sources

This appendix provides a list the key primary sources listed in the gazetteer for fieldwork at Margidunum, referenced to the mapping supplied mainly in Figs. 1 and 2, and occasionally alternatively in Figs. 32 and 33.

The sources are listed in order of publication, with circumstances of the commission of the work where known.

Pryce 1911

- Fig. 2 1911 trenches; 1911 earthworks

OS map 1911

- Fig. 33 inhumations

Oswald 1927 Margidunum

- Fig. 2 Oswald trenches 1911-1936

Oswald JRS 31 schola

- Fig. 2 Oswald trenches 1911-1936

Oswald F The commandant's house

- Fig. 2 Oswald trenches 1911-1936

Oswald 1952 Traverse

- Fig. 2 Oswald trenches 1911-1936

Todd 1969 (rescue excavation by University of Nottm)

- Todd trenches

Knight & Kinsley 1992 (for English Heritage; site prospecting pre road)

- Fig. 1 RB pot scatter; cropmark plots; trenches/test pits 1992
- Fig. 2 1992 Trenches

Knight & Malone 1993 (for Severn Trent Water; rescue excavation)

- Fig. 1 auger survey
- Fig. 32 RB pot scatter

Kinsley 1993 FWP3 (for English Heritage; site prospecting pre road)

- Fig. 1 alluvium, auger survey

Noel & Hale 1993 geophys (ultimately for Department of Transport; site prospecting pre road)

- Fig. 1 Mag survey 1993

Zeffert Knight & Badcock 1995 (for Diamond Cable; rescue excavation)

- Fig. 2 cable trenches 1995 & 2000

Knight 1994 (for Crown Estates)

- Fig. 32 no 104 cropmark

Knight 1994 field 3057 (for Crown Estates)

- Fig. 32 no 110 cropmark

Priest & Knight 1995 (for Nottinghamshire Consulting Engineers; rescue excavation/watching-brief)

- Fig. 2 1995 trenches

Priest & Knight 1998 roundabout (for Nottinghamshire Consulting Engineers; rescue excavation/watching-brief)

- Fig. 2 1995 trenches

Priest & Robson 1998 (for Nottinghamshire Consulting Engineers; rescue excavation/watching-brief)

- F33 no 116
- Knight Hunt & Malone 1999 (Crown Estates)

- Fig. 32 no 117, 118

Elliott 2000 lights and cables (for Nottinghamshire County Council; watching-brief)

- Fig. 2 cable trenches 1995 and 2000

Appleton et al 2003 (for KBR, prospecting pre road)

Fig. 1 RB pot scatter (areas adjacent to A46)

Stukeley 1724

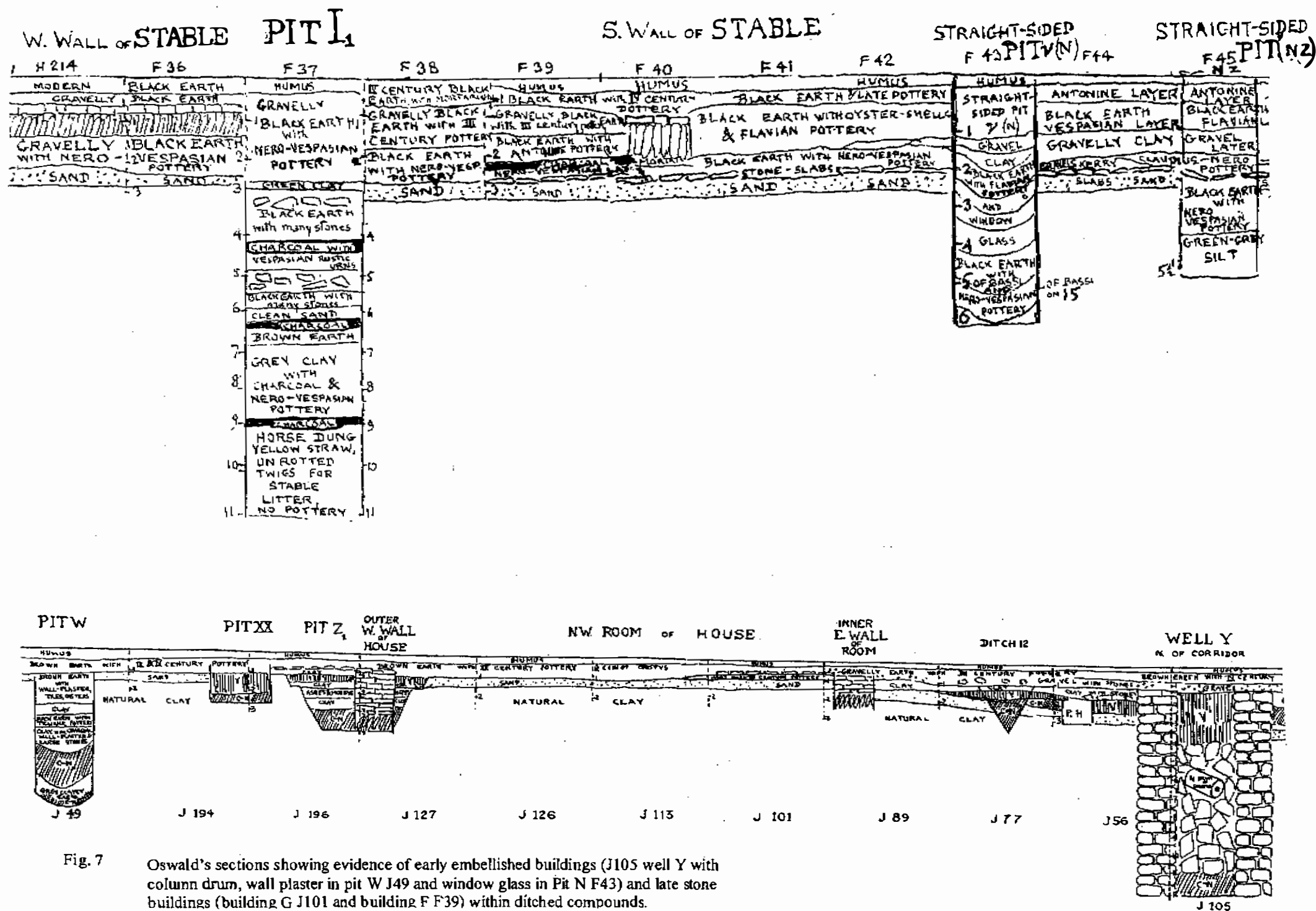
- Not precisely located

Stapleton 1911

- Not precisely located

Standish 1908

- Not precisely located



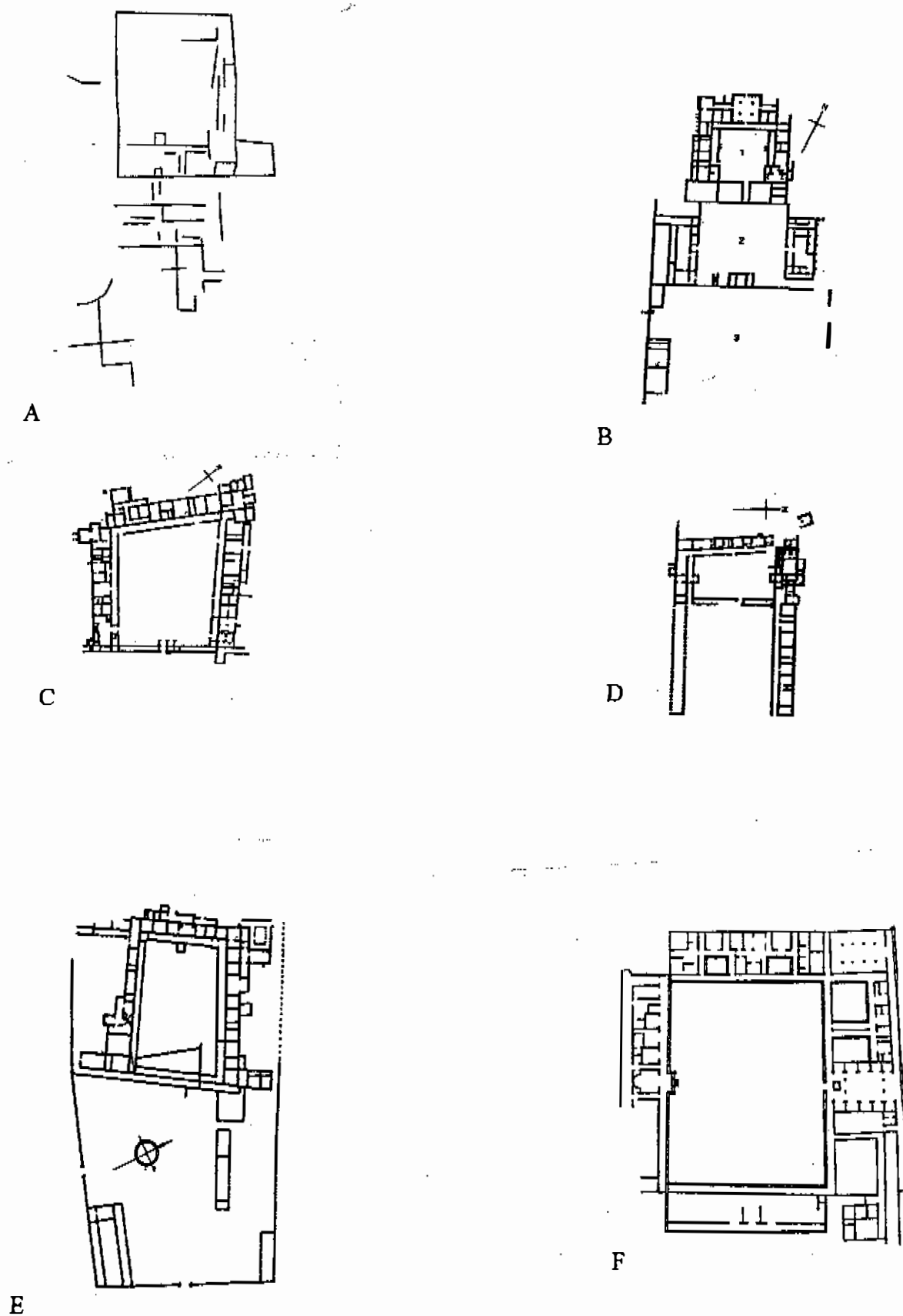


Fig. 8 Margidunum villa geophysical anomalies compared with plans of courtyard villas. A Margidunum, B Woodchester, C North Leigh, D Chedworth, E Bignor, F Fishbourne. All Hingley 1984. 1:3000.

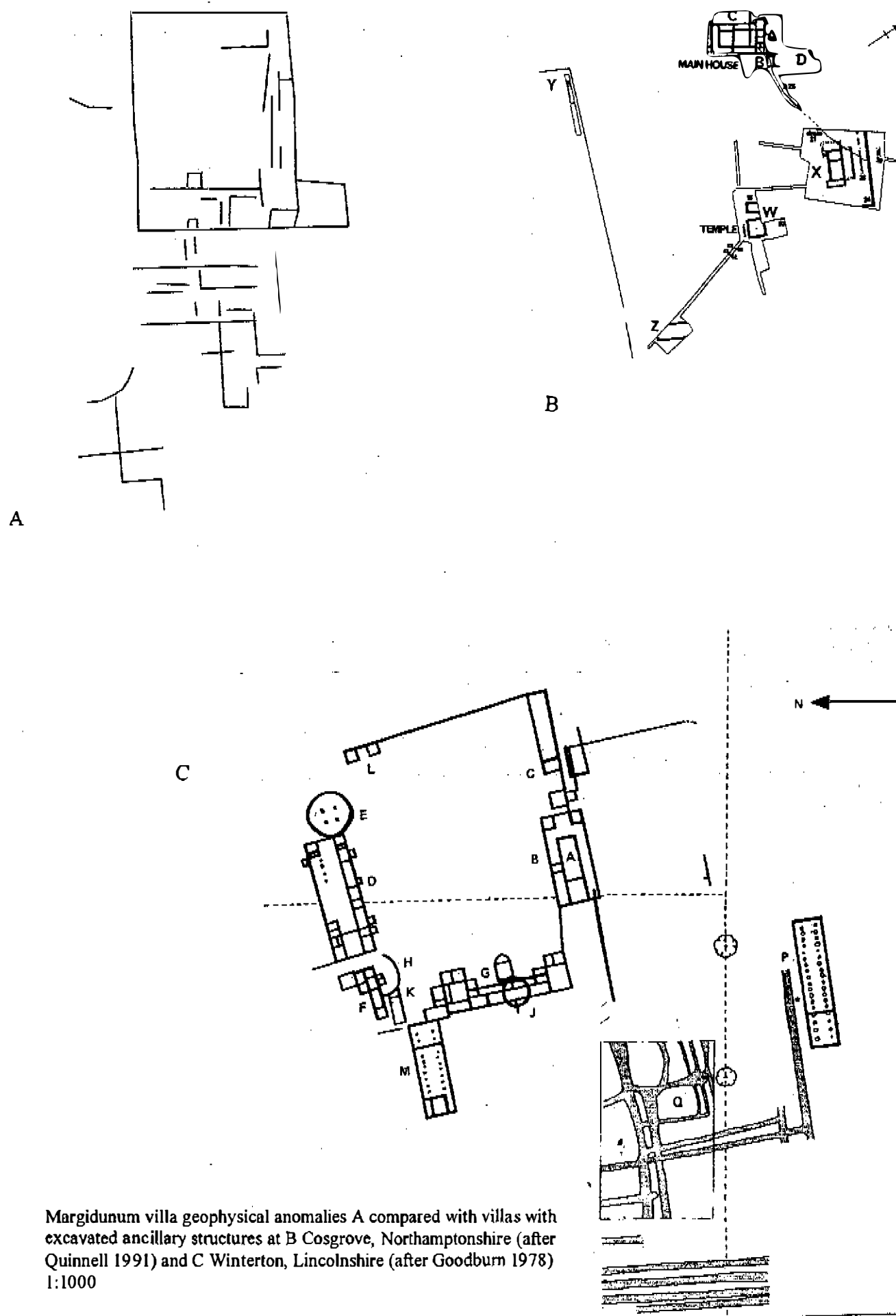
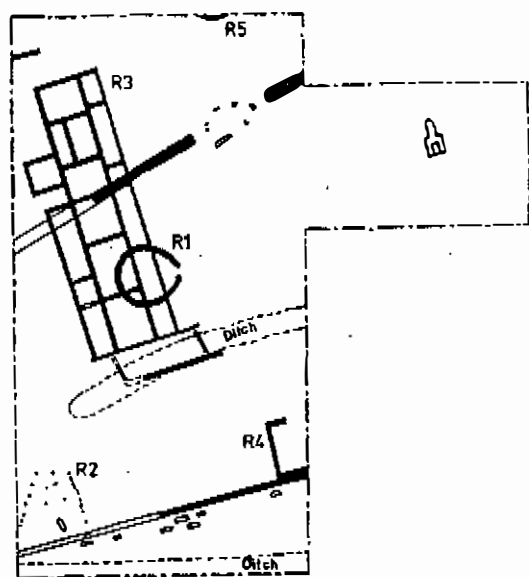
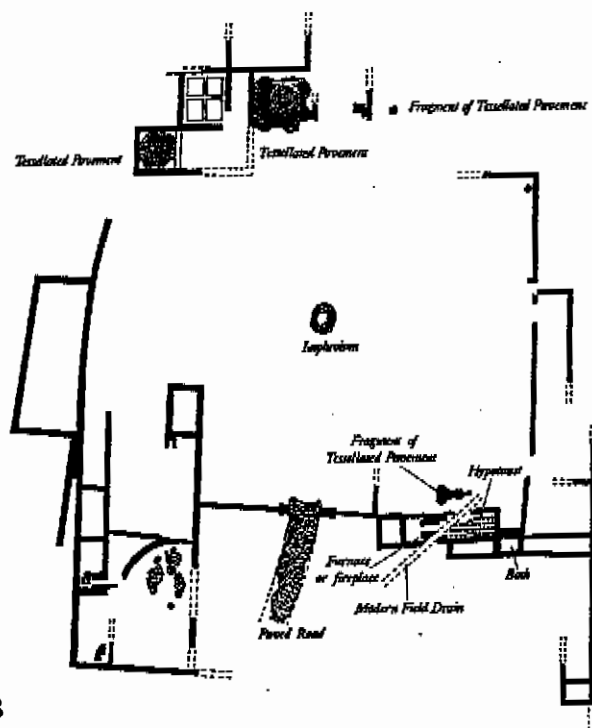


Fig. 9

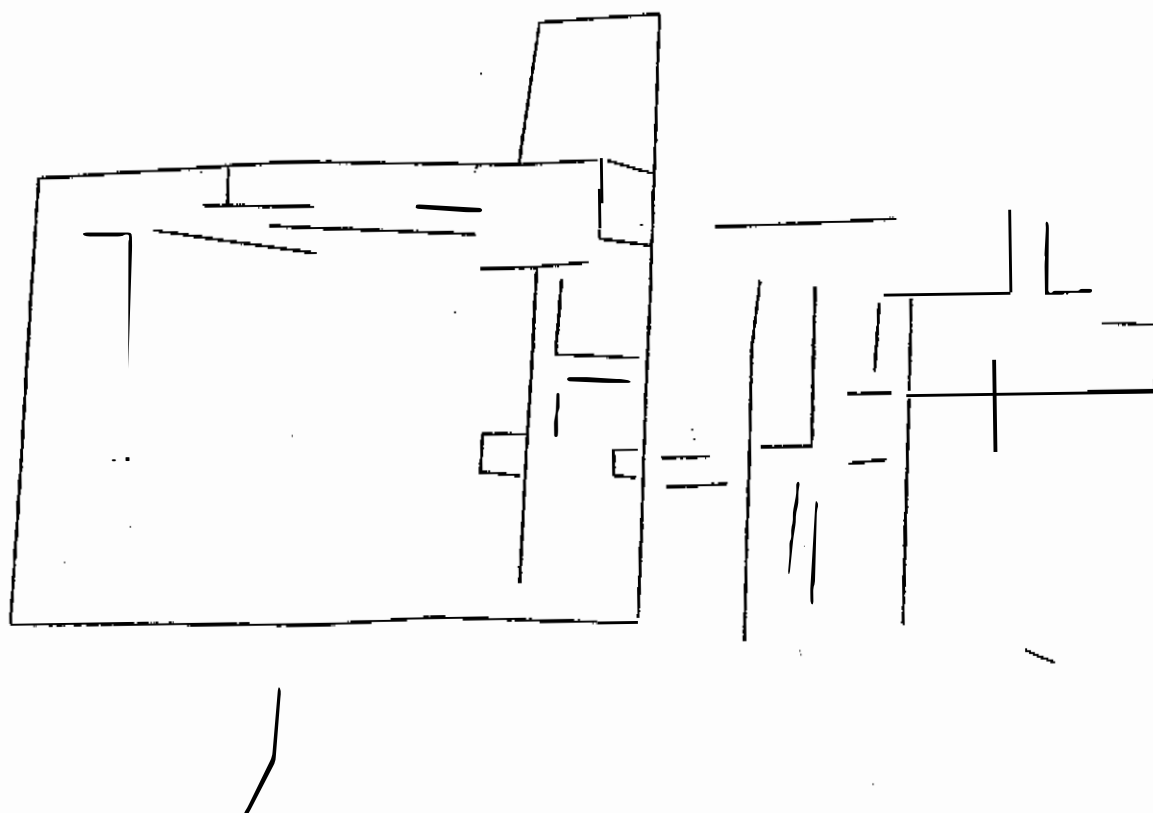
Margidunum villa geophysical anomalies A compared with villas with excavated ancillary structures at B Cosgrove, Northamptonshire (after Quinnell 1991) and C Winterton, Lincolnshire (after Goodburn 1978) 1:1000



A

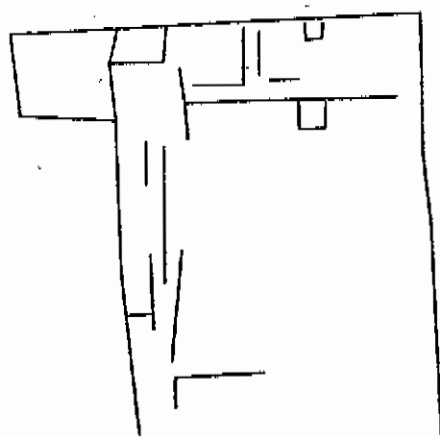


B

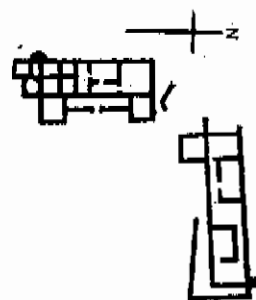


C

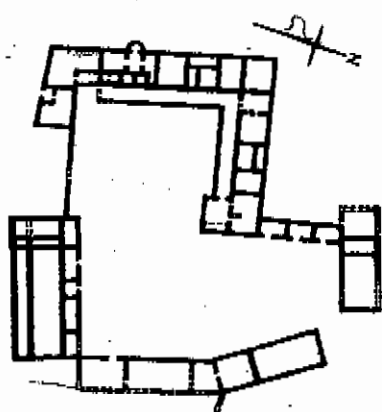
Fig. 10 Margidunum villa geophysical anomalies (C) compared with A villa block at Marshfields, the Cotswolds with enclosure wall and burials (after Blockley 1985) and B villa complex at Apethorpe (after RHCME). 1:1000



A



B



C



D

Fig.11 Margidunum villa compound geophysical anomalies compared with villa compounds apparently with two house range at B Beadlam, Yorkshire, C Llantwit Major, S. Glam and D Gayton Thorpe Norfolk (all after Hingley 1984). 1:1500

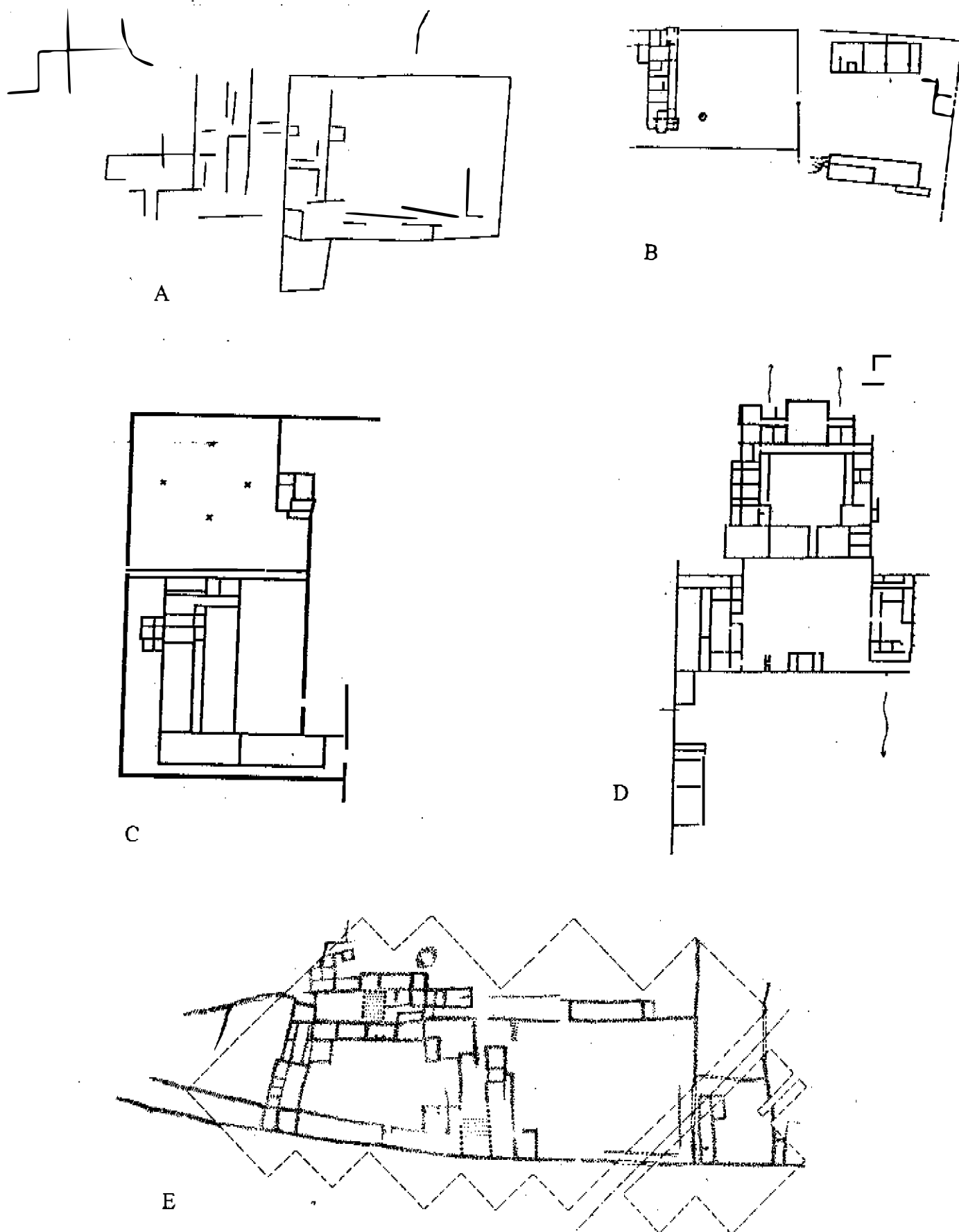


Fig. 12 Margidunum villa geophysical anomalies compared with villas with multiple courtyards at B North Wraxall (after Hingley 1984, C Bisley with Lypiatt, Northants. (after RHCME) D Woodchester (after Hingley 1984), and E Cotterstock, Northants. (after Upex 2001). 1:2000.

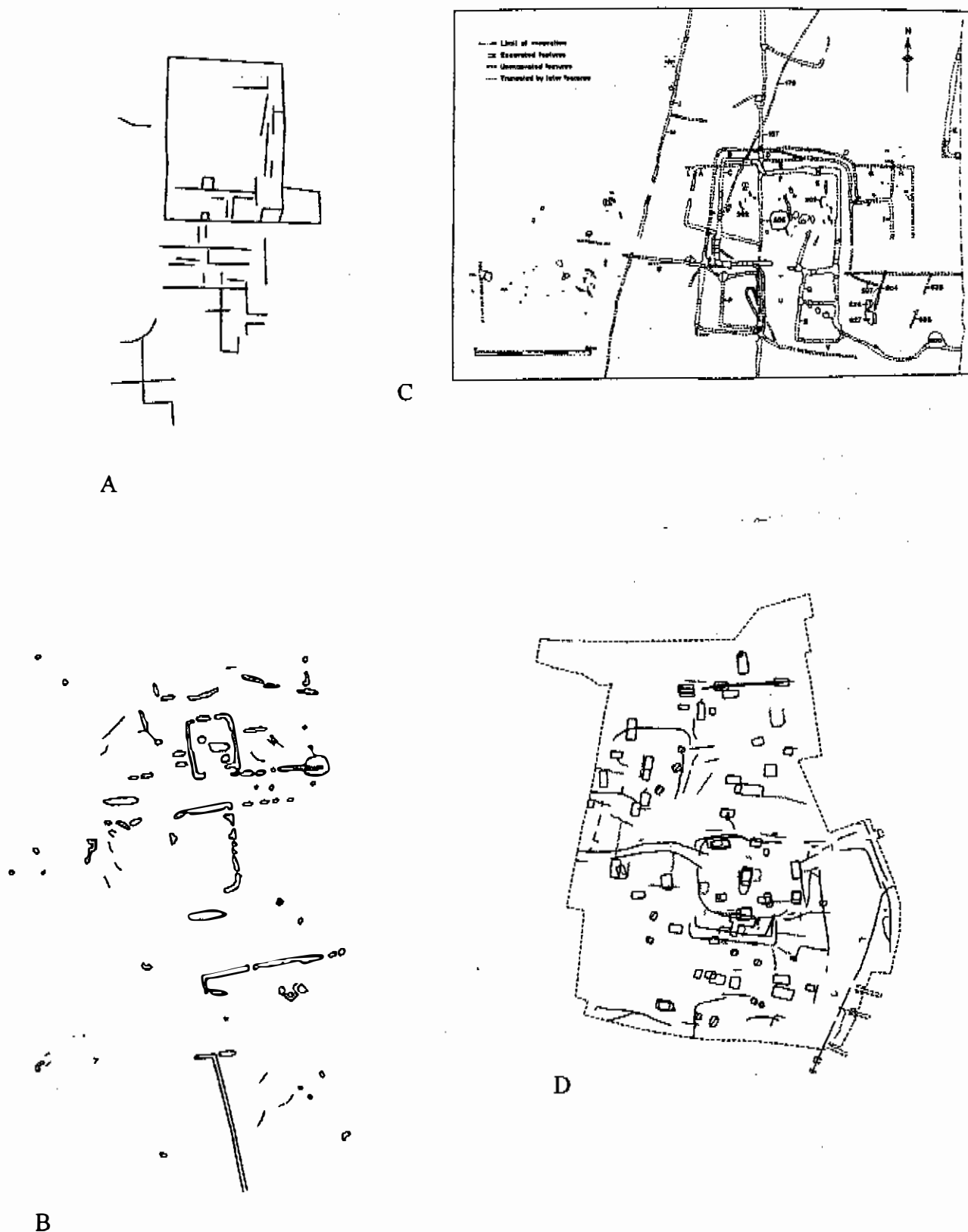


Fig. 13 Margidunum villa A and settlement B geophysical anomalies compared with Iron Age/Romano-British farmstead enclosures at C Hoveringham and Anglo-Saxon settlement at D Catholme (Losco-Bradley and Kinsley 2002). 1: 3000

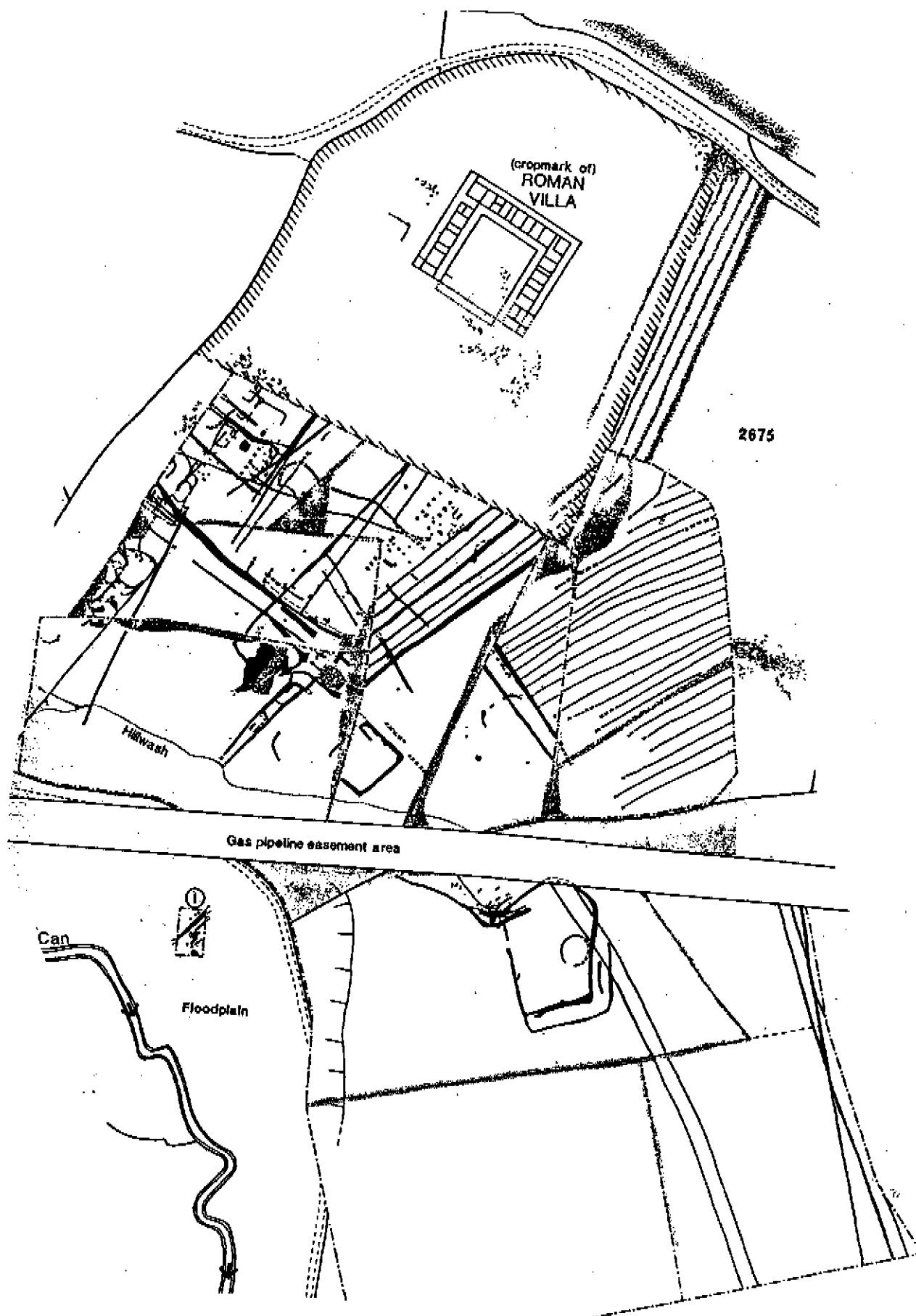


Fig. 14

Roman villa at Chignall, Essex showing villa landscape (after Clarke 1998). Note cemetery next to enclosure south of Easement area and abundance of ditches, posthole buildings and other settlement features south of villa.

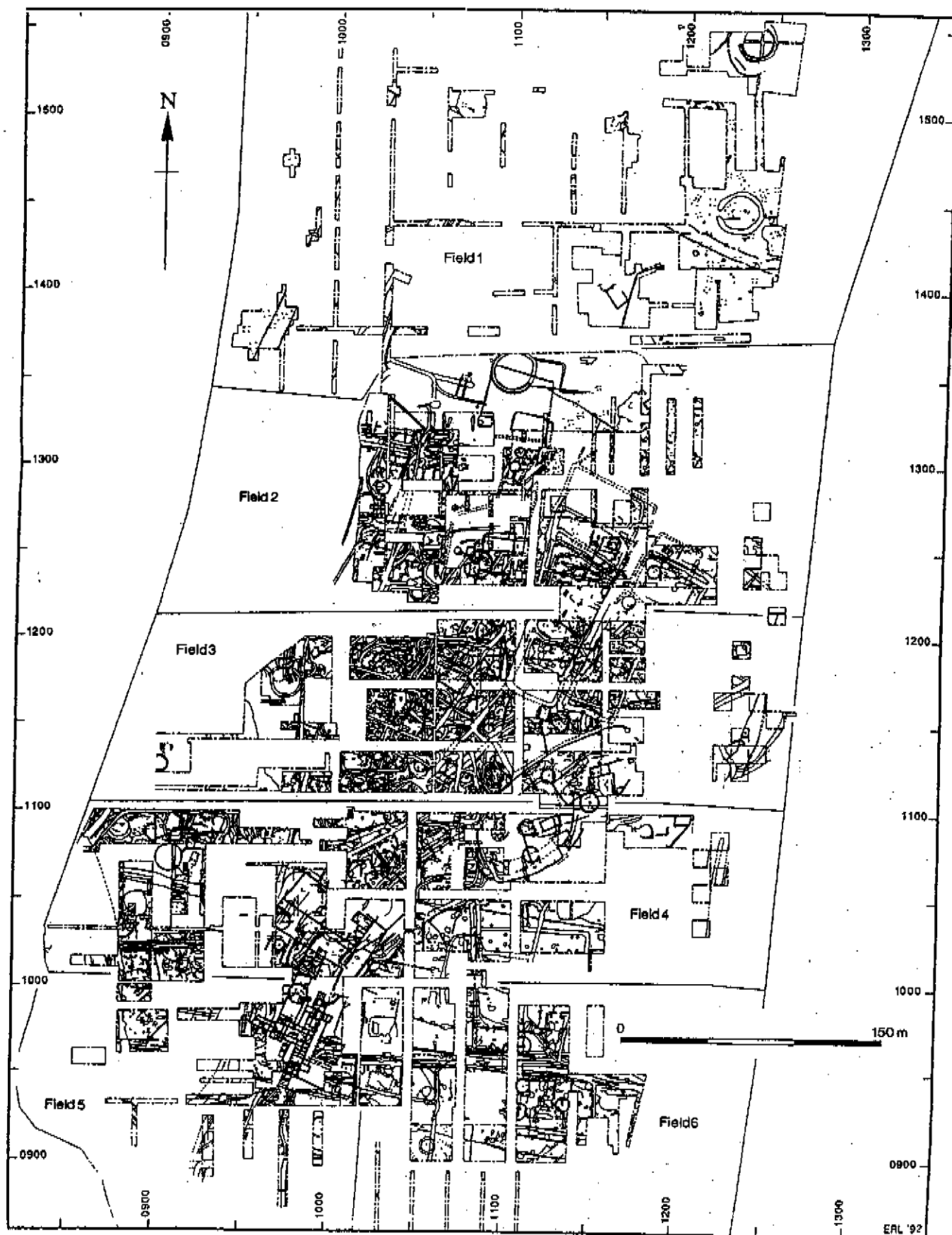
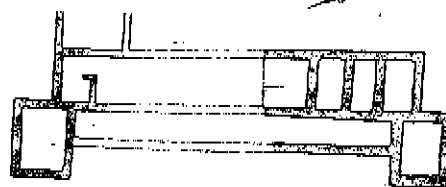
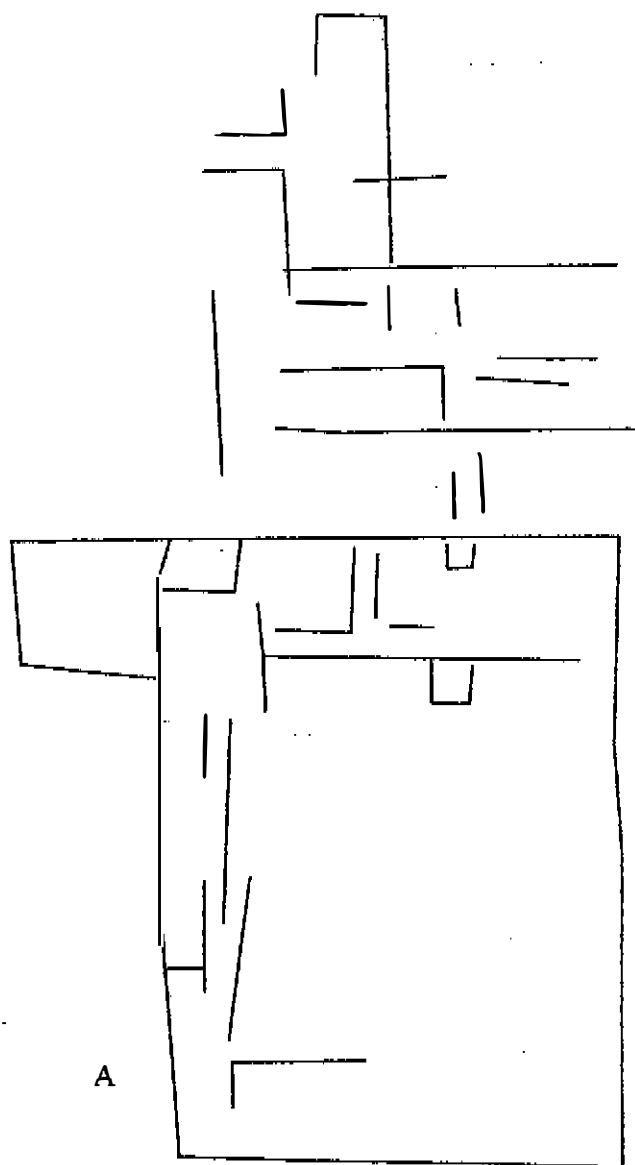
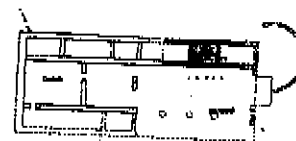


Fig. 15 Excavation at Stanwick, Northamptonshire of villa landscape with underlying prehistoric settlement (after Neal 1989).



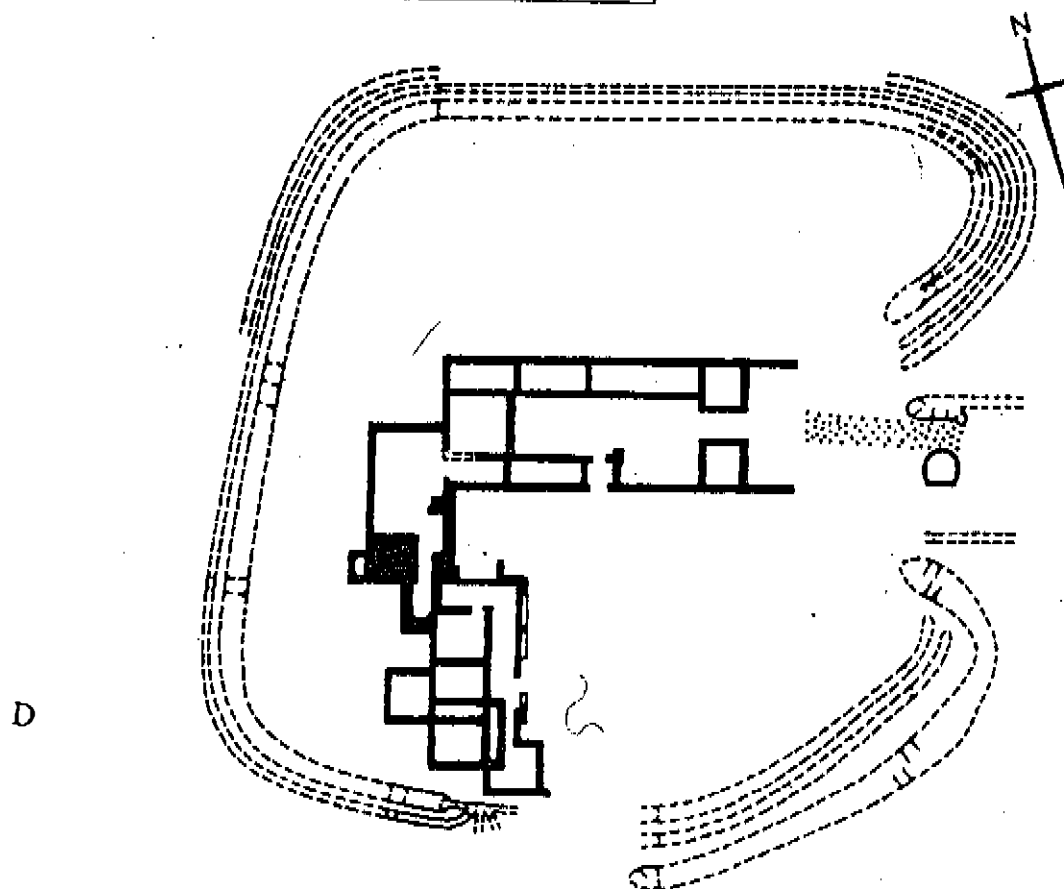
B



C

Fig. 16

Margidunum villa geophysical anomalies compared with regional villa group. B Car Colston, Nottinghamshire (after Blagg 1970), C Denton, Lincolnshire and D Norton Disney, Lincolnshire. 1:1000



D

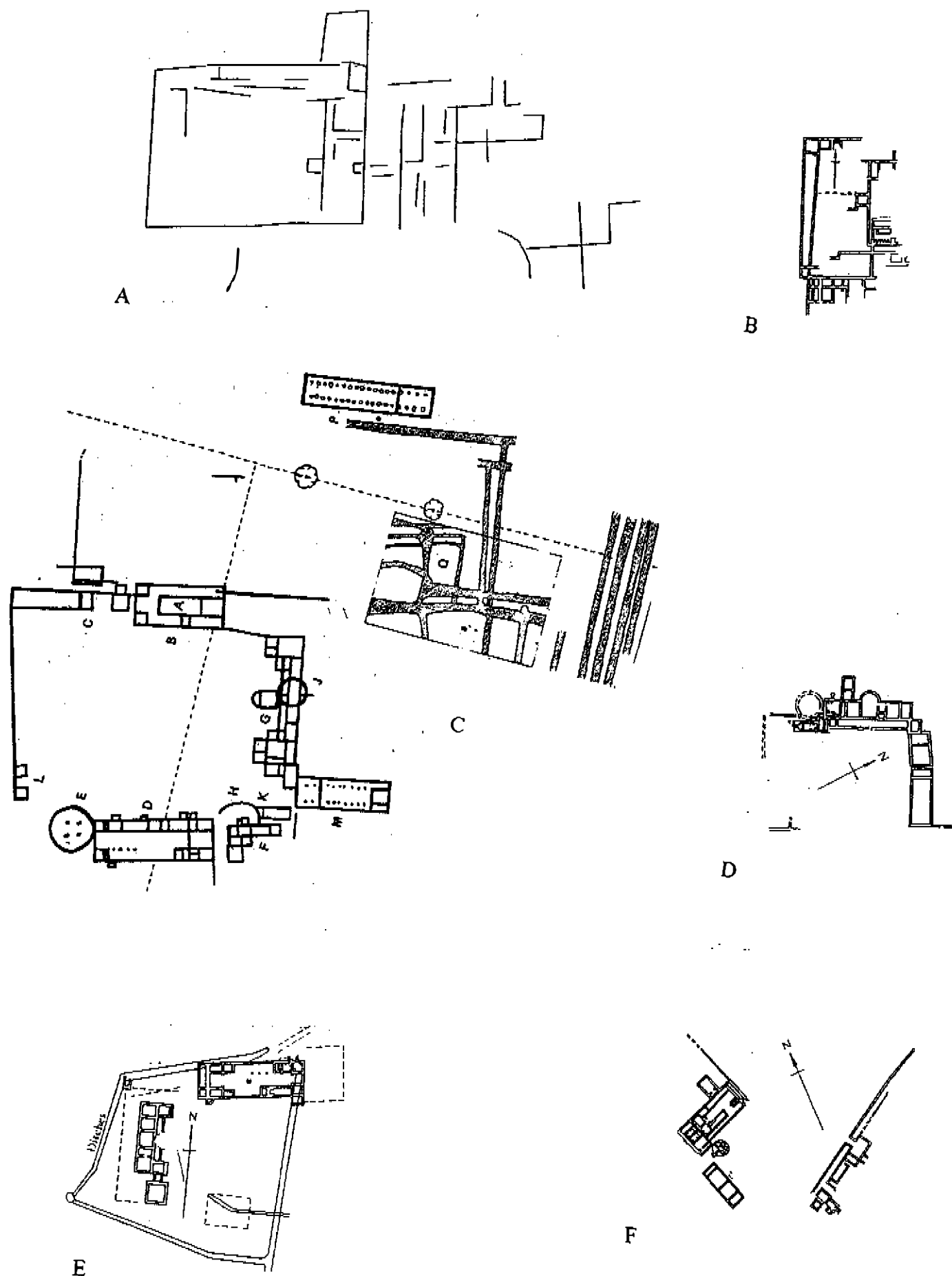


Fig. 17 Margidunum villa geophysical anomalies compared with large villas in the East Midlands (after Whitwell 1975) B Scampton, C Winterton, D Great Weldon E Mansfield Woodhouse, F Great Casterton. 1:2000

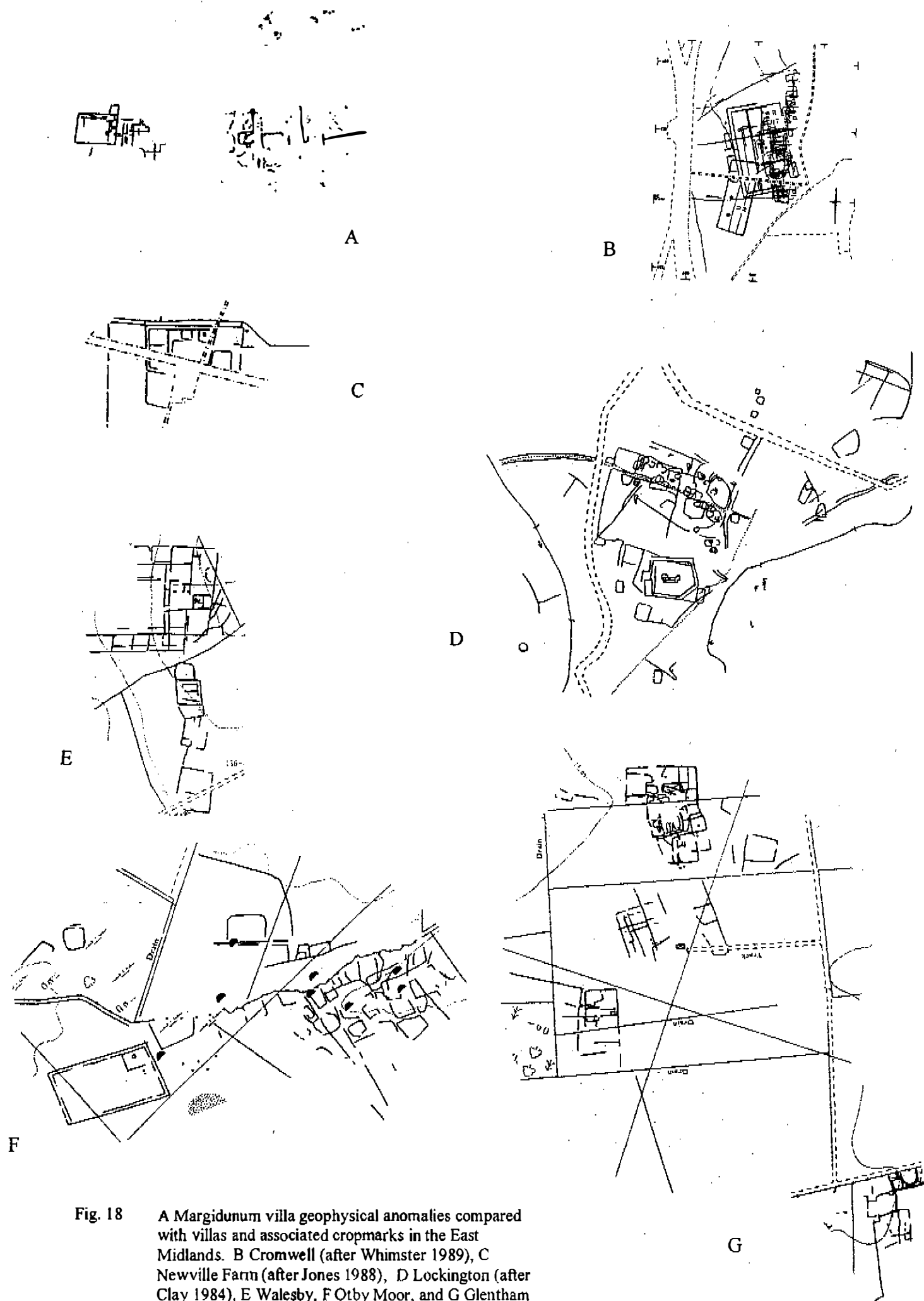


Fig. 18 A Margidunum villa geophysical anomalies compared with villas and associated cropmarks in the East Midlands. B Cromwell (after Whimster 1989), C Newville Farm (after Jones 1988), D Lockington (after Clay 1984), E Walesby, F Otby Moor, and G Glenthams Cliff (all after Jones 1988). 1:10,000.

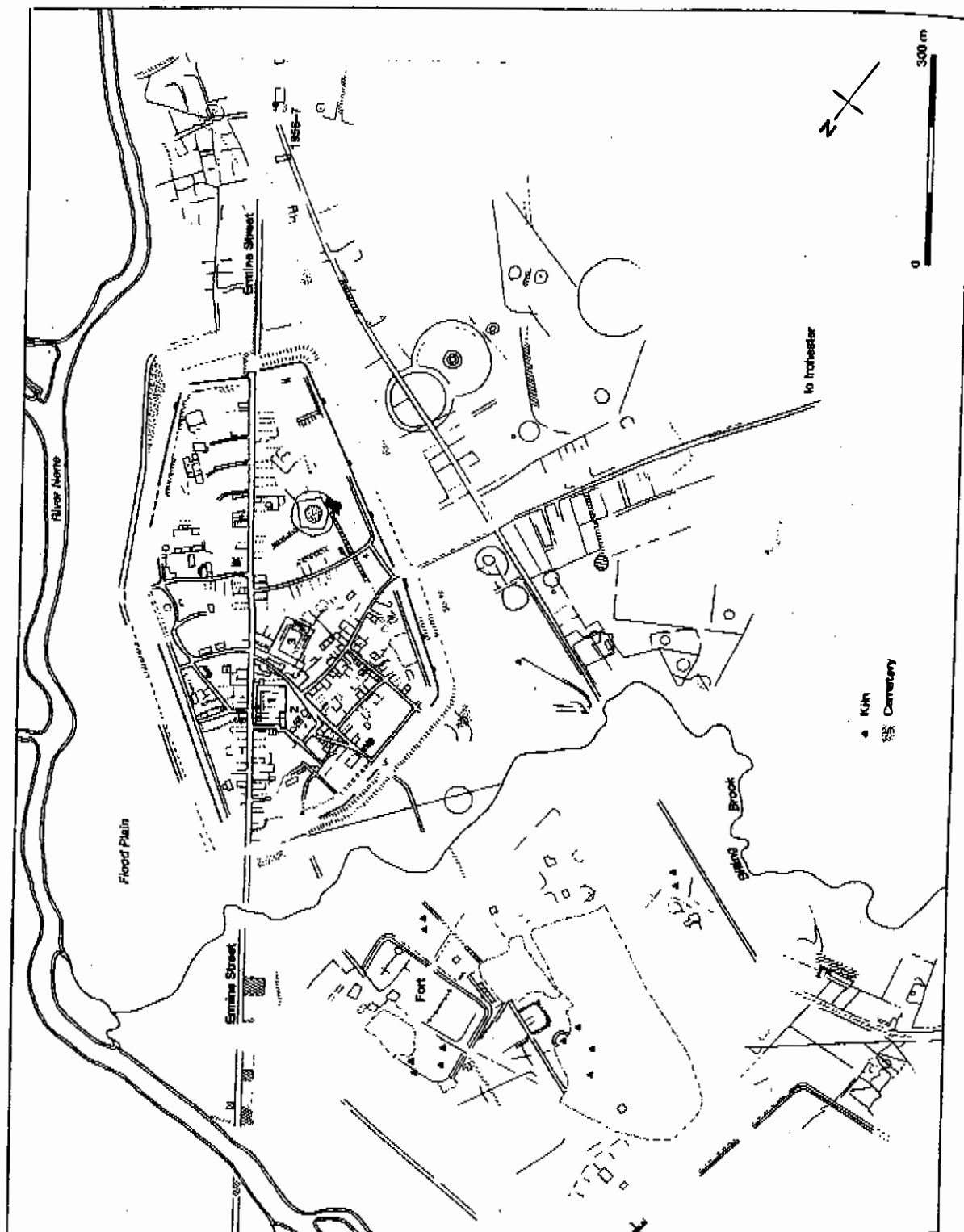


Fig. 19 Water Newton defended town and surrounding landscape (after Burnham and Wachter 1990).

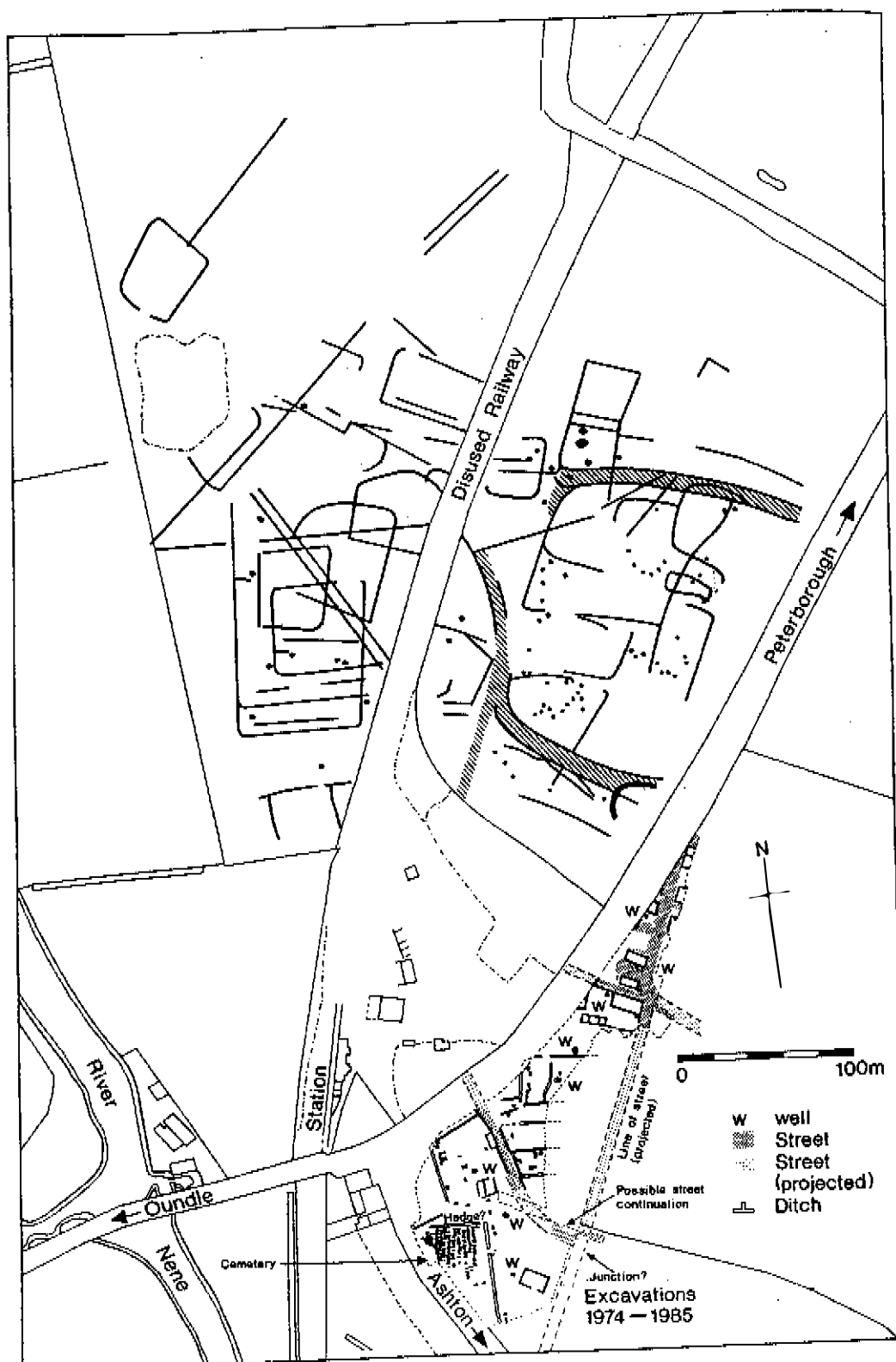


Fig. 20 Ashton (after Burnham and Wachter 1990).

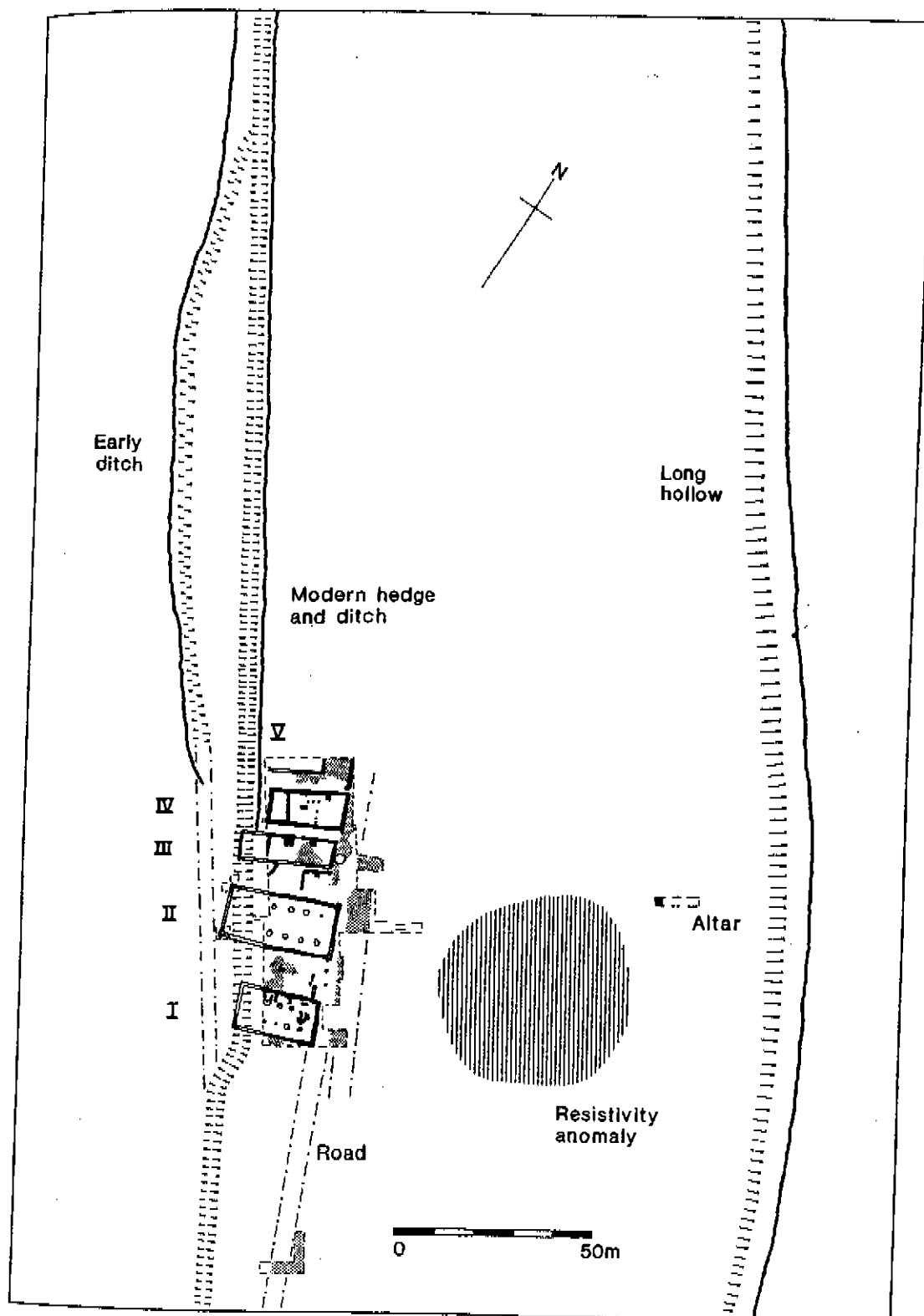


Fig. 21 Sapperton (after Burnham and Wachter 1990).

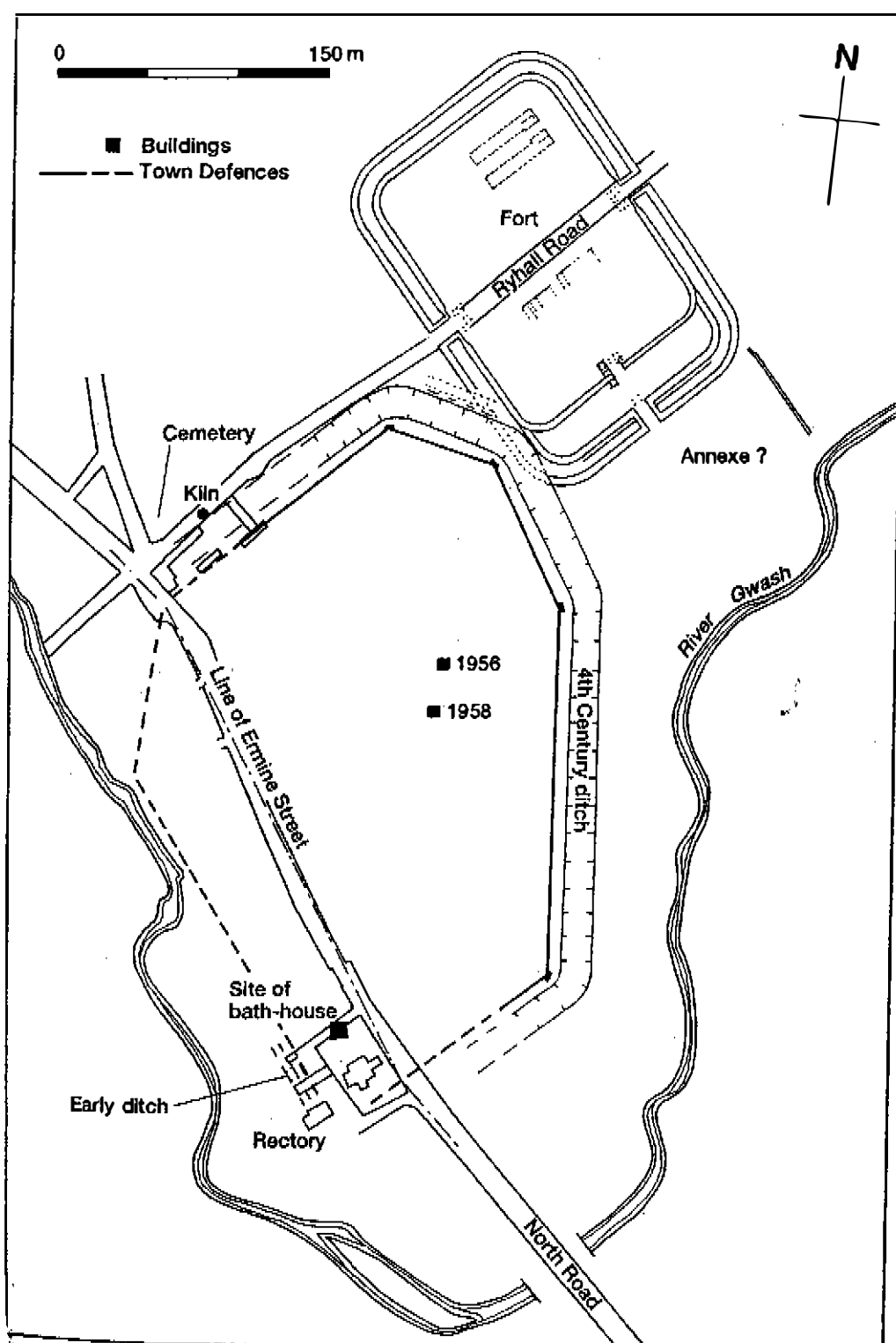


Fig. 22 Great Casterton (after Burnham and Wachter 1990).

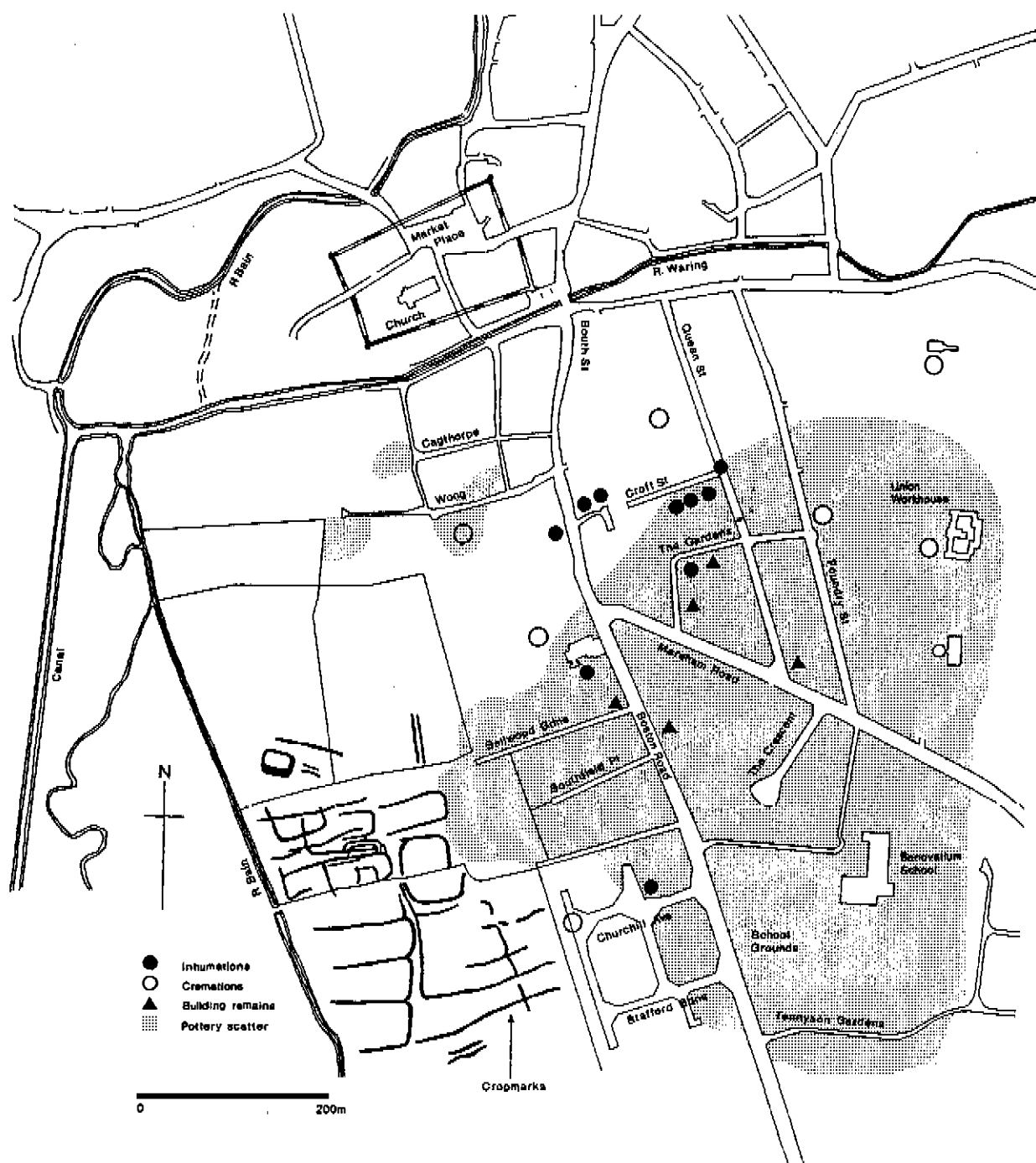


Fig. 23 Horncastle (after Burnham and Wachter 1990).

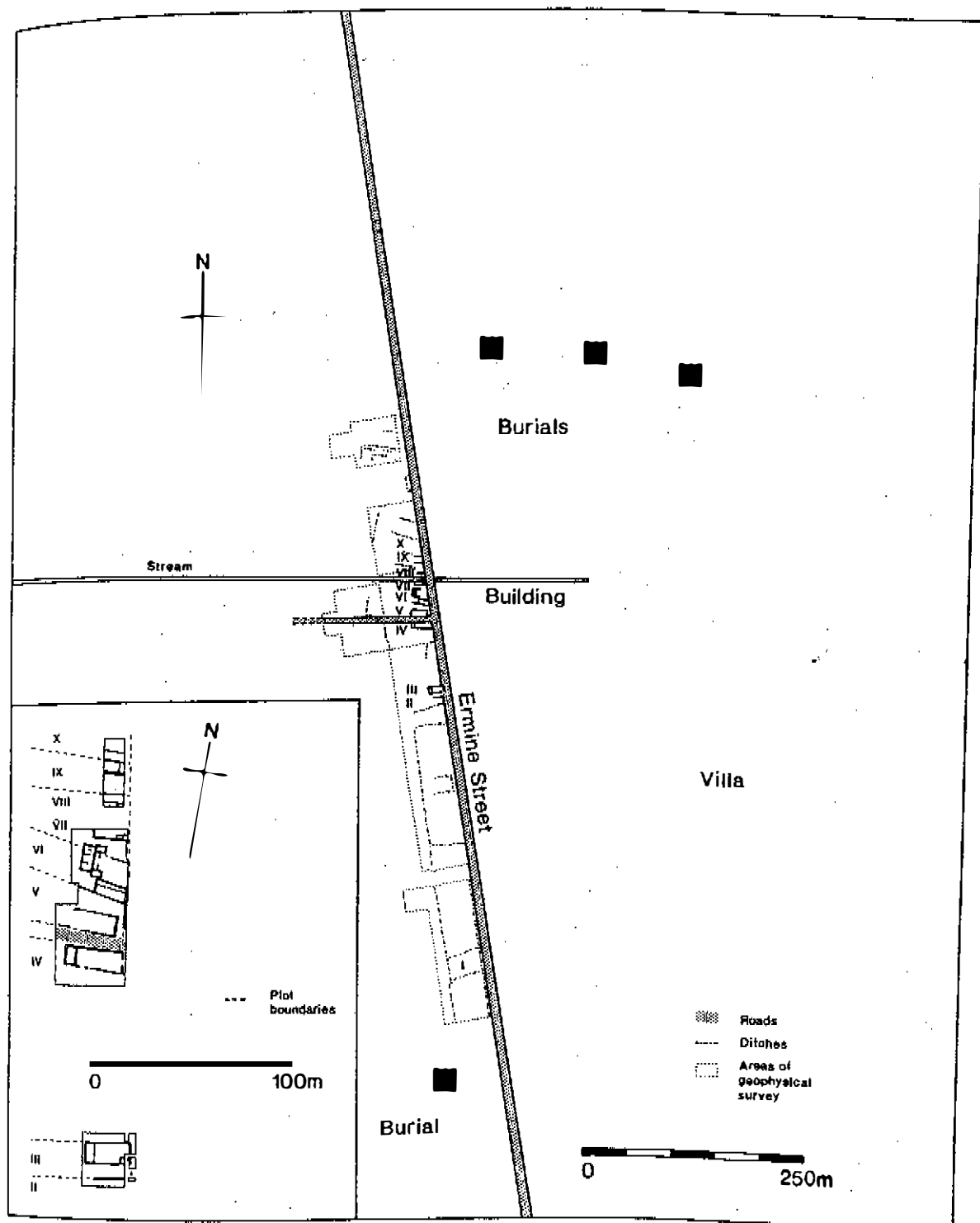


Fig. 24 Hibaldstow (after Burnham and Wachter 1990).

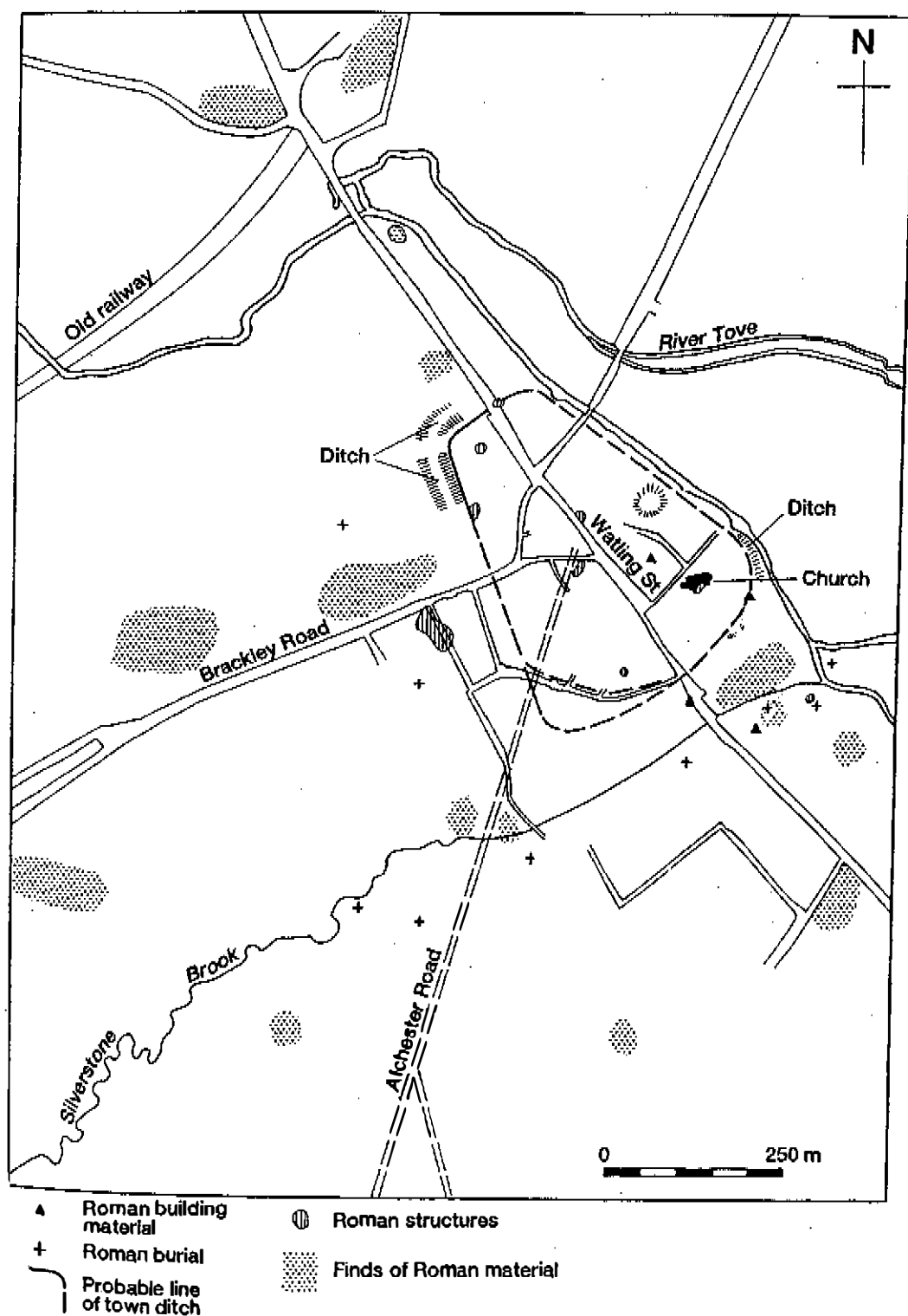


Fig. 25 Towcester (after Burnham and Wachter 1990).

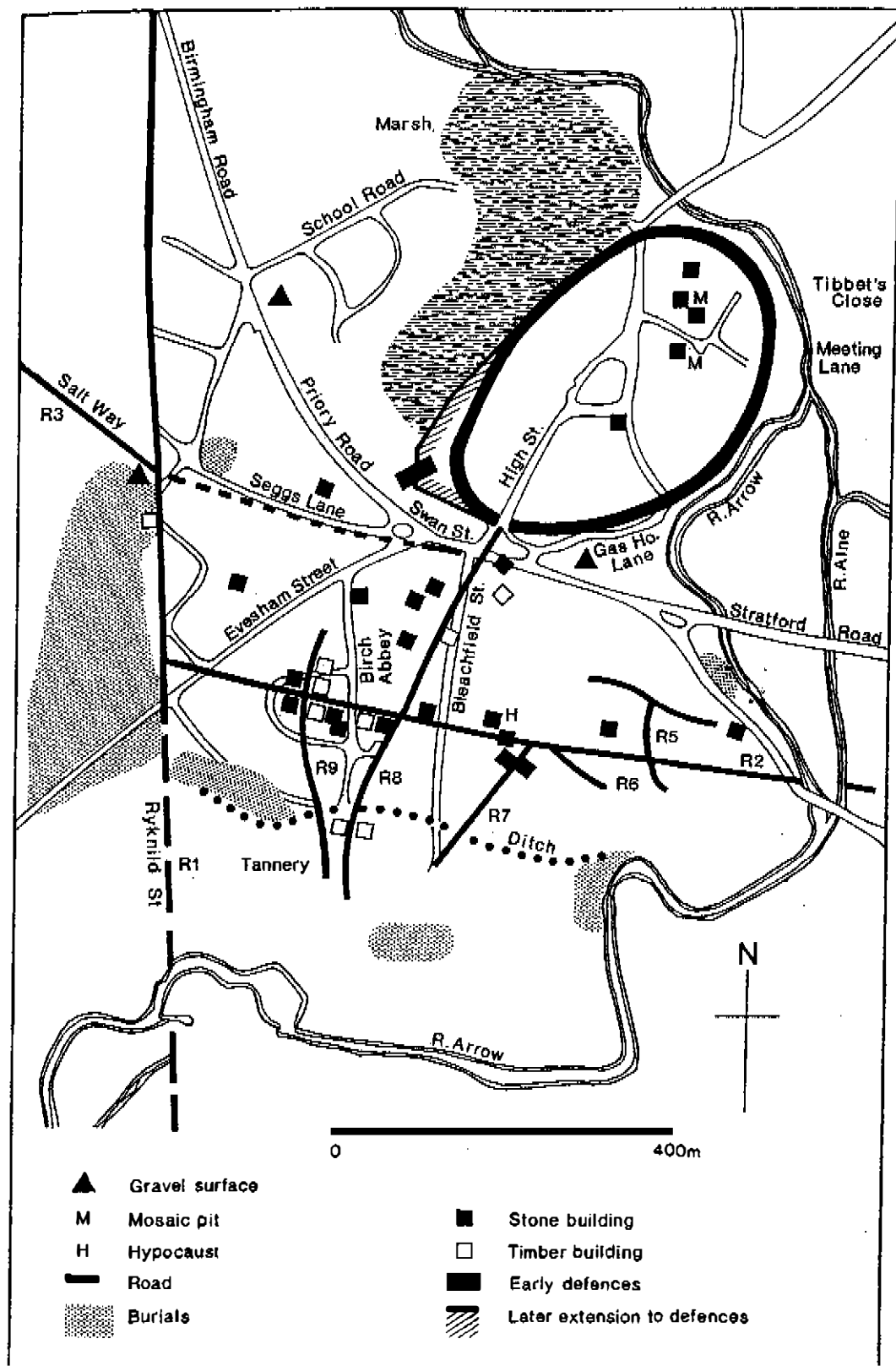


Fig. 26 Alcester (after Burnham and Wacher 1990).

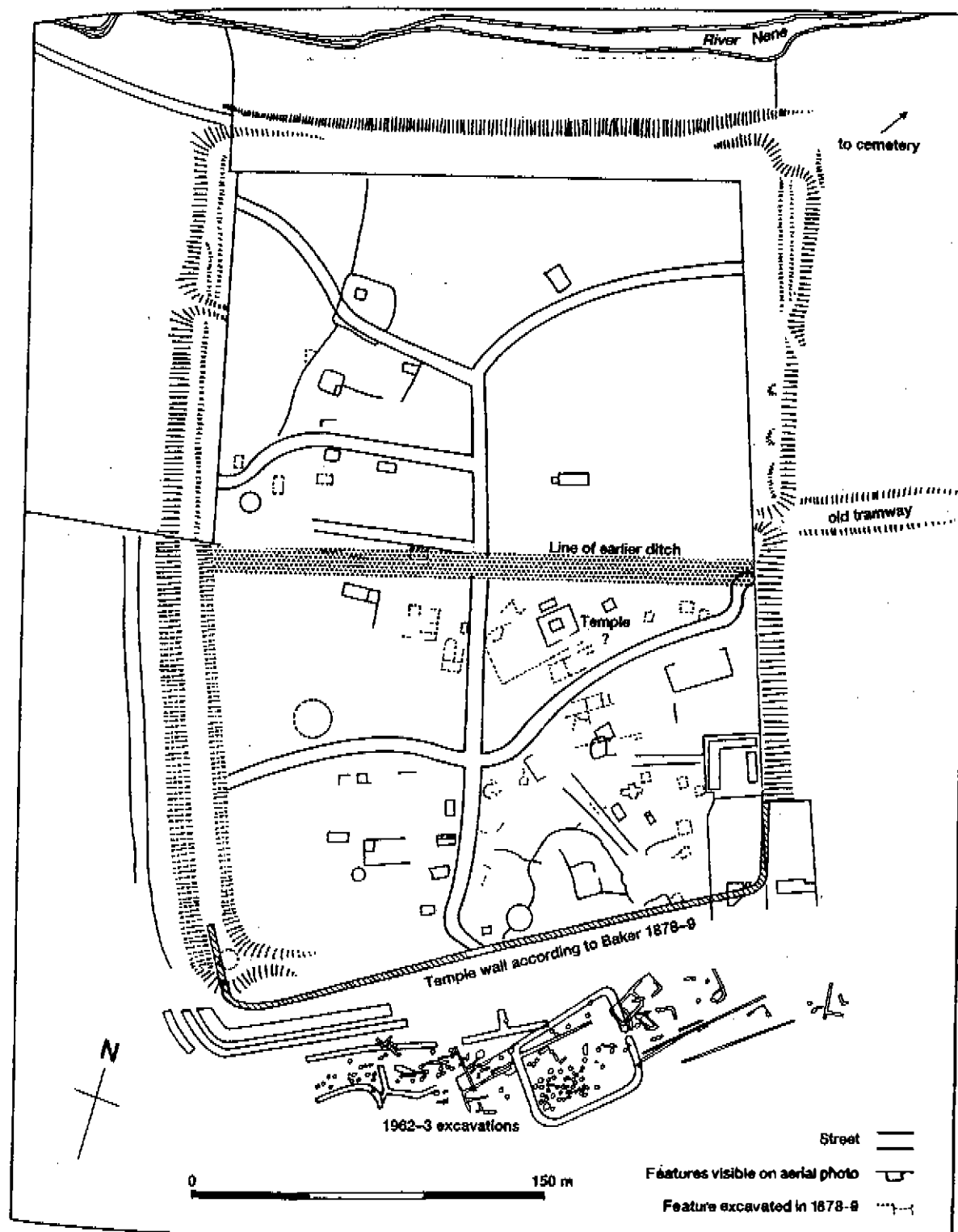


Fig. 27 Irchester (after Burnham and Wachter 1990).

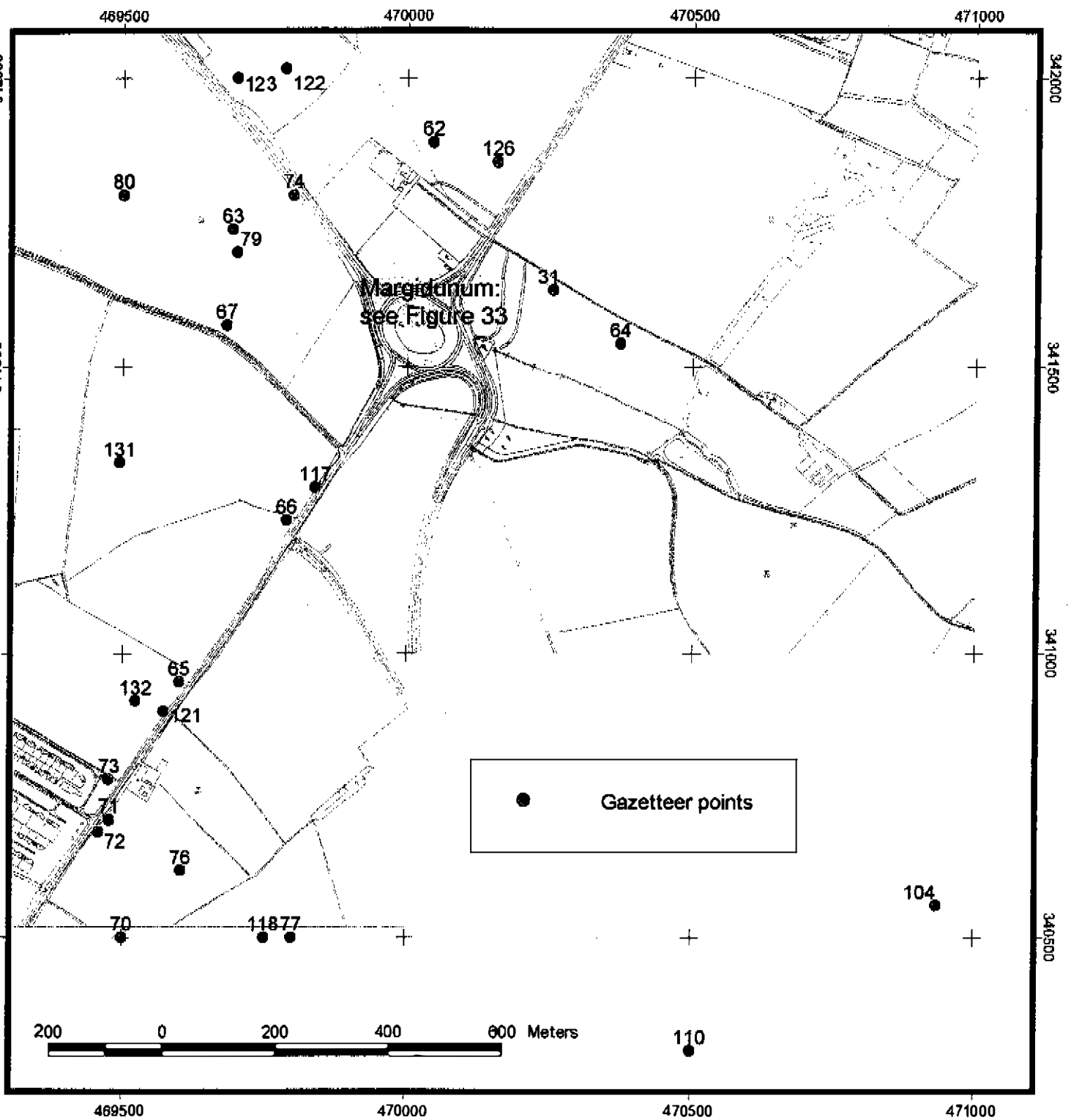


Figure 32: Plan of site with Gazetteer numbers 1:8000

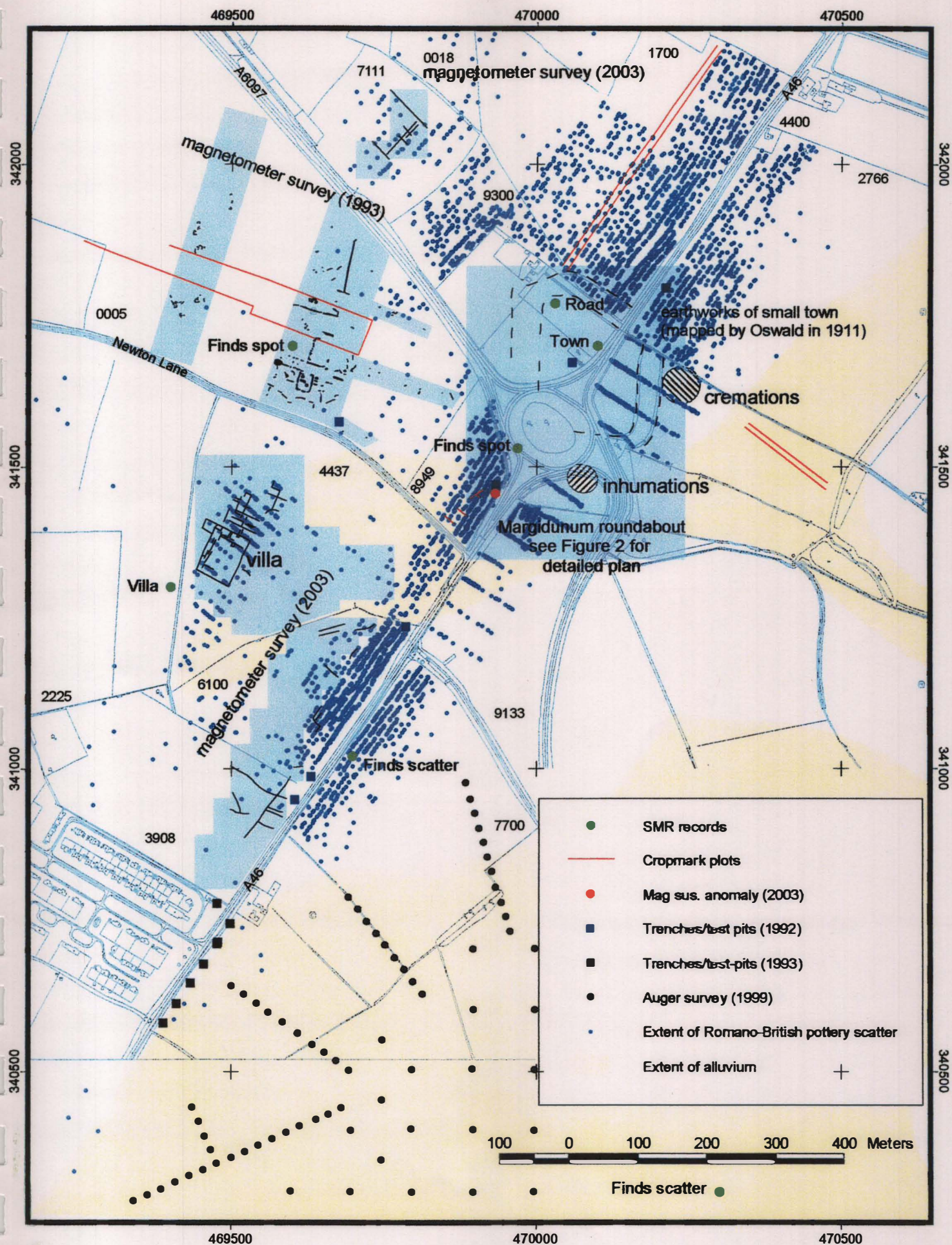


Figure 1: Location of archaeological investigations, finds scatter, cropmarks and geophysical anomalies, auger survey and extent of alluvium around Margidunum. 1:8500

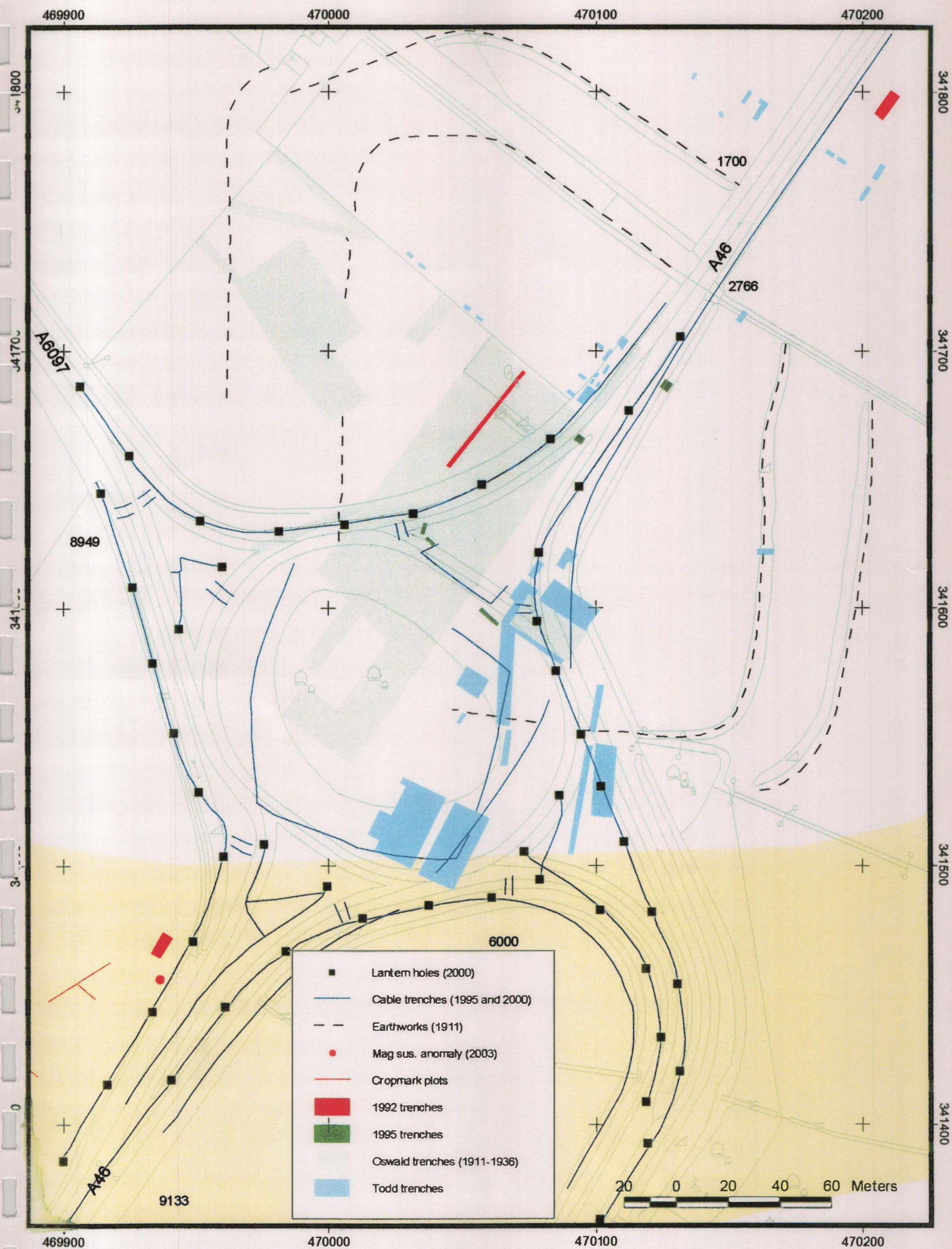


Figure 2: Location of archaeological investigations within and beside defended area. 1:2000

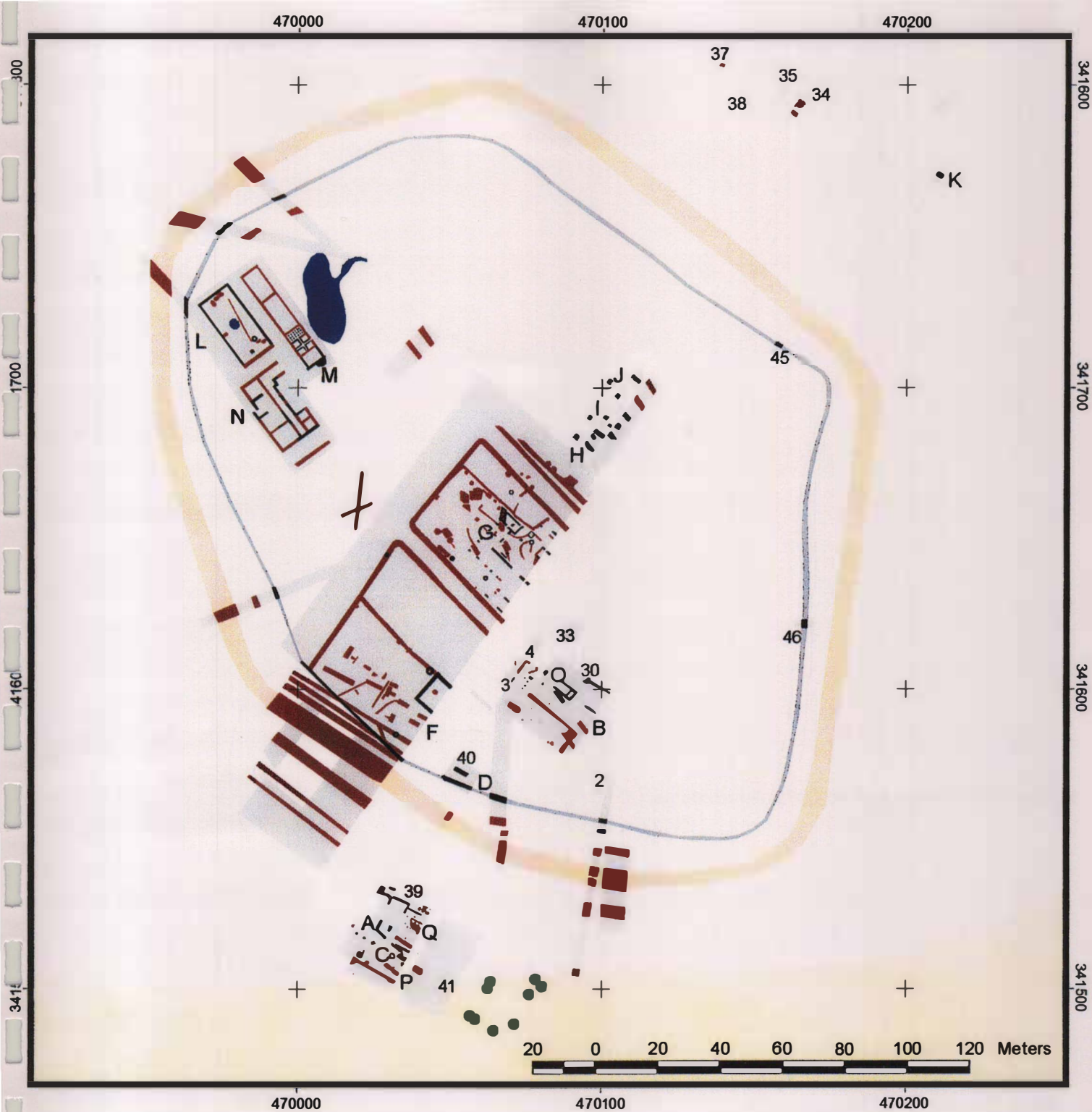


Figure 3: Details of major features excavated by Oswald and Todd showing predicted course of town defences. 1:1500



Structural evidence











- | | | | |
|---|--|--|--|
|  stone buildings |  timber buildings |  ditch |  road surface |
|  stone building footings |  improved buildings |  wall |  altar plinth |
| |  workshop |  cobbled area | |

Figure 4: Details of structural evidence recovered from Oswald and Todd's excavations, and from evaluations and watching briefs carried out in the 1990s and 2000s. 1:1500

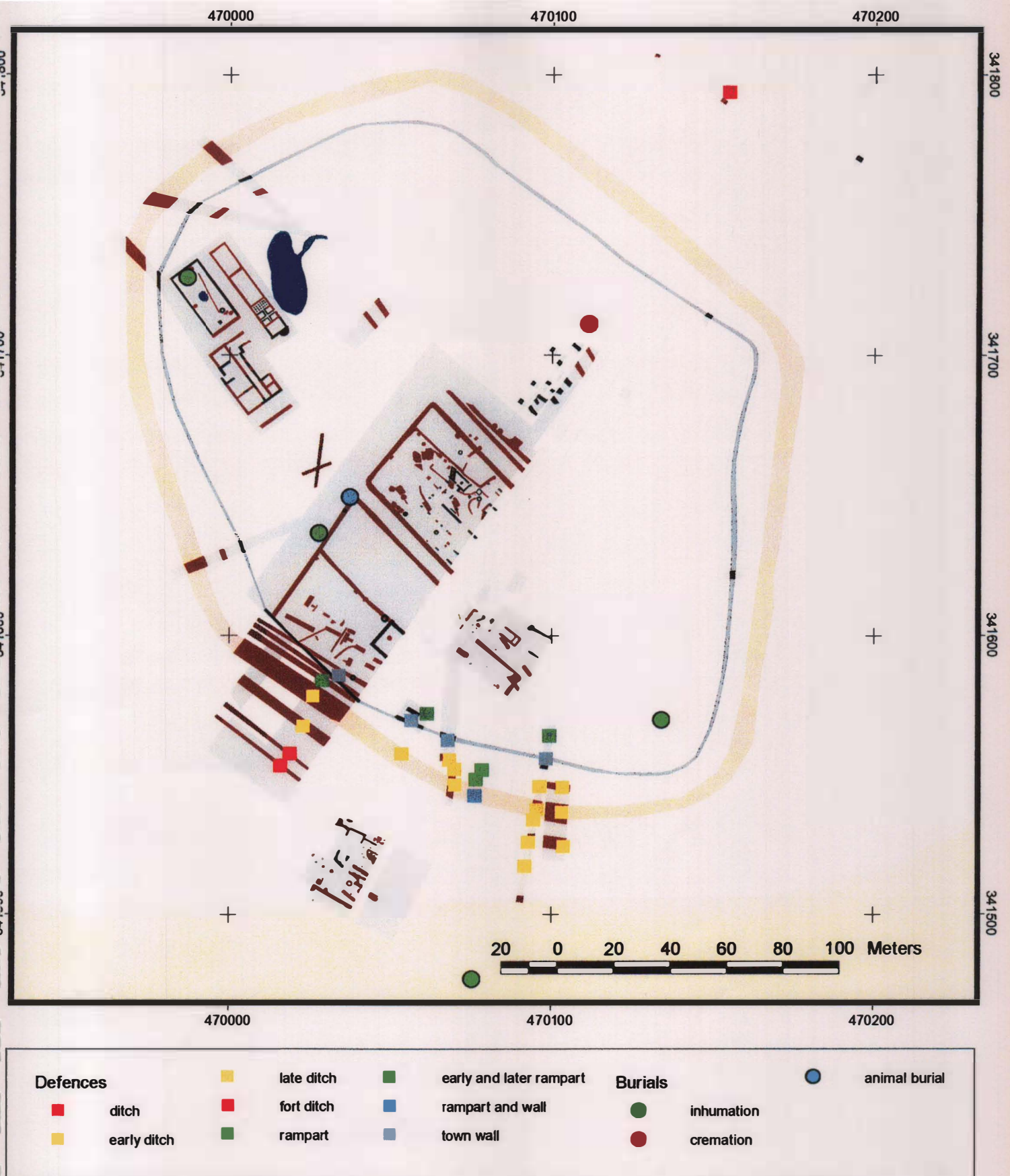


Figure 5: Location and phasing of excavated section of town defences and burials: 1:1500

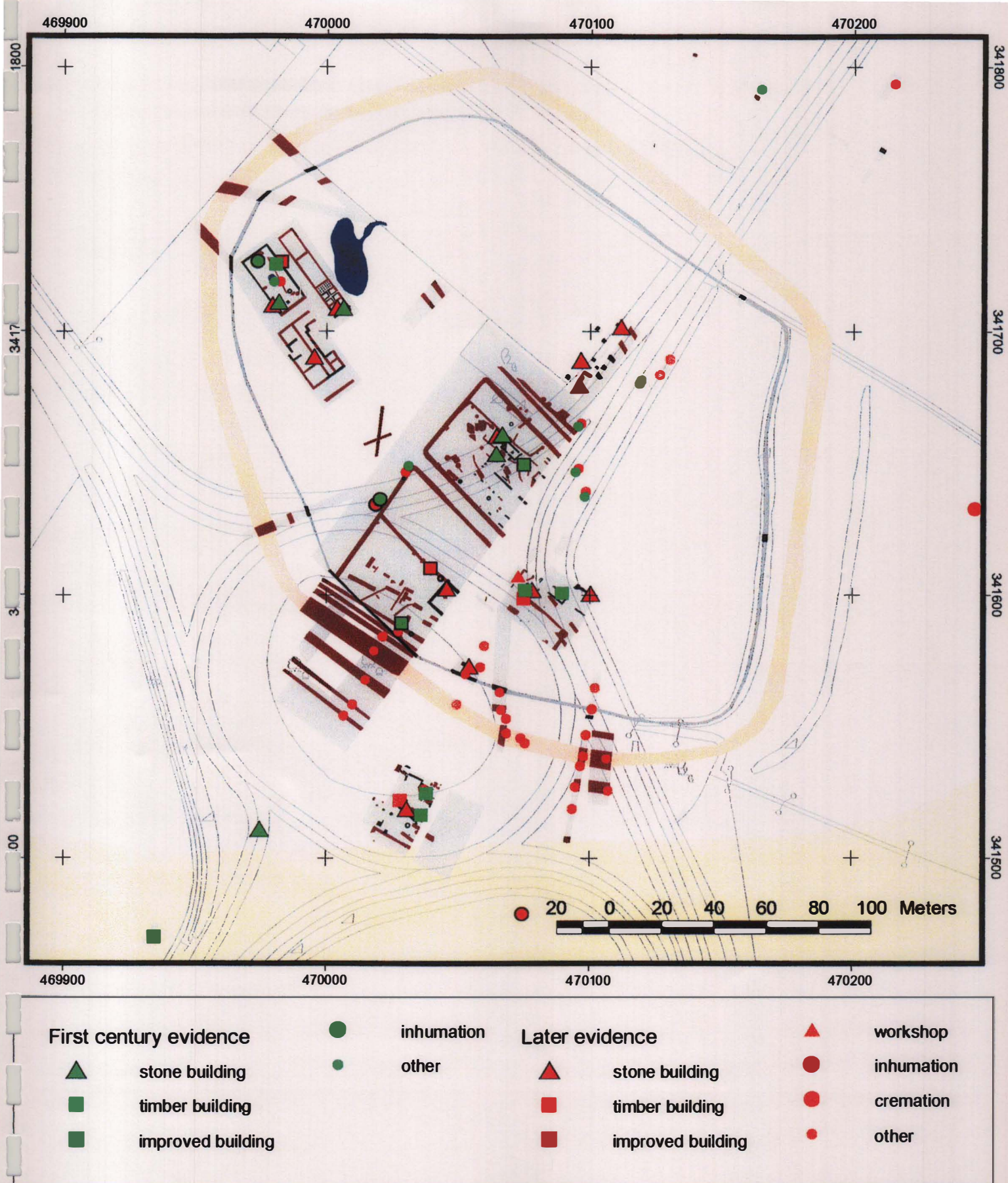
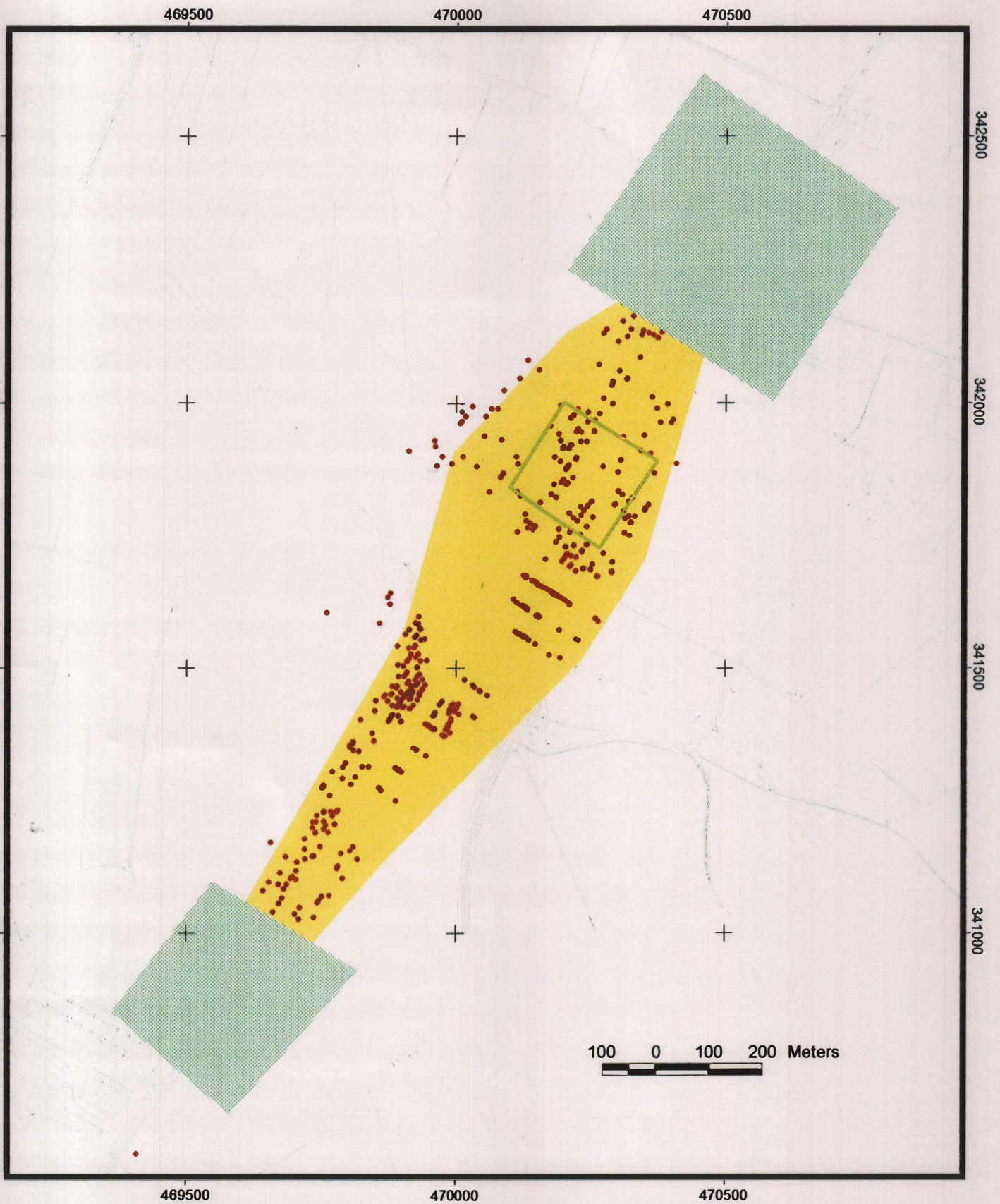


Figure 6: Broad phasing of structural evidence based on published dating. 1:1500








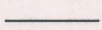



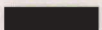





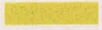


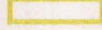


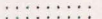
-  Predictive early fort.shp
-  Predictive military burial zones.shp
-  Early pottery spread.shp
-  Predictive military activity: annexe with timber and stone structures and industrial activity.shp

Fig. 28 Predictive Military zones



Fig. 29 Predictive urban and villa settlement

- | | | | |
|---|-----------------------|---|---|
|  | Predictive wall |  | Geophysical anomalies |
|  | Todd's structures |  | Predictive industrial zone |
|  | Todd's inhumations |  | 1993 magnetometer survey - ditches |
|  | Oswald's structures |  | Predictive roadside urban settlement |
|  | Oswald's pools |  | Predictive area of iron age or saxon settlement |
|  | Oswald's ditches |  | Predictive ditch |
|  | Burial zones |  | Predictive villa |
|  | Predictive early fort |  | Predictive villa field system with ancillary buildings |
|  | Plotted cropmarks |  | Predictive area of field system of town or other villas |

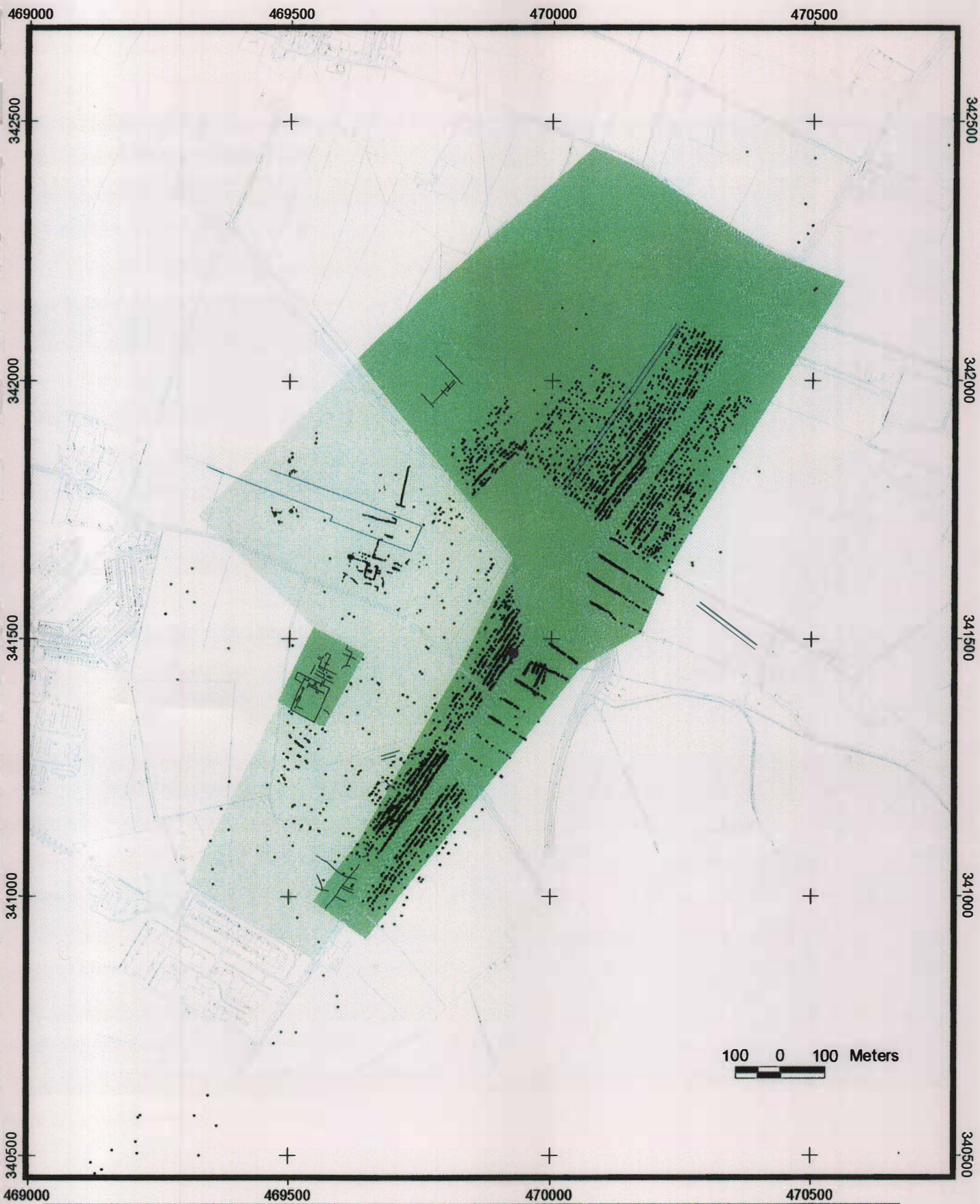








Fig. 30 Predictive map of multi-phase areas

- | | |
|---|-----------------------|
|  | Plotted cropmarks |
|  | Geophysical anomalies |
|  | Type 1 stratigraphy |
|  | Type 2 stratigraphy |
|  | Type 3 stratigraphy |
|  | All rbpot |

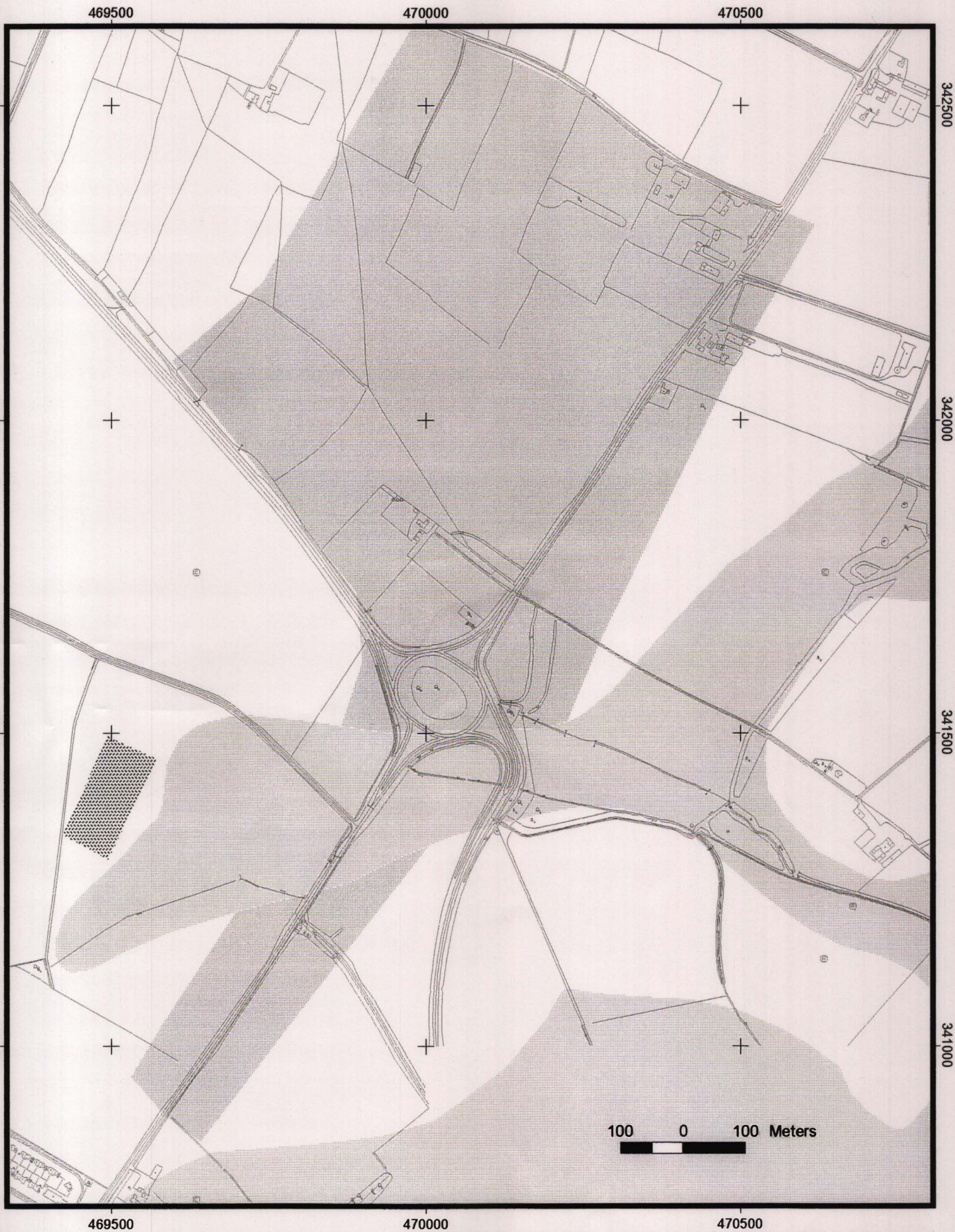
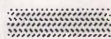


Fig. 31 Predictive zones of alluvium and organic survival



Predictive villa with organics preserved in wells and pits



Predictive roadside urban settlement with organics preserved in wells and pits



Alluvium