
HOUSESTEADS ROMAN FORT,
MUSEUM AND INFORMATION CENTRE PROPOSALS

ARCHAEOLOGICAL ASSESSMENT

JULY 2003



Prepared for: <i>English Heritage</i>	By: <i>The Archaeological Practice Ltd.</i>
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Frontispiece: The site of the proposed new wing of the Information Centre from the west

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SUMMARY

This report comprises an archaeological assessment, which has been compiled to accompany a planning application by English Heritage to improve the visitor facilities at Housesteads Roman fort. The assessment identifies cultural heritage constraints within and adjacent to the area of the proposed expanded information centre and the proposed new building on the site of the Dutch barn at Housesteads Farm, and makes recommendations regarding the work required to mitigate the impact of the two schemes.

The report collates evidence from a wide range of sources, including historic maps, aerial photographs, secondary historical works and the Northumberland County Sites and Monuments Record (SMR). In particular it draws extensively on the previous archaeological assessment work covering the area, culminating in the Housesteads Conservation Plan (HCP).

This has resulted in the identification of a total of 63 sites and monuments within the defined assessment area. There are three scheduled ancient monuments, one of which Hadrian's Wall at Housesteads embraces most of the sites identified here. One listed building record (Hadrian's Wall itself) also relates to the area. Together these provide contextual information regarding the archaeological and historical development of the area of Housesteads.

The assessment concludes that:

- 1. The Dutch barn stands on one of the agricultural terraces of probable Roman date. The terrace lynchet at the south end of the barn may have originated as the south face of the north mound of the Vallum. The extent to which construction of the barn may have damaged underlying features and deposits associated with these earthwork monuments cannot be determined at present. However there is the potential for some evidence, of the kind recorded between the museum and farmstead in 1987 (e.g. pits, postholes and palisade fencing), to survive as buried features beneath the building.*
- 2. The interface between the terraces and the enclosures immediately to the north of the museum (which corresponds to the solid geological interface between the limestone and whinstone respectively) is potentially one of great significance for understanding the development of the historic landscape around Housesteads fort during Roman and later periods. Accordingly the north side of the museum must be considered an area of great archaeological sensitivity.*
- 3. Several significant surviving monuments (quarry features, a barrow, a possible Roman road, etc.) have been identified in the vicinity of the Information Centre. However no distinct archaeological feature has been identified (by examination of historic maps, aerial photography etc) within the envelope of the proposed development on the lower site.*
- 4. The fine relief carving (CSIR 349), featuring two seated female figures, which was discovered during ground clearance prior to Information Centre's construction in 1982, represents the single finest sculpture from Housesteads. It may have derived from a religious shrine or tomb, conceivably located on the site of the Information Centre itself. The possible existence of a Roman road nearby, first suggested by MacLauchlan (1858, 40), would support such a conclusion.*
- 5. The area between the Museum/Farm and the south gate of the fort is one of great archaeological sensitivity with potential vicus buildings and the remains of later settlement and cultivation to survive as buried features.*

It is considered that the proposed development will have the following impacts:

1. *The construction of the new building on the site of the Dutch barn will adversely impact upon any buried archaeological features, associated with use of the terrace, for example, which might survive beneath the barn's concrete floor. The extent of such survival cannot be specified at present.*
2. *No monuments firmly identified in the vicinity of the Information Centre, will be directly impacted by the development, but the uncertainty regarding the exact provenance of carving CSIR 349 and the function of whatever structure it originally derived from means that the full archaeological impact of lower site development cannot presently be determined. There is a significant possibility that archaeological remains of a funerary or ritual character and Roman date may survive as sub-surface features within the envelope of the proposed new constructions.*
3. *The visual impact of both proposed developments on the fort and other Roman frontier monuments at Housesteads, will be minimal and in the case of the new construction at the farm should be more sympathetic to its setting than the present structure.*

The assessment makes a number of recommendations for archaeological work to evaluate and to mitigate the cultural heritage impact of the proposed scheme (Section 8). These comprise:

1. *Evaluation is required to determine whether significant archaeological deposits survive within the area of the new construction at the Information Centre. In view of the restricted area and the possible presence of service pipes, cables etc., it is considered this evaluation should take the form of limited trial trench excavation, rather than geophysical survey. The trenches should extend from the field wall, which forms the southern boundary of the site, to up to the existing wings of the building to observe a profile of deposits across the site. This evaluation phase should establish whether either full mitigation excavation of the area is required or simply archaeological monitoring by means of a watching brief.*
2. *Following demolition of the Dutch barn and removal of the existing concrete flooring, the opportunity should be made available for the full archaeological examination of the area of the new building and excavation of any features therein. If the existing floorpan is retained the strip to the west where the envelope of the new building extends beyond that of the barn should be excavated and any intrusions through the floor monitored by means of a watching brief.*
3. *Any new footpaths connecting the fort with the museum and/or information centre should as far as possible be designed to minimise the impact upon any cultural features and deposits intersected by its course. Should intrusive work prove necessary to establish paths, archaeological monitoring should be undertaken to mitigate the impact by record.*
4. *In view of the extreme complexity, density and sensitivity of the archaeological landscape around Housesteads fort, as far as possible existing pipe trenches, effluent plant sites etc., should be retained, and expanded if necessary. Drilling boreholes will have a relatively minimal impact which can be mitigated by means of archaeological watching briefs. However, on this basis the second choice location for the Museum effluent treatment plant, within the Farmhouse garden on the site of the existing septic tank would be preferable on archaeological grounds since any cultural deposits this location will already have been disturbed and installation work here could be mitigated by means of a watching brief. If the first choice location for the Museum effluent treatment plant is adopted, mitigation will require archaeological excavation of the installation site.*

1. INTRODUCTION

1.1. Purpose of Assessment

This report, prepared by The Archaeological Practice Ltd, has been commissioned by English Heritage. It is intended to accompany a planning application by English Heritage and the National Trust to improve visitor facilities at Housesteads Roman Fort.

The principal aims of the assessment are to identify archaeological constraints within the area of land likely to be impacted directly by any of the proposed developments, to identify areas or locations where further investigative evaluation is necessary in order to clarify remaining areas of uncertainty regarding the nature and significance of the archaeological resource, and to make recommendations regarding the work required to mitigate the scheme's impact.

1.2. Methodology of Assessment

The assessment will:

- define the area concerned (section 2) and list the principal sources of information available for archaeological assessment (section 3).
- present a catalogue (section 4) and chronological synthesis (section 5) of archaeological data derived from various sources and a discussion of specific issues arising (section 6). Accompanying base maps will locate established structures and features within, or in close proximity to, the proposed developments.
- provide conclusions with respect to the known and potential archaeological significance of the proposed development sites (section 7).
- outline the further work proposed to define more clearly the nature of the archaeological record and recommend measures to mitigate the impact of the scheme on the cultural heritage resource (section 8).

2. ASSESSMENT CONTEXT

2.1 Location and Extent of the Survey Area

The assessment focuses on two areas, one incorporating the present museum building and Housesteads farm complex, the other the Information Centre beside the B6318, to the south west and south of Housesteads Roman fort respectively. As is customary with this kind of work, the scope of the report extends well beyond the immediate footprint of the scheme to embrace a wider zone, which stretches up to 1km from the proposed improvements. This zone includes all of Housesteads Field plus strips the north of Hadrian's Wall and south of the Military Road. Consideration of this broader zone provides contextual information regarding those individual sites or historic landscape components which might potentially be physically impacted by the proposed scheme. It also ensures that any site or landscape component which might be more indirectly (e.g. visually) affected is incorporated in the site catalogue (section 4).

2.2 Topography and Geology

Housesteads fort stands on the Whin Sill escarpment in the central and most scenic sector of Hadrian's Wall. The Whin Sill, an igneous intrusion of dense dolerite, provided impressive natural defences for the Roman frontier works, but, more significantly in this context, the complex geological structure, which shaped the scarpland topography of the surrounding landscape, has had a profound impact on settlement and cultivation in the area around the fort. Housesteads represents a very favourable spot within its marginal upland environs. The distinctive scarpland topography, which culminated in the great ridge of Whin Sill, gave rise to the long, south-facing dip slope below the fort. The lower part of the slope, comprising most of the southern half of Housesteads field, consist of a limestone over which good fertile soils have developed. This combination of fertile soils and south-facing aspect provided the only good conditions for arable agriculture in the immediate vicinity, attractive to successive generations of farmers perhaps stretching as far back as prehistory and accounts for the complex palimpsest of agricultural features around the fort. The farm and museum are located towards the northern end of the limestone band. Further south, lower strata of sandstone have created two more parallel ridges. The first of these includes the distinctive whaleback form of Chapel Hill, whilst the second is occupied by the present information Centre which sits just to the south of the crest.

2.3 Present land-use

The site of the proposed new block is presently occupied by a Dutch barn, used for storing stonework and machinery (pl. 1). The surrounding hillside is predominantly pasture land. The Information Centre provides visitor reception facilities, including a shop, snack kiosk and modest site interpretation.

2.4 Nature of Proposed Developments

2.4.1 Lower Site (Information Centre)

The scheme involves the expansion of the Information Centre which will result in substantially improved site interpretation facilities. The existing L' shaped building will be retained in its entirety although extended at the north eastern corner to create a kitchen and bin store.

To the south of the existing building a new interpretation hall will be created, together with a new entrance onto the Scheduled Ancient Monument. The southern elevation of this component is coincident with the current boundary wall to the site (pl. 2).

A new bore hole will be sunk, immediately to the south of the proposed new wing of the Information Centre, to provide a sufficient water supply.

A new path leading westwards away from the visitor centre and suitable for disabled visitors is also envisaged, but its line has not been determined yet, pending completion of a topographical survey to predict the easiest line.

2.4.2 Upper Site (museum and farm complex)

A new building is to be erected on the site of the existing Dutch barn, to house offices, workshops and visitor toilets. This will be approximately 1000mm wider than the existing structure, i.e. the western facade moves out onto the car park by 1m - in order to allow a link between new and old thereby allowing the roofscape to be more readily detailed without seriously compromising the original building.

A new borehole is to be sunk in the farmyard to provide a sufficient water supply for the site. It is proposed to site a new septic tank in the south-west corner of the farmhouse garden.

2.5 Potential Impacts - General

The construction of a building has the potential to cause physical damage to cultural heritage remains through excavation of foundations or floor platforms and general ground disturbance associated with construction operations and also through ancillary operations such as the diversion of services, site compounds, and associated landscaping work. Even the construction of footpaths has the potential to damage archaeological deposits where there is only a thin covering of turf and topsoil. In addition important sites could be adversely affected by development which materially affects their setting.

2.6 Established and Potential Significance of the Assessment Area

World Heritage Site

The museum site forms an integral part of the Hadrian's Wall World Heritage Site, which was designated by UNESCO in 1987. The Information Centre site falls within the agreed setting of the World Heritage Site.

Scheduled Ancient Monuments

The scheduling of a site by the Secretary of State denotes it is of at least national significance and provides statutory protection over the defined area of the monument. The scheduled area at Housesteads (SAM: 26059) extends over a wide area, embracing all the fields between Hadrian's Wall and the Military Road from the Knag Burn in the east to beyond turret 37A in the west. It thus covers many distinct sites and monuments. The area includes the museum and farmstead, but excludes the Information Centre. To the south of the Military Road, a cairn ([55]; SAM 28585) and a barrow ([9]; SAM 28582) are scheduled separately.

Listed Buildings

Listing of built structures by the Secretary of State denotes historical or architectural interest, but does not necessarily include all buildings of significance or local importance. There are no listed buildings within the defined assessment area, which might be potentially visually or otherwise affected by the proposed development.

Guardianship and Ownership

The fort and the core of the vicus outside the south gate of the fort, which was excavated in the 1930s, are in the guardianship of English Heritage. The museum is managed by English Heritage. The fort and all the surrounding fields form part of the National Trust's Hadrian's Wall estate. This incorporates the great bulk of the assessment area. Only some of the fields south of the B6318 are in private ownership. The National Trust owns and manages the Information Centre.

Sites appearing on the Northumberland County Council Sites and Monuments Record (SMR)

The Northumberland County Council SMR has been accessed for entries within and in close proximity to the overall assessment area which may be impacted upon by proposed developments. Consideration of sites outside the defined zone enables better evaluation of its archaeological and historical context, highlighting the nature of potential remains within the assessment area. There are 43 entries relating to sites within the defined assessment area.

2.7 The *Housesteads Conservation Plan (HCP)* and previous archaeological assessment work

The preparation of the proposals to improve the visitor reception and site interpretation facilities was informed by the recently completed Housesteads Roman Fort Conservation Plan (Peter McGowan Associates *et al.* 2002; cited hereafter as *HCP*). This provides the most comprehensive synthesis available covering the archaeological resource in the fort and its environs. The conservation plan in turn built on previous archaeological assessment work, collating earlier investigations and research, notably the survey of the extent and preservation of archaeological deposits compiled by Newcastle University Department of Archaeology in 1994 (Crow & Rushworth 1994).

3. SOURCES FOR ASSESSMENT

3.1 Archival Material and Secondary Sources

The following sources of documentary, cartographic and photographic evidence were consulted:

- *Northumberland County Record Office, Melton Park, Gosforth (NRO)*
- *Northumberland SMR, Planning Department (Conservation Team), Northumberland County Council, Morpeth (SMR)*
- *City Library, Local Studies section, Newcastle upon Tyne (NCL)*
- *Museum of Antiquities Record Room, University of Newcastle upon Tyne (MA)*
- *National Monument Record, Swindon (NMR)*
- *Air Photograph Library, Unit for Landscape Modelling (formerly the Cambridge University Centre for Aerial Photography) (CAPL)*

3.2 Types of Information

Included amongst the various kinds of information used from each of the above sources are the following:

3.2.1 SMR, Scheduled Monument and Listed Building Records

A total of 43 sites and monuments recorded on the Northumberland County SMR, fall within the defined assessment area and provide contextual information on the archaeological and historical development of the assessment area. A majority of these fall within the scheduled area of Hadrian's Wall at Housesteads. No listed building records are relevant to the area.

3.2.2 Primary documentary sources

The majority of sources were consulted through published synthesis, but a number of original documents were also examined, in particular title awards.

3.2.3 Secondary and Published Information

Published works which shed general contextual light upon the assessment area or upon particular aspects of its archaeology or history are included in the bibliography (section 9), and cited where relevant in the synthesis and discussion (sections 5-6).

Local and Regional Histories

The principal local history covering the area of Housesteads is part II, volume 3 of John Hodgson's monumental *History of Northumberland* (1840). Hodgson was the first to study many of the primary documentary sources relating to medieval and early modern Northumberland and his compilations of this material (in the three volumes of part III) are still useful. Hadrian's Wall is dealt with in a 174 page footnote, perhaps the longest in publishing history.

Antiquarian sources

The descriptions provided by antiquaries who visited Housesteads from the start of the 17th century onwards, beginning with Reginald Bainbrigg in 1601, provide much information regarding the state of

the Roman monuments at that time and also details regarding contemporary landuse, including the continuing agricultural cultivation over the site. This information has been collated by Crow and Rushworth (1994, 12-15) and the Housesteads Conservation Plan (HCP: 70-71), building on earlier work by Hodgson (1822, 263-66), Bosanquet (1904, 193-99), Birley (1961, 178-80) and Salway (1965, 84-87).

Hadrian's Wall Research

There is a vast body of secondary literature covering research and investigation on Hadrian's Wall and at Housesteads in particular, stretching from Horsley's *Britannia Romana* (1732) through the work of Hodgson and Collingwood Bruce right up to the present day. New information is periodically collated in the *Handbook to The Roman Wall* (Daniels 1978 is still the most recent edition) and the handbooks compiled to accompany the decennial 'pilgrimages' along Hadrian's Wall by the members of the Society of Antiquaries of Newcastle upon Tyne and the Cumberland and Westmorland Antiquarian and Archaeological Society (Daniels 1989; Bidwell 1999). The most recent published syntheses covering Housesteads are the English Heritage guidebook and a fuller study both by James Crow (1989; 1995). The wider landscape setting is covered by Woodside and Crow's study of the National Trust Hadrian's Wall Estate (1999).

Previous assessments and reports

Two documents completed in the last ten years are especially invaluable for any archaeological assessment at Housesteads:

1. *Housesteads Roman Fort and its Environs: A survey of the extent and preservation of the archaeological deposits* (Crow & Rushworth 1994)
2. *Housesteads Roman Fort Conservation Plan* (Peter McGowan Associates et al. 2002)

Together these summarise a great deal of earlier investigation and research, drawing on a wide variety of source material, to provide the most comprehensive analyses yet of the archaeological resource at Housesteads.

3.2.4 Historic Map Evidence

Although the area of Housesteads is covered by county maps from the late 16th century onwards, Housesteads itself is first marked (as 'Borcovicus') on Warburton's map of Northumberland in 1716. Detailed mapping begins later in the 18th century with Horsley's map of the Wall published in *Britannia Romana* (1732) and, more importantly, the Military Road Survey of 1749. The following have been found useful in compiling a catalogue of monuments and history of the assessment area:

- *NCL - Map of the County of Northumberland, Warburton, 1716 (Fig. 1).*
- *Map of the Roman Wall from Hunnum to Cilurnum, John Horsley, Britannia Romana 1732 (Fig. 2)*
- *NRO ZAN MSM 5 - A Survey of the Country between Newcastle and Carlisle ..., Dugal Campbell & Hugh Debbeig, 1749 (Fig. 3) (see also ZAL 99/5 - Allgood version)*
- *NRO QRA 50 - Thorngraston Inclosure Award and map, 1797 (Fig. 12)*
- *NRO - Map of the County of Northumberland, Armstrong, 1769 (Fig. 4)*
- *NRO - Map of the County of Northumberland, Fryer, 1820 (Fig. 5)*
- *NRO - Map of the County of Northumberland, Greenwood, 1828*
- *NRO DT 446 M - A Map of Thorngraston Township, 1842 (accompanying the Tithe Award) (Fig. 6).*
- *The Roman Wall and Illustrations of the Principal Vestiges of Roman Occupation in the North of England, MacLauchlan 1857 (Fig. 14), including detail of Housesteads (Fig. 15).*
- *NRO - 1st Edition Ordnance Survey, c.1860, Northumberland, 1:2500 Sheet 83.12 (Fig. 7)*
- *NRO - 2nd Edition Ordnance Survey, 1896, Northumberland, 1:2500 Sheet 83.12 (Fig. 8)*

- *NRO - 3rd Edition Ordnance Survey, 1922, Northumberland, 6 in Sheet 81 SW & 90 NW (Fig. 9)*

3.2.5 Pictorial and Photographic sources

A large number of archival collections contain pictorial and photographic coverage of Housesteads. Of these probably the largest, most varied and accessible is the *Hadrian's Wall Pictorial Archive* housed in the Museum of Antiquities Record Room, comprising a collection of mounted photographs and a few sketches copied from a variety of sources. Views relevant to this assessment include a view of the museum shortly after completion (HWA 5542) and a frequently reproduced view taken in low sunlight by J.P. Gibson, at the end of the 19th century, showing the terraces with exceptional clarity (HWA 6250). The latter gives some indication of the appearance of the upper site prior to construction of the museum.

3.2.6 Aerial Photographs

The following serve as repositories of air photographs including views of Housesteads:-

MA

Main Collection: The main aerial photographic collection contains well over 50 b/w mounted prints (mostly oblique) covering Housesteads fort, vicus and wider surroundings, ranging from Cambridge University (J.K. St Joseph) 1945 views right up to a fine series taken by T.M. Gates in 1992. In particular, there are a good number taken from 1964-1970 by N. McCord, and by T. Gates in February 1979. Further McCord examples - 10 colour slides - are stored and catalogued separately.

Aitchinson Archive: The older air photographs are housed separately in the Aitchinson collection. Of the main Hadrian's Wall group (Box file 1), all taken in 1949, 16 cover Housesteads (including milecastle 37 views).

Wall Albums - RAF photo sequence: Particularly useful is the series of overlapping vertical APs covering the Wall zone taken by the RAF, October 1930, which is stored in 4 albums (HGI 33-36). Three photographs cover Housesteads and are among the most informative available. The surrounding earthworks stand out with exceptional clarity (see pl. 9). Glass slide copies are held in NU Box 52.

CAPL

This collection initiated by J.K. St Joseph comprise views taken from 1945 onwards. Important groups include views include the series taken in drought conditions on 1949 and particularly fine views (K17 - AU 28-9 and K17 X 4-6) which were utilised by the RCHME to analyse the landscape around the fort in conjunction with their earthwork survey.

NMR

Large collection, mostly in held in the specialist (oblique collection), b/w and colour which were mainly taken after 1970 (with a few 1930 & 1955), plus some verticals (1930-).

SMR

Also has a large aerial photographic collection which includes significant coverage of Housesteads.

This assessment has made particular use of the following which were photographed in optimal conditions and show the earthworks to particularly good effect:-

- RAF 1930 sequence of 3 overlapping verticals held in album HGI 35 in the Museum of Antiquities Record Room.
- Certain Cambridge photographs: CLY 13: May 1980 (oblique); K17-X 5: Feb. 1971 (vertical) and the 1949 series taken in drought conditions (e.g. DS 28, DS31, DS 78).

- The fine series taken by Gates in 1992 which cover the area south of the information centre, including the 'tumulus' [9], as well as the fort and vicus: NY/7868/J-L (fort); NY/7967/E, G, I-J, L (tumulus etc., especially NY/7967/I); NY/7968/BB-BD ('tumulus'); NY/7968/BA, BE-BG.

An aerial photographic survey of the Wall zone recently completed for Northumberland National Park Authority by Tim Gates provides a valuable new source of information (Gates 1999).

3.2.7 Site Inspection and Local Information

A site visit was made to examine in detail the monuments and features in the immediate vicinity of the proposed improvements by Dr Alan Rushworth on 23rd June 2003. The principal observations derived from this inspection have been included in the relevant sections below (4, 5 and 6).

3.2.8 Excavation and Survey

Excavation

There is a long history of excavation at Housesteads, both inside and outside the fort, stretching back to the pioneering campaigns of John Hodgson in the 1820s and 1830s. One programme of work is particularly significant for the purposes of this study, namely the five trenches excavated by James Crow across the terraces between the museum and the farm complex in 1987. The report on these excavations is in the process of publication and was kindly made available for consultation by Mr Crow. It provides important information on the development of the terraces.

Earthwork Survey

More useful is the extremely detailed topographic survey covering the environs of the fort, completed by the RCHME in the late 1980s. Again the report on this work is in the final stages of preparation for publication, and the author, Humphrey Welfare has kindly made his text and survey plans available for consultation during the compilation of this assessment. The survey sheds important light on the many features recorded outside the fort and in particular further information on the development of the terraces and potential remains in the vicinity of the Information Centre. As part of their research accompanying the survey, the RCHME examined the aerial photographs covering Housesteads and its environs and their report thus provides a comprehensive summary of the information to be derived from the aerial photographic coverage of the site.

4. SITE CATALOGUE

The catalogue below provides a listing both of the sites likely to be materially affected by the development and of monuments in the wider vicinity which may be visually impacted or which may provide contextual information regarding the historical development of the area. The catalogue is derived from consultation of the sources noted in section 3. Cross referencing is provided to the site numbering in the Conservation Plan, along with the relevant SMR, NMR and Scheduled Ancient Monument identifiers.

4.1 Monuments and features within the area of or immediately adjacent to the proposed development

[1] Terraces; SMR: 6671; SAM: 26059; NGR: NY 7893 6853; HCP: A67.

A series of long, parallel terraces, probably designed to facilitate agricultural cultivation, run across the hillside below the fort, from the Knag Burn westwards to the current farmhouse, continuing beyond the fieldwall which marks the western limit of the Housesteads Meadows. These terraces probably covered the entire south-facing slopes originally. The southern faces of the two Vallum mounds and the northern side of the Vallum ditch may have been retained and adapted to create three of the terraces. Birley's work in the 1930's showed that the filled in vallum ditch survives underlying the terraces (Birley & Keeney 1935). Excavation on the terraces in the farmhouse and museum area in 1987 pointed to an origin in the Roman period, in the 3rd century or later, with a more recent phase of re-use, indicated by the presence of a stone mound north of the terrace revetting wall (Crow forthcoming). Pre-terrace palisade fencing and other features were also recorded. To the west of the museum and farm, later cultivation lynchets [40], which probably represent the final phase of ploughing on the hillside, obliquely cut across the original straight alignment of the terraces.

[2] Enclosures west of the Fort; SMR: 6667; SAM: 26059; NGR: NY 788 687; HCP: A82.

An irregular patchwork of enclosures, formed by low stoney banks, on both sides of the Military Way to the west of the fort. Probably stock enclosures rather than arable plots. Further south the enclosures, though more ephemeral, appear to curve round to the east slightly to accord with the alignment of the northernmost of the terraces. They seem to be laid out in relation to the Military Way, but encroach on its line to some extent and may date anytime from the later Roman period until the end of the 18th century.

[3] Housesteads Farm; SAM: 26059; NGR: NY 7890 6862; HCP: B3

A neo-Tudor farmhouse with associated outbuildings to the north built by John Clayton in the 1860s to replace the late 18th-century cottage near the south gate of the fort ([19]; HCP: A49). The latter was still standing in c.1860 when the 1st edition Ordnance Survey was compiled, but had been demolished by 1863 (Bruce 1863, 129). The farmhouse comprises a one-and-a-half storey range with small entrance porch to the north and a single storey wing to the south. The U-shaped range of outbuildings is largely preserved intact in the form documented by the 2nd edition Ordnance Survey (1896), save for the demolition of some pigsties at the south end of the west range, in front of the entrance to the later Dutch barn. The large Dutch barn, currently used to house stonework from the site, is a mid-late 20th century addition. The complex is highly significant as a little altered mid-late 19th century upland farm and because of its associations with John Clayton who used the south wing of the farmhouse as his study during periodic visits to the site.

[4] Museum; SAM: 26059; NGR: NY 7886 6866; HCP: B2.

Museum built between 1934-36 by the National Trust on one of the terraces, initially to house the finds from the 1931-34 excavations in the *vicus*. The groundplan of the single storey building was laid out to the same dimensions as that of the 'Murder House' in the *vicus* (Building 8). The attached curator's cottage was built in the 1950s after the museum had been placed in the guardianship of the Ministry of Works. Despite its functional problems as a museum, the building has high site significance because of its association with beginning of the National Trust's tenure of Housesteads and with the pioneering archaeological research in the *vicus* by Eric Birley and the Durham University Excavation Committee.

[5] *Road from the Stanegate*; SAM: 26059; NGR: NY 79466844-79646858; HCP: A75.

A possible Roman link road traced by MacLauchlan from Grindon Hill Farm, where it branched off the Stanegate, through Beggar Bog to Housesteads (MacLauchlan 1857; 1858, 39-40). Clearest on the ridge immediately north of the car park, where a narrow ramp descends the north face obliquely to join the current track up to the fort. 'A quantity of large stones', interpreted as foundations for the road, were found during 19th-century drainage work, at the point where the track reaches the southern edge of the marshy ground (MacLauchlan 1858, 40). From there it must have climbed the hillside towards the vallum crossing and the fort. The Roman date of this route has yet to be verified, but tentative support for the Roman date of this route may be provided by the discovery of a fine relief carving, featuring two seated female figures (CSIR 349), during ground clearance prior to construction of the National Trust visitor centre in 1982. The sculpture may have derived from a shrine or funerary monument on the ridge, occupying a prominent spot overlooking the road in typical Roman manner.

[6] *Cemeteries*; SMR: 6669; SAM: 26059; NGR: NY 789 684, NY 794 687; HCP: A76.

Very little is known of the cemeteries at Housesteads. The following list of candidates is based on the meagre earlier references:

1: Bruce recorded that numerous human remains were found when the marsh to the south of the fort was drained in the mid-19th century (1863; 1867, 151). Such a peripheral location would be appropriate for a cemetery.

2: A figured gravestone (CSIR 203) seen by Hodgson 'on the ridge in the hollow of the field west of the' *mithraeum*, along with other remains which might have belonged to funerary monuments, notably 'a stone three feet high, which seemed to have been the pedestal of a statue' (1840, 194-5). However, there is no evidence that such funerary activity extended into the fields west of Housesteads Meadows.

3: The discovery of gravestones south of Turret 37B (RIB 1636=CSIR 206), reused in MC 38 (RIB 1639=CSIR 205), and east of Turret 39A (RIB 1641=CSIR 207) suggests there many have been a series of funerary monuments strung out alongside the Military Way, from Housesteads westwards. Normal Roman practice would have been to bury the dead alongside the roads leading away from the fort.

[7] *Quarries beside the Military Road*; SAM: 26059; NGR: NY 786681--795685; HCP: A78.

Several areas of sandstone quarrying can be identified on the escarpments north of the Military Road. These were recorded in detail by the RCHME in 1986 (Welfare forthcoming) and are probably a mixture of Roman (cf. Crow 1991) and mid 18th-early 19th century in date. The most extensive workings lie along the ridge just north of the road, cut into the face of the north scarp. Further west numerous smaller scoops and pits, some as little as 3m across, spill over on to the crest and down the southern dip slope of the ridge. Various tracks and hollow-ways are associated with all this activity.

Further traces of sandstone quarrying can be seen on the north face of the next escarpment to the north (HCP: A78.2), spread over a distance of c.390m westward from the farm track (HCP: C5), but less

intensive than *HCP: A78.1*. The quarry scoops visible in the southern part of Mosskennels Plantation (*HCP: P6*), on the east side of the Knag Burn, represent yet another area of sandstone exploitation (*HCP: A78.3*), possibly associated with the fieldwall construction documented in this area during the late 18th century.

[8] *The Military Road (B6318); NGR: NY 78366754--79886878; HCP: A79/C1.*

Turnpike Road surveyed in 1749 (NRO ZAN MSM/5) and built between 1751-57, to improve communications between Newcastle and Carlisle, following the failure of General Wade's army, based in Newcastle, to intercept the southward march through Carlisle of Bonnie Prince Charlie. Wades troops became bogged down outside Hexham unable to haul their artillery and baggage train through deep snow drifts. Although strategic concerns may have prompted the road's construction, the local gentry strongly supported it, most probably with an eye to fostering general economic development in the Tyne-Solway corridor (cf. Lawson 1966; 1973).

[9] *Bowl barrow at Beggar Bog; SMR: 6588; SAM: 28582; NGR: NY 7937 6833; HCP: A80.*

A large earthen barrow or burial mound, of uncertain date, located in Beggar Bog field on the south side of the Military Road opposite the Information Centre. The mound stands around 4m high and is 26m in diameter. It is bisected by a broad, partially backfilled excavation trench, oriented east-west, the date of which is unknown. The trench was already present by 1769 when it is mentioned by the antiquarian Wallis (1769, 37). Hodgson (1840, 288) suggests it was dug by the early eighteenth century antiquary, Warburton, who visited Housesteads in 1715. In addition the mound has been slightly truncated to the north by the Military Road. No trace of a surrounding ditch or stone kerb can be seen.

4.2 Monuments and features within the defined assessment area

The following includes monuments and features lying outside the area of likely direct impact, but within the wider assessment area. Listing of these sites provides contextual information important for an understanding of the area's historical development. In certain cases these sites might potentially be visually impacted.

[10] *The Fort; SMR: 6564; SAM: 26059; NGR: NY 7899 6880; HCP: A1.*

The Roman fort of *Vercovicium* occupied from the 2nd up till the end of the 4th centuries and possibly beyond. Probably the best-preserved fort in Britain. The defences, central range buildings (headquarters, commanding officer's house, hospital and granaries) two barrack blocks, a late Roman storehouse and a fine set of latrines are consolidated and displayed.

[11] *Turret 36B and Hadrian's Wall foundation inside the fort; SMR: 6554; SAM: 26059; NGR: NY 7896 6884; HCP: A2, A101/36A-36B & A122.*

Remains of turret 36B and adjacent Broad Wall foundation revealed in the northern part of the fort by Simpson and Richmond in 1945 (1946). The redundant turret was demolished when construction of the fort began. The Broad Foundation has been found at other points in the fort, for example at the north-east angle in 1979.

[12] *Hadrian's Wall curtain and ditch - Knag Burn stretch; SMR: 6672; SAM: 26059; NGR: NY79046886--79106900; HCP: A101/36A-36B.*

Surviving stretch of Wall curtain crossing the valley of the Knag Burn, cleared by Clayton in 1857. Junction with NE angle of fort investigated by Simpson in 1909. A section of the curtain was reinvestigated under the direction of I. Stuart (IAM) in 1975 to reveal original Roman masonry. As it stands, the curtain reflects rebuilding of Hadrianic Narrow Wall during the Roman period, probably in the Severan era, and restoration by Clayton, but Broad Wall foundation survives beneath this work.

From the W edge of Housesteads plantation eastward the Wall lies beneath a modern field wall which marks the northern boundary of Moss Kennels Farm.

[13] *Late apsidal building (church?) and cist burial; SMR: 6565; SAM: 26059; NGR: NY 7892 6883; HCP: A15.*

Two features of possible early medieval date lie in close proximity in the northern part of the fort. A cist burial has been inserted into the NW corner a water tank, which was itself probably set into the rampart bank. The tank provided an east-west orientation for the cist. Such cist burials were especially a phenomenon of the early Christian period, from the fourth to eighth centuries and are often aligned east to west like this example. An adjacent apsidal-ended building floored with 'a rude pavement of massive building stones and flags roughly fitted together' was excavated by Bosanquet in 1898 (1904, 242; cf. HWA 5057). This has been interpreted as an early medieval church (Crow 1995, 95-8).

[14] *Longhouse; SAM: 26059; NGR: NY 7901 6846; HCP: A44.*

The remains of a longhouse situated immediately to the north of the south gate. This was clearly a sizeable structure, much larger in ground plan than the nearby bastle. The west end of the building, wedged between the west tower of the south gate and the south-east angle of the *praetorium*, is the easiest part to recognise today. The central portion straddling the *via principalis* was removed in 1936 (Birley 1937-38), but further east the longhouse platform can be seen to continue, its southern edge marked by a scarp well to the south and on a different alignment to that of barrack block XVI. The position of the longhouse, straddling the south entrance to the fort, suggests a primary site with later buildings added in front, and to either side and may point towards construction during the earliest 'pioneer' phase of the 16th/17th century settlement, or even, conceivably, in the 13th century.

[15] *S gate bastle and corn-drying kiln; SMR: 6592 & 6601; SAM: 26059; NGR: NY 7902 6875; HCP: A45.*

Standing in front of the south gate, attached to south face of the east guardchamber, are the remains of a 'bastle', a small defensible farmhouse of the early modern period. This would typically have been a two-storey building, the lower floor serving as a byre, where a few livestock could be securely housed, with the living quarters located at first-floor level. In this case only the ground floor survives. The east guardchamber was incorporated to form a second room. The bastle was probably built in the late 16th or early 17th century. Later, after the bastle had been abandoned as a dwelling, a corn-drying kiln was inserted in the guardchamber.

[16] *South-east bastle; SAM: 26059; NGR: NY 7906 6877; HCP: A46.*

A second possible bastle can be identified in the south-east angle of the fort. No remains of this structure survive today, but the building can be reconstructed from the description and sketches provided by the antiquary Roach Smith (1852), after a brief visit to Housesteads in 1851, plus the evidence of the 1st edition Ordnance Survey.

[17] *17th-18th-century Farmhouse(s); SAM: 26059; NGR: NY 7895 6875; HCP: A47.*

There are no visible traces, today, of the 18th century farmhouse depicted in Stukeley's sketch of 1725 (1776). The 1725 sketch depicts a fairly substantial gabled building apparently located in the west-central part of the fort. Bosanquet exposed the foundations of what he termed the 'seventeenth century farm house' overlying the south-west angle of Building XI and the south-east angle of barrack building VI. It is not clear whether this is the same building as that sketched by Stukeley, or a separate and perhaps earlier example..

[18] *Corn-drying kiln in the granary; SMR: 6601; SAM: 26059; NGR: NY 7898 6882; HCP: A48.*

Midway along the south side of the south granary are the consolidated remains of a well-preserved corn-drying kiln. This has the funnel-shaped form and keyhole plan typical of such structures. When first built it would simply have been set into the conveniently solid bank provided by the collapsed remains of the south granary. The kiln probably dates to the late 17th-18th century, contemporary with the farmhouse shown in Stukeley's sketch. It was certainly disused by the time Hodgson described it in the 1820s for he appears uncertain as to its exact purpose (1822; 1840, 186).

[19] *Later 18th-century farmhouse S of the fort; SAM: 26059; NGR: NY 7897 6871; HCP: A49.*

Little survives today of the farmhouse situated below the south curtain and to the west of the gateway, which replaced that inside the fort during the mid-late 18th century. Only a bank of rubble cut by a robber trench can be seen running north-west from site of the house's west end toward the fort. It can be reconstructed from antiquarian descriptions and mid 19th-century maps and pictorial sources, notably a Richardson watercolour of the cottage c. 1850. These reveal a two storey house with a chimney at either end plus a stone lean-to shed against the west wall and a single storey, gabled building (a byre?) attached to the east. The cottage was standing around 1860, but demolished by 1863.

[20] *Later 18th-century well S of the fort; SAM: 26059; NGR: NY 7897 6868; HCP: A50.*

A circular drystone-wall, resembling a small sheep stall with no entrance, stands a short distance south of the fort, midway between the present farmhouse and the vicus buildings. Within the walled enclosure a well-head is still visible as a setting of blocks. The well was sunk by the tenant at Housesteads, William Magnay, during the late 18th-century, in a convenient location directly in front of the farmhouse south of the fort.

[21] *Vicus south of the fort; SMR: 6564; SAM:26059 ; NGR: NY 790 687; HCP: A53.*

The best-known part of Housesteads *vicus* on the hillside immediately south of the fort. Six buildings belonging to the settlement can be seen on display here today (*Vicus* Buildings 1-5 and 8) out of a total of 26 which were excavated or traced in this area between 1931-34 and subsequently placed in the guardianship. The buildings were all clustered around a series of roads which radiated away from the south gate of the fort. One of these roads remains visible as a fine, paved surface emerging from the south gate and running eastward for over 10m. This would have continued around the south-east angle of the fort presumably to link up with the Military Way. The guardianship area represents the limit of excavation rather than the actual limit of settlement and there is clear evidence that occupation extended beyond this area in all directions. To the south, the line of the Vallum, where the hillside starts to drop away more steeply, was thought to provide a rough limit, but even here it is now clear that buildings extended over the Vallum ditch after it had been abandoned and backfilled, and further down the slope.

[22] *Vicus east of the fort; SMR: 6564; SAM: 26059; NGR: NY 791 688; HCP: A54.*

Quarter of the civil settlement to the east of the fort, revealed by the traces of narrow robber trenches which suggest the presence of at least six strip buildings. Some buildings lay at right angles to the Military Way, lining the approach to the *porta praetoria* and facing on to the road in the usual manner. Others lay parallel to the Military Way and probably faced on to the road running around the south-east angle of the fort.

[23] *The Military Way; SMR: 6672; SAM: 26059; NGR: NY 78146856--78886877 & 79066882--79646914; HCP: A55, A104/36 & A104/36B-38.*

The line of the Military Way can be followed from Milecastle 36 westward. At Housesteads Plantation it joins the line of the earlier road leading up from the Vallum (and the Stanegate?) [24] and follows that established route across the Knag Burn by means of a culvert, probably Roman in origin and then by a broad engineered turn to the main gate of the fort.

West of the fort the Military Way takes a direct line passing close to Milecastle 37. The line is clear throughout its course, marked in places by kerbstones and a clear *agger*.

[24] *Earlier eastern approach road; SMR: 6672 & 7595; SAM: 26059 & 26058; NGR: NY 79246896-79706902; HCP: A56 & A111.*

An earlier approach road to the east gate of the fort identified recently by survey (Welfare forthcoming) and aerial photography. It was clearly constructed before the Military Way since the south scarp of the latter overlies this road at their junction. It lead either to the Vallum, as part of the Vallum patrol track, or perhaps onward to the Stanegate at Grindon, before the Vallum was built. It may even represent an earlier course of the Military Way itself.

[25] *Vallum; SMR: 6672; SAM: 26059; NGR: NY 79406884--79746900; HCP: A57 & A103/36-37.*

The line of the Vallum is apparent as surviving earthworks only as west as the east side of the Knag Burn. South of Housesteads its course is masked by later Roman and medieval/early modern terraces and cultivation patterns. Its route was traced by means of trenching by Birley in the 1930s. A stone-revetted causeway was excavated to the south of the south gate of the fort. The southern faces of the two Vallum mounds and the northern side of the Vallum ditch may have been retained and adapted to create three of the terraces.

[26] *Prehistoric terraces and later quarrying north of the fort; SMR: 6650, 6652, 6653-4; SAM: 26059; NGR: NY 78916887--78996891, 79016891, 791689; HCP: A86.*

A series of small terraces, on the hillside between the east gate and the Knag Burn gateway, bounded on the east by the Military Way, probably representing lynchets created by former arable cultivation. One or two of these terraces appear to continue to the north of Hadrian's Wall, in which case they must pre-date the Wall and the fort itself and represent traces of later prehistoric agricultural activity on Housesteads hillside. Two quarry scoops cut into one of the lynchets north of the fort.

[27] *Shieling or milking shed; SMR: 6656; SAM: 26059; NGR: NY 7910 6889.*

Reduced earthworks of a small rectangular shieling or possibly a milking shed set on one of the lynchets north east of the fort. Associated with the medieval or early modern exploitation of the site.

[28] *Grospoolhole and the Fairy Stone; SMR: 6662; SAM: 26059; NGR: NY 7900 6895 & 7899 6896; HCP: A84.*

A pair of sub-circular embanked enclosures side by side near the Knag Burn in the field north of the Wall known as Grospoolhole or Goose Pool Close (NRO QRA 50). The more south-easterly of the two incorporates a semi-recumbent stone slab, 1.15m long, almost blocking a gap in the bank to the north-east. Known as the 'Fairy Stone', this may have formed one side of an entrance and was still upright during the 19th century when it was recorded by Hodgson (1822, 270; 1840, 288n), MacLauchlan (1857, 38; 1858) and Bruce (1863, 116). The enclosures may represent pens for geese or stack stands.

[29] *Knag Burn gate; SMR: 6651; SAM: 26059; NGR: NY 7908 6894; HCP: A58.*

Gateway through the Wall, occupying a low-lying position next to the culvert for the Knag Burn. The gate is a single passageway with responds for arches at the front and rear, flanked by two towers which were entered by doorways off the roadway. It had two main structural phases. It was probably constructed in the form of a simple arched and gated passage when the Wall curtain was rebuilt at the beginning of the 3rd century, to provide access to the north for Wall maintenance and patrols, replacing the north gate of the fort, which was taken out of use at the end of the 2nd century. The flanking towers were clearly a later addition and abut the rear face of the Wall

[30] *The 'Amphitheatre' (quarry); SMR: 6578; SAM: 26059; NGR: NY 7908 6900; HCP: A59.*

The quarry known as 'the amphitheatre' located on the north side of the Wall, north east of the Knag Burn gate, where it exploits a rare outcrop of sandstone in proximity to the Whin Sill. It forms a large depression up to 4.6 m deep and measuring 33 m from NE to SW by 28.5 m transversely. Its true function was revealed by Bosanquet who put two trenches across it (N-S and E-W) in 1898

[31] *Kennel Crags Lynchets; SMR: 6657; SAM: 26059; NGR: NY 7916 6900 & NY 7914 6901*

Group of irregular angular terraces on the east side of the Knag Burn between the Military Way and the Wall. Probably of Roman date.

[32] *Kennel Crags shielings; SMR: 6661; SAM: 26059; NGR: NY 791 690; HCP: A60.*

A group of five shielings on Kennel Crags, preserved as turf-covered stone footings. Two stand on separate terraces north of the Wall. The other three are located behind the south face of the Wall, just east of Housesteads Plantation, two of these butting hard up against the curtain for maximum shelter.

[33] *Knag Burn well; SMR: 6673; SAM: 26059; NGR: NY 7916 6894; HCP: A61.*

A spring encased in a shallow rectangular stone basin on the east side of the Knag Burn, 45m north west of the bathhouse. The basin, measures 2.0m by 1.7m across and 1.5m deep has a lower sill on one side and two intakes in the opposite corners. The spring probably supplied water to the baths. It was excavated by Bosanquet in 1898.

[34] *Bathhouse; SMR: 6673; SAM: 26059; NGR: NY 7924 6887; HCP: A62.*

Hadrianic bathhouse for the fort built in the narrow valley of the Knag Burn, between the Wall and the vallum nearly 200m east of the east gate. The remains sit on a narrow shelf immediately above the east bank of the Knag Burn. An evaluation trench cut in the 1932 found one wall standing ten courses in height, almost as high as part of the baths from Chesters fort (Birley & Keeney 1935, 243).

[35] *Lime kiln; SMR: 6666; SAM: 26059; NGR: NY 7925 6885; HCP: A64.*

A lime kiln of Roman date situated on the west side of the Knag Burn SE of the fort. Excavated by Simpson in 1909. No visible remains as the kiln was backfilled after excavation, but traces of reddened stones can still be found in the sheep scrapes at the lower side of the valley.

[36] *Settlement and field system east of the Knag Burn; SMR: 6599 & 6655; SAM: 26059; NGR: NY 7933 6891 & 7922 6892; HCP: A65.*

Circular structure (roundhouse?) with rectangular enclosures to west which may form part of a Romano-British or later settlement on the east side of the Knag Burn, immediately north of the Vallum. Perhaps associated with a series of irregular, angular terraces which stretch between the Wall and the Vallum to the east of the burn and appear to form part of a field system. The banks and lynchets of the field system stand out well on the surface. Excavation was carried out in the settlement by Ann Dornier of Leicester University in 1967-68 (Dornier 1968; 1969).

[37] *Lead workings; SMR: 6660; SAM: 26059; NGR: NY 7938 6869; HCP: A63.*

Remains of a lead drift mine represented by a prominent, flat-topped, pear-shaped spoil heap projecting into the marsh at the foot of the hillside, south east of the fort, and an adit about 40m to the north. Probably dug in the very last years of the 19th century.

[38] *Hedge-lines south and east of the fort; SAM: 26059; NGR: NY 791 688; HCP: A66.*

A series of stoney banks can be traced south, south east and east of the fort, which probably represent early hedge lines or field walls associated with the early modern exploitation of the hillside.

[39] *Cross contour ridge-and-furrow; SAM: 26059; NGR: NY 787 684 & 792 687; HCP: A68.*

An extensive pattern of broad ridge-and-furrow can be seen running up and down the lower slopes of the hillside to the south east and south west of the fort, from the Knag Burn in the east continuing westwards well beyond the field wall which marks the modern western limit of Housesteads Meadow. Probably representative of the penultimate phase of agricultural cultivation on the hillside (cf. Welfare forthcoming).

[40] *Contour broad ridge-and-furrow; SAM: 26059; NGR: NY 788686 & 792687; HCP: A69.*

A pattern of broad, gently curving ridge-and-furrow follows the contours of the hillside south east of the fort. This broad rig partially reuses the earlier, Roman terraces but also cuts obliquely across them in places, notably just to the east of the extant *vicus* buildings south of the fort (A53). It also cuts across the earlier phase of cross-contour ridging, which runs up and down the lower slopes immediately to the south ([39]; HCP: A68). Some of the contour terraces south west of the fort appear to have been modified in a similar way to those to the south east, with lynchets obliquely cutting across the original straight alignment of the terraces to the west of the museum and farm. The latest phase of cultivation identified by the RCHME survey (Welfare forthcoming). It probably represents the surviving traces of the determined arable cultivation reported by antiquaries Hunter, Stukeley and Horsley in the earlier decades of the 18th century.

[41] *Recumbant Columns SE of fort; SMR: ; SAM: 26059; NGR: NY 79386856 & 79456872; HCP: A70.1-2.*

Two recumbant column drums visible at the foot of the hillside in the flat, marshy meadow south east of the fort. One lies close to the Knag Burn; the other is located 150m to the south west. First noted in 1708 and 1853 respectively. Both probably *ex situ* and likely to have been brought down by agricultural cultivation or flash flooding of the Knag Burn.

[42] *Well/shrine of Mars Thincsus and lower vicus; SMR: 6670; SAM: 26059; NGR: NY 7910 6856; HCP: A71 & A72.*

The Roman well just to the north of Chapel Hill fed by a powerful spring which still supplies water to the farmhouse. The well is c. 1.35m ('4ft 6in') deep, lined with stone slabs and enclosed by a small shrine with an apsidal north end. The interior of the D-shaped building is now covered by dense vegetation. Immediately to the south, a monolithic arch and inscribed pilaster (CSIR 159, 161) - probably parts of a carved projecting doorframe - were uncovered by Clayton's workmen (Clayton *et al.* 1885, 170; cf. Bruce 1884, 142; 1885, 152f), along with an altar dedicated to Mars Thincsus, the two *Alaisiagae* and the *numen Augusti* (RIB 1594). Two uninscribed altars were found within the shrine. Excavation carried out in 1960-61 by R.E. Birley (1961; 1962) showed that the well and apsidal shrine, revealed by Clayton, formed part of a larger settlement, including a large hall, and a workshop. The latter was overlain by a more crudely-built circular structure, evidently a later roundhouse (misinterpreted as the shrine of Mars Thincsus by the excavator). More buildings were revealed to the south west by Birley (1962, 124-125) and by Bosanquet in 1898 (1898). Excellent preservation of organic remains was evident in waterlogged conditions.

[43] *Chapel Hill; SAM: 26059; NGR: NY 791 685; HCP: A73.*

Two phases of cultivation systems are evident on Chapel Hill. A pair of terraces run along the contours on the south facing slope and continue around the west end of the hill. Towards the eastern end of the hill, these terraces are apparently overlain by a later phase of ridge-and-furrow plus associated hedge-lines running down the slope. Along the crest of the hill aerial photographs reveal possible footings of a row of perhaps three small buildings - perhaps 'the foundations of houses' and the 'little oblong square temple' known as Chapel Steads, mentioned by antiquaries like Sir John Clerk in 1724 (Birley 1962, 240). These may represent a medieval or early-modern farmstead. Antiquarians also recorded the discovery of much carved stonework on Chapel Hill, but successive episodes of archaeological trenching have proved inconclusive. However the stonework which can be reliably

attributed to Chapel Hill on the basis of early antiquarian accounts consists solely of official dedications by the garrison to various deities, suggesting there may have been a shrine in the vicinity which served as a focus for official acts of devotion by the garrison.

[44] *Mithraeum; SMR: 6668; SAM: 26059; NGR: NY 7903 6846; HCP: A74.*

The site of the *mithraeum* visible today as a depression at the east end of the ridge, SW of Chapel Hill. Excavation by Hodgson in 1822 and Bosanquet in 1898 revealed a small rectangular building, no more than 15m in length (east-west) and 6m wide, constructed by digging a level platform into the ridge and lining this with rough stone walls, bonded with clay and faced only on the inner side. The *mithraeum* was clearly functioning in the 3rd century on the basis of epigraphic and coin evidence. The site has produced one of the most outstanding groups of stonework from Housesteads, comprising six inscribed altars and another six statues and relief carvings.

[45] *Coal pits; SAM: 26059; NGR: NY 7910 6834; HCP: A77.*

Four small pits, strung out in a line roughly north-south, can be seen about midway between the *mithraeum* and the Military Road, at the foot of the crags immediately north of the road. These probably represent shallow shafts opened by coal prospectors. Three of the shafts are marked on the OS 1st edition 1:2500 map (1860) as 'Old Shafts (Coal)'.

[46] *Road from Vindolanda; SAM: 26059; NGR: NY 78606805--79016874; HCP: A81.*

A possible Roman road heading southwest from the fort's south gate towards Vindolanda and the Stanegate, following the line of the present farm access track (*HCP: C5*). The south-east corner of *Vicus Building V* is cut away to facilitate the passage of traffic along this road. The farm track descends the hillside obliquely on a narrow inclined terrace which appears to predate the surviving agricultural terraces on either side.

[47] *Hadrian's Wall west of fort; SMR: 6672; SAM: 26059; NGR: NY 78106862--78886882; HCP: A101/36B-37.*

The Wall curtain west of the fort was mostly conserved by John Clayton in the mid-19th century. The lower courses represent original Roman work. The stretch in Housesteads Wood was excavated and restored by the National Trust in the 1930s, shortly after it had acquired the fort and Milecastle 37.

[48] *Mr Magnay's Bath; NGR: NY 7873 6884; HCP: A83.*

A stone-lined basin encasing a spring situated amidst scree at the foot of the crags 125 m WNW of the fort. The spring represents one of the probable sources of water for the fort. Still in use during the later 18th century when, according to Hodgson (1840, 288), the stone basin served as a bath for the family of William Magnay, the tenant at Housesteads.

[49] *Stack stand and ridge-and-furrow; SMR: 6618; NGR: NY 7855 6886; HCP: A108.*

Sub-circular stack stand overlying an area ridge and furrow north of the Wall. Evident as earthworks (cf. Welfare forthcoming) and recorded on aerial photographs (CUCAP BEW 68, 70; cf. Gates 1999, 49-50 (NY 76NE 83)).

[50] *Medieval or early modern farmstead; SMR: 6664; SAM: 26059; NGR: NY 7863 6868; HCP: A89.1.*

A rectangular building, measuring 13.6m by 5.4 m, situated 120m ESE of Milecastle 37. Its walls are 0.9m wide and survive only a single course high. They are well-constructed with neatly-laid, heavy blocks. A stony bank extends northward for a short distance from the north-east corner of the building and may form part of an associated enclosure. Perhaps a small, permanent farmstead rather than seasonally occupied shieling on the basis of the relative quality of its construction and the possible presence of an attached enclosure.

[51] *Medieval/early modern farmstead*; SMR: 6663; SAM: 26059; NGR: NY 7846 6867; HCP: A89.2. A second rectangular building, lying only 10m west of Milecastle 37, is similar to [50]. The possible remnants of enclosure walls, in the form of fragmentary stony banks, survive to the north east and north west of the building in the angle formed by the milecastle.

[52] *Milecastle 37*; SMR: 6555; SAM: 26059; NGR: NY 7850 6869; HCP: A123.

Very well-preserved milecastle west of Housesteads fort. Excavated in 1853 by Clayton, 1907 (Simpson), 1933 (Blair) and 1988-89 (Crow). The most recent excavations established the structural phasing, which reveals important evidence for the structural history of the Wall. The primary phase comprised the gate piers with broad-Wall foundation on either side. The milecastle was completed to narrow-Wall gauge. The north gate was later blocked and subsequently a postern pierced through the blocking. The south face of the north curtain wall is the highest surviving wall face from Hadrian's Wall.

[53] *Cuddy's Crags*; SMR: 6679; SAM: 26059; NGR: NY 784 687; HCP: A.

Watching briefs by the National Trust and Lancaster Archaeological Unit were undertaken along Hadrian's Wall at Cuddy's Crags as part of the development of the Hadrian's Wall Path in August 1997. The foundations of a wall were revealed at the bottom of the Gap With No Name, which it is suggested may be Bronze Age in date. Prehistoric boundary walls have been revealed running from Sycamore Gap west along the tail of Peel Crags (HCP: A139; Woodside & Crow 1999, 130 (Site 1)) and at the foot of Kings Crags (Woodside & Crow 1999, 130-1 (Site 2)).

[54] *Prehistoric/Romano-British settlement (Housesteads farm road)* SAM: 26059; NGR: NY 7870 6836; HCP: A88.

Settlement of late prehistoric or Romano-British date, situated on a small crest immediately north west of the farm road ([46]; HCP: C5 & A81) c. 400m south west of the fort. The site comprises three or perhaps four roundhouse platforms represented by circular scoops or low stoney banks plus a series of smaller circular depressions, the function of which is unclear (later quarry pits?). On the east and south sides, a bank probably marks the remains of an enclosure wall. There is also evidence of quarrying along the crest immediately to the east. The most easterly scoop, which lies beyond the enclosure wall, may relate to such quarrying rather than the settlement.

[55] *Round cairn 450m NE of East Crindledikes*; SMR: 6591; SAM: 28585; NGR: NY 7881 6777.

Flat-topped round cairn prominently situated on top of an E-W ridge. Measures up to 12m in diameter and stands 0.6m high. Perhaps Bronze Age in date.

[56] *Little Shield enclosed settlement*; SMR: 6678; NGR: NY 7915 6789.

Settlement comprising a sub-rectangular enclosure situated on the edge of a rock outcrop and containing the remains of three or four stone round houses and associated yards. Attached system of sub-rectangular fields apparent on the hillslope to the west, south and east (Gates 1999 (NY76NE P)).

[57] *Mound*; SMR: 6590; NGR: NY 7938 6815.

Grass-covered tumulus 2.5m high, once interpreted as a barrow (cf. MacLauchlan 1857; 1st edition Ordnance Survey: 'tumulus'), but now considered to be a natural knoll.

[58] *Cord rig*; SMR: 12387; NGR: NY 7910 6813.

Small patch of cord rig, less than 0.1 hectare in extent, identified from aerial photographs (TMG 13889/63-65, 44, 58-60; cf. Gates 1999 (NY76NE U)).

[59] *Cord rig*; SMR: 12385; NGR: NY 7967 6800.

Elongated patch of cord rig, less than 0.1 hectare in extent, north of the Knag Burn (south branch), identified from aerial photographs (cf. Gates 1999 (NY76NE S)).

[60] *Small circular enclosure; SMR: 6658; SAM: 26059; NGR: NY 7959 6901.*

Small circular enclosure of suggested medieval date.

[61] *Square enclosure; SMR: 6659; SAM: 26059; NGR: NY 7945 6907.*

Square enclosure of suggested medieval date.

[62] *Turret 36A (Kennel Crag); SMR:6553; SAM: 26059; NGR: NY 7931 6915; HCP: A121.*

Turret 36A is situated on the crest of Kennel Crag. Visible as a slight mound. Trenched in 1946 by C.E. Stevens.

[63] *Turret 36A connecting track; SMR: 6642; SAM: 26059; NGR: NY 79326914-79346907; HCP: A104/36.*

A trackway of Roman date links Turret 36A to the Military Way.

[64] *Pre 1797 field boundary bank; SAM: 26059; NGR: NY 78306807-79586857.*

Boundary field bank which can be traced along the foot of the scarp to the north of the Information Centre (Welfare forthcoming). This corresponds to the principal property boundary demarcating the southern limit of the Housesteads enclosed land on the 1797 map.

[65] *Field bank N of Information Centre; SAM: 26059; NGR: NY 79196834-79346843.*

Bank running along the crest of the ridge N of the Information Centre and extending 220m to the west. It skirts around some quarries on the ridge, but is cut by others, confirming that the quarrying was carried out in more than one phase. Not marked on the 1797 Inclosure Award or any other historic map. May predate 1797.

5. HISTORICAL SYNTHESIS

5.1 Prehistory

The Roman army was perhaps not the first to occupy the site of Housesteads and recognise the particular advantages of its location. As discussed above (section 2.2) Housesteads is a very favourable spot within its marginal upland environs. The distinctive scarpland topography, which culminated in the great ridge of Whin Sill where igneous dolerite was extruded through a limestone strata, gave rise to the long, south-facing dip slope below the fort. Its combination of fertile soils and the south-facing aspect of the long dip slope below the Whin Sill escarpment proved attractive to successive generations of farmers, perhaps stretching as far back as prehistory (Welfare forthcoming).

The discovery of residual Mesolithic and Neolithic flint tools during excavations in the south rampart and north-east quarter of the fort (Waddington forthcoming), points to some hunter-gatherer and early pastoralist/agricultural activity in the locality. More intriguingly, traces of later prehistoric agricultural activity have been tentatively identified outside the fort, on the hillside between the east gate and the Knag Burn gateway, in the shape of a series of small terraces which probably represent lynchets from former arable cultivation (Welfare forthcoming). One or two of these terraces appear to continue to the north of Hadrian's Wall, in which case they must pre-date the Wall and the fort itself. In addition, the remains of cord-rig, which may be associated with this terracing, were also recognised underneath the east end of Barrack XIII, inside the north-east corner of the fort, when that building was excavated in the 1974-77.

Given the relative fertility of this hillside, such a prehistoric phase should not be dismissed. Although this part of the hillside receives less sunshine than the south-facing dip slope, it is sheltered from the prevailing south-westerly winds. Nevertheless it would be surprising to find such terraces only here and they may represent an outlying fragment of a much more extensive pattern of prehistoric agriculture which once covered the southern slopes as well. Late prehistoric or Romano-British settlements are known elsewhere in the environs at Milking Gap (*HCP*: A105; NY 7724 6779) and Bradley (*HCP*: A106; NY 7759 6818), only 500 m apart, at Little Shield [56] with the remains of a fourth, less well defined, lying on a small crest immediately to the NW of the farm road only 400 m SW of the SW angle of the fort ([54]; *HCP*: A88).

In the wider area land division, perhaps during the Bronze Age, is attested by the presence of early boundary walls running from Sycamore Gap west along the tail of Peel Crags (*HCP*: A139; Woodside & Crow 1999, 130 (Site 1)), at the foot of Kings Crags (Woodside & Crow 1999, 130-1 (Site 2)) and perhaps at Cuddy's Crags [53]. Prehistoric funerary activity is also evidenced by the round cairn near East Crindledikes [55] and perhaps by the barrow on the south side of the B6318 opposite the Housesteads Information Centre ([9]; *HCP*: A80).

5.2 Roman Period

5.2.1 Hadrian's Wall and the Roman fort

The first elements of the Hadrian's Wall to be constructed on Housesteads ridge were Turret 36B and the foundation for the Broad Curtain of the Wall. The building of the fort, the next element to be initiated, entailed the demolition of Turret 36B and also made redundant the stretch of Wall foundation

already laid within the area of the fort, since the north curtain wall of the fort was actually off the crest of the ridge and lay a little north of the line of the Wall foundation.

The outline of the fort took the familiar playing card shape with gates in each of the four straight sides. Internally it contained administrative and official buildings as well as barracks and stores. The form of the external defences and the internal buildings was essentially the same in all the Hadrianic forts on the Wall, but with its dramatic position astride the Whin Sill escarpment Housesteads fort is one of the most easily recognisable Roman monuments in Britain. The name of the site, *Vercovicium*, may signify 'place of the strong fighters' (Rivet & Smith 1981, 493-4). At 5.5 acres in area it was designed to hold a military cohort of 800 infantrymen, conceivably the same *cohors I Tungrorum*, which garrisoned the site in the third and fourth centuries (Crow 1995, 57-9). The fort was occupied until the end of the Roman period and during that period underwent a numerous internal modifications, including a major defensive overhaul of the fort c. AD 300, involving the construction of new ramparts, interval towers, barrack ranges and a massive storehouse building, perhaps for the collection of taxation in kind (*annona*). External earthwork defences may have been built at this stage or possibly later in the 4th century.

Following construction of the fort the curtain of Hadrian's Wall was completed on either side to a narrower gauge than originally planned, only 8 Roman feet as opposed to 10 Roman feet, but still clay-bonded. A good stretch of Hadrianic Narrow Wall is visible to the west of the fort from NW angle of the fort to Housesteads Wood and on as far as Milecastle 37, but the Knag Burn curtain was cleared and rebuilt by Clayton in 1857 (Bruce 1857, 234), having already been rebuilt during the Severan era with the result that only the lowest courses of the Hadrianic Wall remain. The gateway ([29]; *HCP*:A58) through the Wall curtain beside the Knag Burn was probably formed part of the Severan rebuild, but its two flanking towers were probably a later addition still, perhaps belonging to late third-early fourth centuries. The ditch in front of the Wall curtain may have been dug at the same time as the fort was under construction and prior to the completion of the Narrow Wall (Crow 1995, 18).

5.2.2 Vallum

The Vallum ([25]; *HCP*: A103), a second linear obstacle, was constructed behind the Wall, still during the reign of Hadrian. Consisting of a flat bottomed ditch with a mound on either side, it was perhaps intended to demarcate the military zone, prevent ingress by the local farming population and thereby reduce the threat of a sudden surprise attack on the Wall garrisons. At Housesteads its course from the Knag Burn westward across the hillside to the south of the fort is largely masked by the later cultivation features, although vestiges of the north and south mounds and ditch are perhaps preserved in places, reused as terrace scarps ([1] see below), themselves cut by the latest ridge and furrow ploughing (cf. Welfare forthcoming). The causeway south of the fort was excavated by Birley in 1931-34 (Birley *et al.* 1932, 225-226; 1933, 91; Birley & Charlton 1934, 185-190).

5.2.3 Water supply and Bathhouse

The Hadrianic bathhouse was built in the secure zone between the Wall and the Vallum, sheltered in the narrow valley of the Knag Burn, nearly 200m east of the east gate, where a good water supply from the north could be ensured either from the burn itself or the stone-lined well lying further north on the same side of the burn.

5.2.4 Construction processes - quarrying and limeburning

All this construction is probably also reflected in some of the numerous traces of quarrying in the surrounding area, notably the sandstone quarries along the ridge just to the north of the Military Road ([7]; *HCP*: A78; cf. pl. 4), where Horsley noted long abandoned workings as early as the 1720s (Horsley 1732, 148). However it is clear that there were several phases of extraction with further

workings particularly common from the mid-18th century onward to supply the builders of the Military Road and the extensive drystone walling required by the 1797 Inclosure Act. A lime kiln ([35]; *HCP*: A64), situated on the west side of the Knag Burn just south of the bathhouse, was excavated by Simpson in 1909 (Simpson 1976, 152-153; cf. Crow 1995, 24-5, Welfare forthcoming). Another sandstone quarry, the large depression north of the Wall known as the 'Amphitheatre' ([30]; *HCP*: A59), exploited a rare bed of sandstone beside the Whin Sill escarpment.

5.2.5 Road network

The road network is not fully understood though it may have been complex and will to a large extent have determined the layout of the civil settlement around the fort.

Best known is the Military Way ([23]; *HCP*: A104/36-38) both to the east and west of the fort and probably first built in the later 2nd century. Traces of an earlier route approaching from the east can also be recognised ([24]; *HCP*: A111; cf. Welfare forthcoming). It is crossed by the Military Way, which it plainly antedates, just E of the S end of the wood adjoining the Wall. This may represent the original alignment of the Military Way, but more likely formed an early approach road from the Stanegate, probably continuing eastward in the direction of Moss Kennels, and at some point joining the known route which branches off from the Stanegate at Grindon Hill. A third road ([46]; *HCP*: A81) is thought to have headed southwest from the fort south gate in the direction of Vindolanda and fourth southward through the vicus to the causeway across the Vallum. This latter route probably continued to the bottom of the hillside, where excavation in 1960-1 revealed a vicus street on the same alignment, beside the well shrine, and then crossed the marshy area to the point where a track ([5]; *HCP*: A75) may be traced obliquely climbing the ridge immediately north of the modern car park (MacLauchlan 1858, 40; cf fig. 15 & pl. 8 here). From there it perhaps headed east to join the Stanegate. Within the vicus itself a flagged lane is still visible between building I and the later bastle. This probably followed a course roughly parallel with the fort wall from the south gate round the south east angle to join the Military Way.

5.2.6 The Vicus.

To the east and south of the fort lay a civil settlement, or *vicus*. The visible, stone-built structures revealed by excavation close to the south gate of the fort, probably belong to the 3rd century, but the excavation records contain hints of earlier timber-built phases belonging to the 2nd century and perhaps broadly contemporary with the inception of the fort.

The full extent of the *vicus* is uncertain (see Welfare forthcoming for detailed discussion). The antiquaries probably exaggerated its size, misled by the quantities of sculptural and architectural fragments and inscriptions they saw, most notably beside the Knag Burn and along the fieldwall marking the southern edge of the early 18th-century ploughed zone. This stonework had probably been collected together in those areas as a result of agricultural clearance and was not necessarily *in situ*.

The best known area is that within guardianship immediately outside the south gate of the fort, where a group of large well built structures have been revealed lining the streets heading south, south west and east. Many of these oblong 'strip buildings' some of which had open fronts with slots for timber shuttering - probably served as shops, workshops, taverns or the like. Several were fully excavated by the Durham University Excavation Committee between 1931-1932 (1-4, 8 and 9) and subsequently consolidated and displayed. From the south gate the settlement stretched southward at least as far as the vallum causeway with one building (21) overlying the backfilled vallum ditch.

It is possible that the vicus extended further south beyond the vallum, as a narrow, continuous ribbon of development lining a single street linking the south gate quarter with another settlement focus at the

bottom of the hillside, where several buildings and cobbled street surfaces were revealed in 1960-1 around the Mars Thincsus shrine and well at the foot of Chapel Hill. One of the vicus buildings in this area was overlain by a later roundhouse (misinterpreted as the shrine of Mars Thincsus in 1961).

To the east of the fort the outline of more strip buildings is marked by robber trenches visible on aerial photographs (CAPL: CLY 13 (1980); K17-X 5 (1971)), following the same alignment as the Military Way, indicating that the civil settlement also covered this part of the hillside, clustering around the approach to the *porta praetoria*. It is likely that further buildings lay to the southeast of the fort, between the eastern cluster and the south gate quarter, probably lining the flagged street which is still in part visible today.

The full extent of the built-up area to the west and south west has not been firmly established (Birley & Keeney 1935, 239). The settlement around Chapel Hill may conceivably have extended west and southwestward towards the mithraeum, beyond the area trenched by Birley and Bosanquet and now buried beneath deep deposits of hill wash. However, no trace of Roman structures has been detected in the fields west of Housesteads Meadows. An altar fragment was discovered during the RCHME survey, by the cattle trough 160 m WSW of the hemmel, but careful observation in this area during drainage work, and around the hemmel, produced no evidence of any structures. It is likely therefore that the mithraeum lay on, or very close to, the western edge of the valley bottom settlement. Further north, no trace of buildings was found underlying the terrace between the farm and museum in 1987, though evidence of pre-terrace enclosure fences was noted, and there was clearly no built-up zone west of the field wall.

Beyond the built up area would have lain the cemeteries, funerary monuments and perhaps outlying shrines probably lining the approach roads to the fort. However the location and extent of these is still more uncertain. Our knowledge of the road system serving the fort and vicus is probably incomplete and many of the peripheral elements of the vicus may be buried in the valley bottom under a substantial depth of hill wash resulting from later cultivation. The mithraeum ([44]; *HCP*: A74) west of Chapel Hill is well known following investigation by Hodgson (1822) and then Bosanquet (1904, 255-263), as is the small apsidal shrine built around the well in the valley bottom and dedicated to Mars Thincsus ([42]; *HCP*: A71). Another shrine was probably situated on Chapel Hill ([43]; *HCP*: A73) itself, where the early antiquaries, Hunter, Smith, Clerk and Gordon, all record a small building and where altars dedicated to Iupiter Optimus Maximus by the garrison (*RIB* 1584 & 1586 - *I.O.M et numinibus Aug.*) were found. This would have been a very prominent when viewed from the fort and therefore a logical site for a temple dedicated to the principal Roman deity. Trenching in 1961 failed to reveal any trace, but it may well have been robbed out since the early 18th century. Similarly, the sculpted block featuring two very finely carved female figures (*CSIR* 349), discovered during clearance of the area beside the National Trust Information Centre, west of the car-park (Blagg 1985, 1), may have derived from a shrine or funerary monument built in another prominent position, beside the suggested course of one of the Roman routes ([5]; *HCP*: A75, see above), on the long ridge running parallel to and just north of the Military Road (see section 6.2 below for further discussion).

Funerary reliefs and epitaphs have been found on the slopes of Chapel Hill, along the field wall in the valley bottom south east of the fort, beside the Knag Burn (*RIB* 1618-23, *CSIR* 200-1, 203) and in the field west of the Mithraeum (Hodgson 1840, 194-195), but it is uncertain whether the antiquaries found any of this stonework *in situ*. Bruce (1867, 151) records that 'numerous human remains' were found during drainage of the marsh south of the fort. The dampness of the valley bottom would pose no barrier to funereal use. The large earthen barrow, or 'tumulus' ([9]; *HCP*: A80), immediately south of the Information Centre on the south side of the Military Road, might represent a burial mound contemporary with the Roman fort. It would have been a prominent feature on the ridge, but there are no direct Roman parallels for such monument on the northern frontier (see 6.2.3 below).

5.2.7 Terraces

South of the fort long terraces ([1]; *HCP*: A67) probably designed to facilitate agricultural cultivation stretch from the Knag Burn westwards to the current farmhouse, petering out beyond the fieldwall which marks the western limit of the Housesteads Meadows (pl. 3). To the south and south east, and to the south west beyond Housesteads meadow a considerable stretch of the terrace earthworks has probably been removed or greatly eroded by later (16th-18th century?) ploughing down the slope, whilst later reuse of the terraces for broad ridge-and-furrow ploughing has greatly altered the form of those to the east of the surviving vicus buildings (Welfare forthcoming). Excavation on the terraces in the farmhouse and museum area in 1987 pointed to an origin in the Roman period, in the 3rd century or later, with a more recent phase of re-use, indicated by the presence of a stone mound north of the terrace revetting wall (Frere 1988, 434; Daniels 1989, 55; Crow forthcoming). Pre-terrace palisade fencing and other features were recorded. The southern faces of the two Vallum mounds and the northern side of the Vallum ditch may have been retained and adapted to create three of these terraces (Welfare forthcoming).

5.3 Early Medieval

Evidence for the continuing use of the fort after the official deliveries of pay and supplies ceased in the early 5th century is best represented in the northern part of the fort in the shape of structures uncovered by the 1974-81 excavations and by Bosanquet in 1898. A late, west-facing apsidal building was uncovered by Bosanquet, north of buildings I and VII, with a dark earth layer beneath. In close proximity lies an east-west orientated cist burial, inserted in the water tank south west of the interval tower on the north curtain ([13]; *HCP*: A15). This juxtaposition suggests the apsidal structure may actually be a church. Even if this interpretation is correct the building may represent a later 4th century garrison chapel rather than a post-Roman church. However the presence of the cist burial within the circuit implies continued veneration of the site and its possible use as a religious focus for the district, after most other settlement had ceased at Housesteads.

The latest structural evidence from the 1974-81 excavations was identified at the east and west ends of Building XIII, where a number sub-circular structures, were inserted into 4th-century 'chalets' (free-standing barrack *contubernia*), whilst the flagged floor of a probable oval or boat-shaped structure was uncovered sitting on the earlier road metalling at the east end of the street between ranges XIII and XIV. The justification for tentatively assigning these features to the early medieval period, rather than the latest phases of Roman military occupation is based on the character of the surviving remains rather than the presence of a clear assemblage of early medieval datable material. In particular, the fact that occupation was no longer neatly confined to the well-established building ranges of the Roman fort, with structures now encroaching on to the roadways, denotes a loss of formality incompatible with a regular military regime. Furthermore the oval or sub-circular structures recorded seem to mark the transition to a different building tradition closer to the circular houses long maintained by the rural communities of northern Britain.

Eventually the inhabitants may have moved to the more sheltered site of *Vindolanda* and merged with the community there. The hillfort of Barcombe, overlooking *Vindolanda*, seems to preserve part of the Housesteads' name *Borcovicium* (the later form of *Vercovicium* as attested in the *Notitia Dignitatum*) and was perhaps reoccupied as a new focal stronghold for the district. Such continuing use of the fort names to designate the surrounding districts is suggested by the mention of *Ahse* (perhaps *Aesica* - Greatchesters) in the life of St Cuthbert. where the local populace 'gathered from around the mountains' to see the saint and witness him perform a miracle.

5.3.1 The fort environs in late antiquity

The vicus was completely abandoned by the late third century, as indicated a dramatic fall off in coin finds. However the construction of a roundhouse over one of the buildings in the lower vicus, close to the well ([42]; *HCP*: A72), suggests the area surrounding the fort was not deserted. The traditional rural peasantry of the northern frontier zone continued to farm the area and at some point began to reoccupy the area of the vicus, at least the lower settlement in the valley bottom which may have been particularly attractive because of its reliable water supply. This resettlement cannot be dated other than relatively, i.e. it occurred after the demise of the organised vicus, but before roundhouses ceased to form part of the architectural tradition of rural communities in northern Britain.

The settlement ([36]; *HCP*: A65) inconclusively excavated in the 1960s, on the eastern side of the Knag Burn just north of the Vallum, might also belong to such a phase of later-Roman or early-medieval agricultural exploitation, but earlier Roman or prehistoric dates cannot be excluded either. A field system, comprising a number of irregular angular terraces on the eastern side of the burn between the Wall and the Vallum, may be associated with this settlement.

5.4 The Medieval Period

There are no documentary references to settlement at Housesteads during the medieval period. Firm archaeological evidence of any permanent settlement on the site is also lacking. Nevertheless, the possibility cannot be excluded that there were phases of permanent inhabitation and sedentary agriculture at Housesteads earlier than that first recorded in the 16th century. The soils at Housesteads are amongst the richest and most easily cultivable in the locality (see 2.2), and coupled with the site's south-facing aspect, make it a relatively attractive spot within an agriculturally marginal zone. Its location is in no way inferior to those of Sewingshields Castle and Bradley Hall, the nearest recorded medieval settlements. Hence it is likely that, throughout this period, land use oscillated between, on the one hand, pastoralism pursued by means of seasonal transhumance into the uplands from communities in the Tyne valley and, on the other, permanent settlement based on a combination of arable cultivation and stock rearing on surrounding pasture.

Permanent occupation is a particularly strong possibility during the climatic optimum of the 13th century, with a reversion to transhumant pastoralism perhaps occurring following climatic deterioration in the 14th century. Excavation of the terraces north of the present farmhouse in 1987 revealed evidence for post-Roman reuse of these features for arable cultivation, in the form of a stone-clearance mound north of the terrace revetting wall, which might conceivably relate to a medieval recolonisation.

5.4.1 Shielings

It is likely that for most of the period transhumant pastoralism would have been the favoured subsistence strategy. This practice, known as shielding, whereby communities moved their livestock from the lowland pastures up into the hills in late spring, returning at the end of the summer, was characteristic of the Northumbrian upland exploitation in the medieval and early modern eras. Whilst resident on high pastures the herdsmen dwelt in small huts or cottages usually rectangular in form, termed shielings. A group of such five shielings ([32]; *HCP*: A60) stand on Kennel Crags.

5.4.2 The longhouse

Of the various farmhouses known in or adjacent to the fort, the only one to which a medieval date might plausibly be applied is the longhouse ([14]; *HCP*: A44) situated immediately to the north of the south gate. It was clearly a sizeable structure, much larger in ground plan than the nearby bastle. The south-east corner of this building, featuring massive boulders used in the footings, is shown in two of Simpson's excavation photographs. The position of this corner relative to the Roman rampart-back structures would give the building a total length of c. 40 m. The longhouse is aligned at 90 degrees to

the bastle (slightly out of skew with the gate passageway and *via principalis*). Occupation of the two doubtless overlapped chronologically, but it is likely that the bastle was laid out in relation to the longhouse rather than vice versa. The position of the longhouse, straddling the south entrance to the fort, suggests a primary site with later buildings added in front, and to either side. Moreover its masonry is very mixed and of poorer quality than that of the bastle, which has careful quoining, carved door jambs and relatively regularly sized masonry typical of that class of dwelling. This may point towards construction during the earliest 'pioneer' phase of the 16th/17th century settlement, or even, conceivably, in the 13th century.

5.5 Early Modern Period

The earliest reference to the area is contained in the schedule of the Border Watch, set out in Bowes and Ellerker's Border Survey of 1542 (reproduced by Hodgson 1828, 239ff.). There it is stated that two watchmen were to be stationed between Caw Gap and Knagburne Head. Knagburne Head must be the valley of the Knag Burn immediately E of Housesteads. The name *House steads* first appears later in the 16th century, when it was in the hands of Nicholas Crane of Bradley Hall, but the site also appears under the name 'Chesters in the Wall near Busygap'. In 1568 Hugh Crowhawe (Crowhall) held Housesteads along with many other properties in Thorngrafton township, including Bradley Hall, Crindledykes and Crowhall itself. Nicholas Crane of Crowhall settled these or similar properties on his daughter as part of a marriage settlement in 1615; and in 1629 one George Nixon acquired a long lease at Housesteads from Hugh Crowhall (NRO 2219.70). The farmland at Housesteads was subdivided between a number of tenants. The existence of two tenancies later in the 17th century, both held by members of the Armstrong clan, is demonstrated by documents of that date preserved amongst the Clayton deeds at Northumberland Record Office (NRO 2219.70), where one Armstrong holding is explicitly described as 'intermixing dale by dale' with another's tenement.

Housesteads at this time was centred in a zone of lawlessness, on the margins of the civilised world. In 1604 one resident of Housesteads, Hugh Nixon - presumably a relation of the above George - is recorded as a stealer of cattle and receiver of stolen goods in the Lord Howard's *Household Books* for the Dacre estates around Gilsland (Ornsby 1878, 445). Later in the century, the activities of the Armstrongs, gave the site a fearsome criminal reputation. Established at the nearby bastle farmstead of Grandy's Knowe, the family is also recorded as tenants and briefly as freeholders at Housesteads from 1663 onwards (NRO 2219.70). They operated as horse-stealers, ranging as far north as Perth and as far south as the Midlands (Bosanquet & Birley 1955, 168). Both Armstrong tenements were acquired by Thomas Gibson of Hexham in 1698 though the family stayed on at Housesteads as tenants until 1704 when Nicholas Armstrong was hanged for his crimes and his brothers emigrated to America.

5.5.1 Bastles

Whether or not the longhouse immediately inside the south gate originated in the medieval era, it most likely remained in use in the 16th century and into the 17th century. More characteristic of this period, however, are the two-storey defensible farmhouses - now usually termed bastles - which were designed to provide secure shelter for livestock in a groundfloor byre with living accommodation on the floor above. Two such structures can be identified at Housesteads. One can still be seen in front of the south gate of the fort, the ground floor level surviving ([15]; *HCP*: A45). The building abuts the south face of the east guardchamber, which was incorporated as a second ground floor room with a doorway inserted between the two. The guardchamber was subsequently converted into a corn-drying kiln, by which stage the bastle must have been abandoned as a dwelling. A second, now vanished, bastle ([16]; *HCP*: A46) can be identified in the south-east angle of the fort on the basis of sketches by the antiquary, Roach Smith, and the 1st edition Ordnance Survey map.

This archaeological picture of a small hamlet, rather than a single farmstead, within the fort, accords with the evidence presented by the documentary sources. The latter imply there were at least two households and farm tenancies, intermixed 'dale by dale', at Housesteads in the 16th and 17th centuries. The dwellings sit in a line, sheltering under the hillside, on a terrace formed by the collapsed material of the south ramparts. A further building on this terrace, excavated by Bosanquet and labelled by him 'the seventeenth century farmhouse' ([17]; *HCP*: A47; Bosanquet 1904, 198, 211, 239) lay to the west of the longhouse and might belong to the latter stage of this period, but a later date is also possible (see below).

5.5.2 Ridge and furrow ploughing

Traces of cultivation in the field below the fort may be tentatively associated with late medieval and early modern settlement. A likely candidate is the penultimate phase of ploughing identified by the RCHME survey, which takes the form of broad ridge-and-furrow running up and down the lower slopes to the south east and south west of the fort ([39]; *HCP*: A68). The date of the transition between this phase of cross-contour ploughing and the subsequent broad ridge-and-furrow running along the contours and overlying the Roman terraces cannot be determined.

5.6 Inclosure and improvement - The 18th-early 19th centuries

Over the course of the 18th and early 19th centuries the landscape around Housesteads underwent a transition from a mixed farming regime, based on arable cultivation and rearing stock (mainly cattle) on rough common pasture, to a purely pastoralist one centred around rearing sheep on pasture which had been improved by drainage and liming. This was made possible by a series of events. The elimination of the last vestiges of Reiver culture with the acquisition of Housesteads by Thomas Gibson in 1698 and the subsequent introduction of new tenants to replace the Armstrongs, opened up and normalised the area. Construction of the Military Road in the middle of the 18th century improved communications within the upland Wall corridor, bringing adjoining farms, like Housesteads, within the wider market economy and thereby justifying agricultural improvement. The road was certainly promoted by local landowners with an eye to more than just the security of the realm. Enclosure of the open, commonland pasture around Housesteads followed in 1797 (cf. fig.12) and the construction of field walls to divide up the landscape and drains to improve the pasture was soon in full swing, as Hodgson, writing in the early 19th century, clearly attests. It is clear that none of the present field boundaries on the farm can predate the construction of the Military Road, since they are all aligned to run at 90 degrees to it, and in fact they all probably postdate the 1797 Inclosure Act. The walls were in place by c. 1860, however, when they were marked on the 1st edition Ordnance Survey map (fig. 7).

5.6.1 Ridge-and-furrow

Earlier in the 18th century, arable cultivation was still being energetically pursued as the reports of Hunter, Stukeley, Horsley and the like amply demonstrate, the former graphically recording the discovery of an altar 'having been tore up by the Plough', for example (Hunter 1704, 1131). The ploughing of which these sources speak is probably manifested on the ground by the latest phase of cultivation identified by the 1987 RCHME survey, a pattern of broad, gently curving ridge-and-furrow which follows the contours of the hillside south east of the fort ([40]; *HCP*: A69; Welfare forthcoming). This broad rig partially reuses the earlier, Roman terraces but also cuts obliquely across them in places. Also representative of this final period of arable cultivation are the two corn-drying kilns in the east guardchamber of the south gate and in the south granary ([15]; *HCP*: A45 and [18]; *HCP*: A48). Both kilns were obviously disused when Hodgson described them in the 1820s, for he

appears uncertain as to their exact purpose and even ascribes a Roman date to them in his later work (1840, 186-187).

5.6.2 Farmhouses

After 1698 the settlement pattern at Housesteads changes from a small hamlet to one of a single farmstead, with a corresponding reduction in the resident population, as the previous farm-holdings were amalgamated into a single viable tenancy by Gibson. This farmstead periodically shifts position around the hillside, beginning with the early 18th-century farmhouse which Stukeley depicted in a sketch of 1725, apparently in the west central part of the fort, perhaps over the site of the hospital ([17]; *HCP*: A47). Alternatively the building in Stukeley's sketch might represent the 'seventeenth century farm house' which Bosanquet identified overlying the south-west angle of Building XI and the south-east angle of barrack building VI (Bosanquet 1904, 198, 211, 239), i.e. down on the level south rampart terrace just east of the longhouse and other earlier buildings, unless that was a separate and earlier building. At any rate, the farmhouse within the fort had been demolished by the later 18th century and replaced by one located immediately outside the fort, just west of the south gate ([19]; *HCP*: A49). This house figures in several paintings or sketches of c. 1850 including one Richardson watercolour where it forms the principal subject. It was demolished around 1860 by Clayton and all that remains today is the well ([19]; *HCP*: A50), now enclosed by a circular drystone wall, which one of the tenants, William Magnay, dug in front of the house in the later 18th century.

5.6.3 Quarrying and mining

The building of the Military Road and such extensive lengths of walling, plus field drains, demanded large quantities of building stone, which, for probably the first time since the 4th century, could not be met simply by robbing stone from the Roman frontier monuments (though the latter practice was certainly still employed). Many of the extensive traces of quarrying ([7]; *HCP*: A78), which are visible on the ridges south of the fort and have been recorded by the RCHME, must date to this period as old Roman workings were reopened and new ones cut. Some of these are recorded on the First edition Ordnance Survey (1860), but this map presents only a very partial picture and the surviving remains exhibit numerous phases of extraction, small in scale and sometimes associated with particular tracks and hollow-ways notably along the ridge north of the Military Road.

A line of four small pits, probably shafts opened by coal prospectors can be seen roughly midway between the mithraeum and the Military Road ([45]; *HCP*: A77). Three of these are marked (as disused) on the 1st edition Ordnance Survey. They should probably be assigned to later 18th-early 19th century when coal was being sought on an increasing scale to fuel the lime kilns required for agricultural improvement.

Another mine is still visible as a prominent, pear-shaped spoil heap and adit ([37]; *HCP*: A63), in the valley bottom between the two recumbent Roman columns close to the Knag Burn. The adit and spoil heap feature on the RAF air photograph of 1930 and on the OS 3rd edition (1922), by which time the mine was probably disused. It was probably dug towards the end of the 19th century. .

5.7 The Clayton era to the present day: 1838-

The acquisition of Housesteads by John Clayton in 1838, part of the gradual build up of his Wall estate, marked the beginning of a new phase in the site, one in which the importance of the Roman frontier monuments was fully recognised. Henceforth the management and investigation of these monuments acquired increasing prominence alongside the continued pursuance of livestock farming. Serious archaeological investigation had begun with Hodgson in the 1820s and 1830s, but under

Clayton extensive programmes of clearance were undertaken. The internal and external faces of the fort curtain were revealed at all but two points and the gates and angle towers displayed, thus providing visitors with a clear impression of the overall form of the fort defences.

As part of this programme, the farm range beside the south gate was in turn replaced by the present farmhouse ([3]; *HCP*: B3) and steading located in a less obtrusive position south west of the fort c. 1860. The former is still shown on MacLauchlan's plan (c. 1852) and on the 1st edition OS map (c. 1860), but was demolished before 1863 (Bruce 1863, 129).

Grazing now seems to have been the predominant form of land-use, a shift which had actually have occurred under Gibson tenure following the 1797 Inclosure Act to judge from the pattern of field-wall building.

Archaeological investigation continued after Clayton's death, first with Bosanquet's extensive trenching throughout the fort to recover the internal plan in 1898 and then with Simpson's work between 1909-12. Following the gift of the fort to the National Trust by Professor G.M. Trevelyan in 1930, and the subsequent placing of the fort and *vicus* under Ministry of Works guardianship in 1951-52, Housesteads has come under ever closer management intended to ensure the preservation of the archaeological deposits and their display to the public. The grazing of livestock is a principal means towards this end, and has remained the predominant form of land-use on the surrounding farmland. This phase too has left its own monuments, which are in their way as characteristic as those of preceding periods, principally the Museum ([4]; *HCP*: B2) built in 1935 by the National Trust to the dimensions of *vicus* building 8, the current National Trust Visitor Centre and the car park, but also smaller features such as the walled garden plot for the DoE custodian, which attest changing methods of curating the monument.

6. SPECIFIC ISSUES

6.1 Museum/Farmhouse Site

6.1.1 Terraces

The principal features identified in the area of the upper development are the series of long, parallel terraces, probably designed to facilitate agricultural cultivation, which run across the hillside below the fort. The farm buildings, including the Dutch barn, sit on one of these terraces (pl. 5), whilst the museum building sits on the terrace immediately above (pl. 6). The farmhouse, however, is set on its own platform which juts out over the next terrace to the south (fig. 13).

The best evidence for the development of these features is provided by the excavations conducted by James Crow on behalf of the National Trust in 1987 on the terrace between the Museum range and the farm complex. Traces of pre-terrace cultivation features, in the form of palisade fencing and pits associated with Roman pottery, were identified and the results strongly suggested that the terraces themselves originated in the Roman period, in the 3rd century or later, with a more recent phase of re-use (medieval? or early modern?), indicated by the presence of a stone mound north of the terrace revetting wall. However, no traces of buildings were uncovered in these excavations and it seems clear that the built-up area of the *vicus* did not stretch this far west. Even so, aerial photographs taken in the dry summer of 1949 (e.g. CAPL: DS 31) do suggest that *vicus* buildings may have extended further towards the farmhouse than previously realised, emphasising the archaeological sensitivity of any works on improving access between the Museum/Ticket Office area and the fort.

6.1.2 Vallum

On the basis of the detailed survey of the surviving earthworks undertaken by the RCHME in the 1980s, Welfare (forthcoming) has suggested that three of the terrace scarps to the south east of the fort may have their origins as the north and south mounds of the Vallum and the north slope of the Vallum ditch, and were only later adapted to serve an agricultural purpose. On this basis it is possible that some of the terraces on the west side of the *vicus* settlement preserve the alignment of the Vallum's various different components, although the evidence is less clear there. In particular, the south end of the Dutch barn stands at the top of a terrace scarp which may potentially have originated as the north mound of the Vallum (pl. 7), whilst the scarp immediately to the south of the farmhouse perhaps began life as the north face of the Vallum ditch.

6.1.3 Enclosures

To the north of the museum terrace, an irregular field system of embanked enclosures ([2]; *HCP*: A82) stand out clearly on either side of the Military Way. Welfare (forthcoming) notes that these enclosures appear to respect the general line of, but encroach over, the Military Way, suggesting a post-Roman date. However, a section excavated by Crow across the line of the Military Way next to Peel Cottage in 1988/89 revealed two phases of metalling on this road, the second of which was only c. 2.40m wide, but still apparently laid within the Roman period (*HCP* 2: 229-30 (A104/39A-39B)). The existence of this narrower carriageway means the enclosures could originate as early as the Roman period, but the Military Way remained in local use right up to the 19th century so a much later date is possible. In plan the enclosures bear some morphological resemblance to the rectilinear enclosures identified by geophysical survey outside Castlesteads fort and by aerial photography around the Saxon Shore fort at Brancaster (Edwards & Green 1977). The thinness of the soils on the top of the whin escarpment would suggest they represent stock enclosures rather than arable plots.

The enclosures appear to terminate immediately to the north of the museum. The RCHME survey plan and examination of aerial photographs (e.g. CAPL CLY 13 (1980)) suggests that the southernmost enclosures may stand on a terrace (the northernmost) which would signify that the enclosures were established later than the terraces. This relationship is only a tentative inference, which depends on the correct interpretation of one terrace lynchet, and would require further investigation to confirm it. Moreover it is clear that the distribution of terraces and enclosures is broadly complementary, as might be expected since they probably reflect different landuse functions - arable cultivation v livestock management - related to the underlying solid geology. Thus the two groups of features could be broadly contemporary even if, in detail, one structurally precedes the other. Alternatively, the apparent complementarity may itself simply be a reflection of the geological composition of the hillside which meant that the two areas were suited to different modes of exploitation which did not greatly overlap, even over a very long timescale. What does appear clear is that the enclosures respect the orientation or the original terraces and not the later cultivation lynchets ([40]; *HCP*: A69; Welfare forthcoming) which cut obliquely across the line of the terraces to the west of the museum and farm (cf. fig 13).

6.1.4 Housesteads Farm and Museum

Finally, the importance of the stone buildings of the farmstead, plus the Museum building and former custodian's cottage to the north, has been recognised. The farm complex is the most visible element surviving from John Clayton's tenure of the site and is thus representative of his pioneering heritage management of the site and the wider Roman Wall, as well as being a little altered example of a mid-late 19th-century upland farm (pl. 5). The farmhouse itself contains the study used by Clayton when he visited the site. The Museum building (pl. 6) is similarly associated with the next significant stage in the developing process of conservation, namely the earliest years of National Trust custodianship, although it has since been significantly altered, notably by the addition of the custodian's cottage in the 1950s. The Dutch barn, however, is a much later addition of no architectural merit (pl. 1).

6.2 Lower Development

6.2.1 Relief carving *CSIR* 349

The potential archaeological significance of the Visitor Centre's immediate environs was dramatically highlighted by the discovery of a fine relief carving, featuring two seated female figures (*CSIR* 349), during ground clearance prior to centre's construction in 1982. The relief was probably the product of a Carlisle workshop and was the single finest sculpture from Housesteads. Moreover, it constitutes a rare, relatively securely provenanced piece. Sadly it was virtually destroyed in the fire which gutted the visitor centre in 1985.

The discovery of the relief gives rise a number of questions with regard to the archaeological character of the Visitor Centre site and the ridge on which it sits, which cannot yet be satisfactorily answered. The relief was found amongst the cleared stone, rather than being identified when first disturbed, and, consequently, there is no guarantee that it was in its original position when uncovered in 1982. It might conceivably have been shifted to the site at an earlier date as a result of indeterminate agricultural operations, for instance. However such is the quality of the piece that it is difficult to believe it could have been moved far without coming to someone's attention. Moreover the site is relatively distant from evident traces of post Roman cultivation, such as the ridge and furrow on the slopes of Chapel Hill ([43]; *HCP*: A73) and on the hillside below the fort ([39-40]; *HCP*: A68-69). Inscriptions and carved stones were to be seen in abundance in precisely those locations during the early 18th century, to the delight of antiquaries such as Stukeley and Horsley, who described and

sketched them on top of Chapel Hill and piled up along the fieldwall at the foot of the hillside below the fort ¹.

Equally unclear is the nature of the structure which the relief must originally derived from. The editors of *CSIR*, Coulston and Phillips, suggested that it represented two female deities such as Ceres and Persephone or Cybele, which would imply that it formed part of a shrine. The ridge presently occupied by the Information Centre would indeed be a plausible location for such a shrine, particularly given its prominence when viewed from the fort. Alternatively the two carved figures may derive from a funerary monument and represent the deceased (mother and daughter?).

A number of shrines are known scattered in and around the lower *vicus* (see 5.2.6 above), most notably the *mithraeum* to the west ([44]; *HCP*: A74; Welfare forthcoming; Daniels 1962) and the apsidal shrine of Mars Thincsus and the Alaisiagae [42] enclosing the well at the foot of Chapel Hill (*contra* Birley 1962; cf. *HCP*: A71). More speculatively, antiquarian references point to the possible location of a small temple on Chapel Hill [43], perhaps dedicated to Jupiter Optimus Maximus on the basis of the inscribed altars found in the vicinity (cf. *HCP*: A73). Similarly a discrete cluster of two groups of Matres, first recorded near the Knag Burn, at the base of the hillside below the fort, where they had probably been deposited following agricultural clearance and cultivation in the early modern era, points to the existence of a shrine to those deities somewhere in the wider area (*HCP*: A70).

By contrast, very little at all is known about the cemeteries at Housesteads ([6]; *HCP*: A76; see 5.2.6 above, and Welfare forthcoming). Previous investigation is limited to a few chance observations or second hand reports by Hodgson and Bruce and the recovery of *ex situ*, loosely provenanced tombstones. Attempts during the 1930s identify the burial grounds around the fort largely failed to yield significant results. The clearest reference is perhaps that provided by Bruce who recorded that numerous human remains were found when the marsh to the south of the fort was drained in the mid-19th century but there is no other evidence of burials here (1867, 151). Such a location on the periphery of the settlement would be appropriate for a cemetery. Similarly Hodgson saw a figured gravestone (*CSIR* 203), in 1810, 'on the ridge in the hollow of the field west of the' *mithraeum*, along with other remains which might have belonged to funerary monuments, notably 'a stone three feet high, which seemed to have been the pedestal of a statue'. Again this is a peripheral location, west of known outlying shrines, which would be appropriate for funerary activity.

6.2.2 Roads

The proximity of a Roman highway would lend support to either of these options - religious or funerary. In particular, it is generally acknowledged that burials in the Roman world were located on the peripheries of settlements, often alongside roads leading away from the built-up area. A possible Roman link road, which would fit with this hypothesis, was traced by MacLauchlan from Grindon Hill Farm, where it branched off the Stanegate, through Beggar Bog to Housesteads (1857, cf. fig. 14 here; 1858, 40). The clearest traces in the vicinity of the Information Centre can be seen on the ridge immediately north of the car park, where a narrow terrace descends the north face obliquely to join the current track up to the fort (fig. 15 (MacLauchlan) and compare with fig. 10 and pl. 8). 'A quantity of large stones', which have been interpreted as foundations for the road, were found during 19th-century drainage work, at the point where the track reaches the southern edge of the marshy ground. From there MacLauchlan suggested it followed the same north-westerly course as the present visitor path to reach the vallum crossing and the main north-south street through the *vicus*, which led up to the south gate of the fort. It is perhaps more likely, however, that the road continued into the lower *vicus* at the foot of Chapel Hill and then proceeded directly up the hillside towards the vallum crossing. Indeed it

¹ The altars and 'basso-relievos ...all tumbled in a wet meadow by a wall side, and one on top of the other to make up the wall of the close' (Stukeley 1776, 61), are clearly shown on Stukeley's sketch of the site.

is the evident requirement to provide access of the lower settlement which provide the best explanation for MacLauchlan's route.

The fort and immediately surrounding civil settlement had an alternative eastern approach road from the Stanegate, in the shape of the route identified recently through aerial photography which joins the Military Way just to the east of the Knag Burn and Housesteads Wood (Welfare forthcoming; *HCP*: A111). The morphology of the earthworks at the junction shows this road clearly predated the Military Way, constructed in the late 150s-160s, and was superior to the route identified by MacLauchlan in that it avoided all the marshy ground at the bottom of the hillside below the fort. Its course further east has not been traced, but it may well have joined the route identified by MacLauchlan somewhere near Moss Kennels or connected to an early patrol track along the vallum. Although this route was clearly superior for the members of the garrison and the inhabitants of the immediately adjacent upper *vicus*, it is difficult to believe that the occupants of the lower *vicus* on the northern flanks of Chapel Hill would have climbed up to the fort every time they wanted head east towards the Stanegate. Instead, it is likely that a series of alternative trackways would gradually have been established to serve their needs.

Nevertheless, although it was first suggested by MacLauchlan in the 1850s, the Roman date of the Grindon-Housesteads route has yet to be verified and is certainly not beyond doubt, given the long history of agricultural settlement at Housesteads, spanning the period since the 16th century and probably much of the medieval era as well. Trackways providing access to the farmsteads are to be expected and indeed several can be recognised on the RCHME survey. Moreover the extensive quarrying pursued from the 18th century onwards along the ridge, which probably reused and expanded earlier Roman workings, must have led to the creation of further trackways to allow the stone to be carted away. These are represented by various tracks and hollow-ways evident to the west of the Visitor Centre.

The more easterly stretch of MacLauchlan's proposed road, between Beggarbog and Grindon, was recorded on the Military Road survey as early as the mid 18th century and was clearly still in use at that stage (fig. 3), whereas only faint traces were evident by the time MacLauchlan conducted his survey a century later (fig. 14). This may be significant because the 1749 survey most likely precedes the renewed quarrying activity along the ridge immediately to the north and west of the Information Centre, which was probably driven by the need to supply stone for the construction of the Military Road in the years following and for the stone walls associated with commonland inclosures at the end of the century. Although it is conceivable that MacLauchlan's route had grown up in the post-Roman era to provide access to the farmsteads in and around Housesteads, other highways of Roman origin in the area, notably the Stanegate itself and the Military Way, certainly persisted in use up until this period. Furthermore, the more 'engineered' aspect of the oblique ramp down the scarp might be appropriate for a route leading to a Roman settlement, but would appear excessive in relation to the needs and resources of the later rural occupants of Housesteads. Carts taking out stone quarried along the ridge might have required something of this kind, however.

6.2.3 The 'tumulus'

On the south side of the Military Road, immediately opposite the Information Centre, a large earthen barrow or burial mound, standing over 3m high (pl. 10), is located in the corner of Beggar Bog field ([9]; *HCP*: A80; Welfare forthcoming). Its date is uncertain. Burial mounds of this size are exceptional in Northumberland and are generally stone cairns rather than earthen barrows. They are usually Bronze Age in date but some may be Neolithic. However, a Roman date is conceivable. When viewed from the fort the mound would certainly have been a prominent feature on the ridge to the south. Roman barrows are known elsewhere in Britain, but there are no direct parallels for this

monument on the northern frontier yet. Woodside and Crow (1999, 132) have also suggested a late Iron Age context associated with possible pre-Roman settlement at Housesteads.

Whatever its date the barrow is a monument of some significance and the possibility cannot be excluded that associated outlying mortuary activities could extend to the north of the Military Road, in close proximity to the Information Centre.

Immediately to the west of the tumulus, a north-south aligned ditch can be seen on aerial photographs running for c. 50m southwards from the Military Road (cf. pl. 9). The ditch turns eastwards at its south end and continues for another 40-50m, before apparently petering out. The ditch is still apparent on the ground and may represent a short holloway (pl. 11). The eastern branch stands on the scarp of a pronounced slope. It has been partially filled by recent dumping, but appears to resemble a series of small quarry scoops, rather than a ditch or hollow-way. Although the character and function of this feature are not certain, it is more likely to represent another small episode of 18th- or 19th-century quarrying, linked to the Military Road by a short trackway, rather than a feature associated with the barrow in some way.

A second mound [57], located some 200m to the south, was also identified by MacLauchlan (1857, cf. fig.14 here) as an ancient 'tumulus'. More recently it has been interpreted as a natural knoll, but in view of its proximity to the first example it may merit re-examination., particularly as prehistoric funerary activity is definitely attested in the wider area by the presence of a flat-topped cairn of stone and earth construction [55] c. 675m to the south west, on a ridge north east of East Crindledikes.

6.2.4 Quarrying

As noted above, the extensive traces of sandstone quarrying at Housesteads were probably not only 18th century and later in date. Long-abandoned, overgrown quarry workings were noted by Horsley in the 1720s (1732, 148) and it is likely that these were Roman in date. The building of the Wall, the fort, and the civil settlement would have required vast quantities of sandstone for facing stones. Thereafter, robbing of the Roman structures would have provided sufficient building material for the area's small rural community until construction of the Military Road in 1751-57 and, subsequently, the extensive programme of drystone walling and field drainage, associated with agricultural enclosure and improvement at the end of the 18th and beginning of the 19th centuries, generated a new requirement for very large quantities of stone.

The most extensive workings lie along the ridge just north of the Military Road, cut into the face of the north scarp (see pl. 4), especially in the stretch to the west and north of the Information Centre, roughly opposite the fort ([7]; *HCP*: A78). The 18th-century workings will probably have destroyed much of the evidence for earlier, Roman activity and even with excavation it would probably be difficult to disentangle these two main phases. Along the crest of the ridge, just to the north of the Information Centre and extending 220m to the west, a field bank [65] skirts around some quarries and is cut by others, confirming that the quarrying was carried out in more than one phase. The date of this bank is unknown, as it does not figure on any historic maps, but it clearly lay in unenclosed common in 1797, when the Inclosure map was drawn up, and may predate that time (Welfare forthcoming; see 6.2.5 below).

It is possible that a strange series of fourteen horseshoe-shaped scoops cut into the slope 20m NNE of the Visitor Centre, and divided by banks up to 0.4m high, may be related to one or other phase of this quarrying (Welfare forthcoming). These are visible on the earliest aerial photographs to cover the area, the series taken by the RAF in 1930 (pl. 9), demonstrating that these peculiar features are not of very recent date.

6.2.5 Boundaries and field banks

It is clear from the evidence of both the 1749 survey and the later Inclosure Award that the Military Road was constructed through what was at that stage open common to the south of Housesteads. This commonland included the site of the present-day Information Centre itself. The principal property boundary demarcating the southern limit of the Housesteads enclosed land on the 1797 map corresponds to a bank [64] which can be traced along the foot of the scarp to the north of the Information Centre (Welfare forthcoming). The location of that boundary may have altered over time, however, since other banks are visible on the ridge, notably the example running along the crest of the ridge [65], which was discussed above in relation to the quarrying activity there. The latter boundary was perhaps rendered impractical when breached by quarrying and may have been superseded by that marked on the 1797 map, which kept well clear of the many quarry faces.

7. CONCLUSIONS

7.1 Summary of Cultural Heritage Remains

The assessment of both discrete and more extensive historical landscape components reveals that:

- 7.1.1 The Dutch barn stands on one of the agricultural terraces of probable Roman date. The terrace lynchet at the south end of the barn may have originated as the south face of the north mound of the Vallum. The extent to which construction of the barn may have damaged underlying features and deposits associated with these earthwork monuments cannot be determined at present. However there is the potential for some evidence, of the kind recorded between the museum and farmstead in 1987 (e.g. pits, postholes and palisade fencing), to survive as buried features beneath the building.
- 7.1.2 The interface between the terraces and the enclosures immediately to the north of the museum (which corresponds to the solid geological interface between the limestone and whinstone respectively) is potentially one of great significance for understanding the development of the historic landscape around Housesteads fort during Roman and later periods. Accordingly the north side of the museum must be considered an area of great archaeological sensitivity.
- 7.1.3 Several significant surviving monuments (quarry features, a barrow, a possible Roman road, etc.) have been identified in the vicinity of the Information Centre. However no distinct archaeological feature has been identified (by examination of historic maps, aerial photography etc) within the envelope of the proposed development on the lower site.
- 7.1.4 The fine relief carving (*CSIR* 349), featuring two seated female figures, which was discovered during ground clearance prior to Information Centre's construction in 1982, represents the single finest sculpture from Housesteads. It may have derived from a religious shrine or tomb, conceivably located on the site of the Information Centre itself. The possible existence of a Roman road nearby, first suggested by MacLauchlan (1858, 40), would support such a conclusion.
- 7.1.5 The area between the Museum/Farm and the south gate of the fort is one of great archaeological sensitivity with potential vicus buildings and the remains of later settlement and cultivation to survive as buried features.

7.2 Impacts

7.2.1 Direct Impacts

1. The construction of the new building on the site of the Dutch barn will adversely impact upon any buried archaeological features, associated with use of the terrace, for example, which might survive beneath the barn's concrete floor. The extent of such survival cannot be specified at present.

- 2 Any improvements to access between the museum/cottage and the cow shed/education room, particularly if engineered to meet the needs of disabled visitors, are likely to adversely impact on the intervening terrace scarp.
3. No monuments firmly identified in the vicinity of the Information Centre, will be directly impacted by the development, but the uncertainty regarding the exact provenance of carving CSIR 349 and the function of whatever structure it originally derived from means that the full archaeological impact of lower site development cannot presently be determined. There is a significant possibility that archaeological remains of a funerary or ritual character and Roman date may survive as sub-surface features within the envelope of the proposed new constructions.

7.2.2 Visual Impacts

1. The proposed new building on the site of the Dutch barn will be largely hidden from view of the fort by the original U-shaped range of farm outbuildings, which it will be tucked behind. It is any case likely to be less visually obtrusive than the Dutch barn, itself, with a lower profile at the south end and more sympathetic stone construction. The visual impact of the proposed developments on the monument complex is therefore minimal and may even be considered positive.
2. The Information Centre is a single storey structure tucked below the crest of the ridge on which stands and is largely masked from view of the fort and museum by a dense plantation along the ridge (see front cover). Although the new single-storey wing will increase the area of buildings, therefore, the visual impact of the proposed developments on the overall monument complex will be minimal.

8. RECOMMENDATIONS

The following work is recommended in the within and adjacent to the proposed developments to evaluate and mitigate the archaeological impact of the new visitor facilities. All remain subject to consideration by the National Park Archaeologist.

8.1 Evaluation

8.1.1 Evaluation is required to determine whether significant archaeological deposits survive within the area of the new construction at the Information Centre. In view of the restricted area and the possible presence of service pipes, cables etc., it is considered this evaluation should take the form of limited trial trench excavation, rather than geophysical survey. The trenches should extend from the field wall, which forms the southern boundary of the site, to up to the existing wings of the building to observe a profile of deposits across the site. This evaluation phase should establish whether either full mitigation excavation of the area is required or simply archaeological monitoring by means of a watching brief.

8.2 Mitigation

8.2.1 Following demolition of the Dutch barn and removal of the existing concrete flooring, the opportunity should be made available for the full archaeological examination of the area of the new building and excavation of any features therein. If the existing floorpan is retained the strip to the west where the envelope of the new building extends beyond that of the barn should be excavated and any intrusions through the floor monitored by means of a watching brief.

8.2.2 Any new footpaths connecting the fort with the museum and/or information centre should as far as possible be designed to minimise the impact upon any cultural features and deposits intersected by its course. Should intrusive work prove necessary to establish paths, archaeological monitoring should be undertaken to mitigate the impact by record. Particular care should be taken in the area between the museum/cottage and the cow shed/present education room to minimise the damage to the archaeologically significant terrace scarp which might be caused by the creation of disabled access ramps.

8.2.3 In view of the extreme complexity, density and sensitivity of the archaeological landscape around Housesteads fort, as far as possible existing pipe trenches, effluent plant sites etc., should be retained, and expanded if necessary. Drilling boreholes will have a relatively minimal impact which can be mitigated by means of archaeological watching briefs. However, on this basis the second choice location for the Museum effluent treatment plant, within the Farmhouse garden on the site of the existing septic tank would be preferable on archaeological grounds since any cultural deposits this location will already have been disturbed and installation work here could be mitigated by means of a watching brief. If the first choice location for the Museum effluent treatment plant is adopted, mitigation will require archaeological excavation of the installation site.

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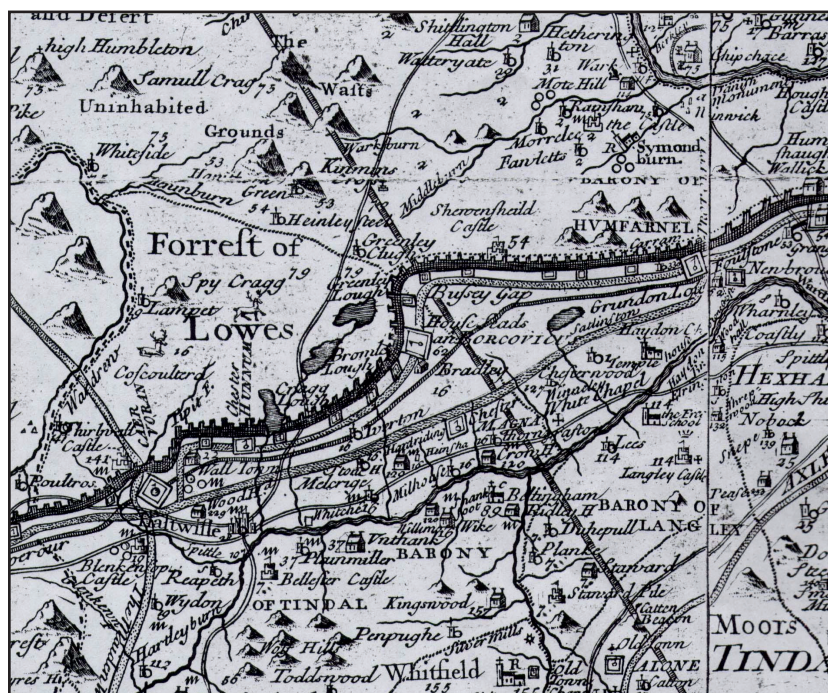


Figure 1: Extract from Warburton's Map of the county of Northumberland 1716

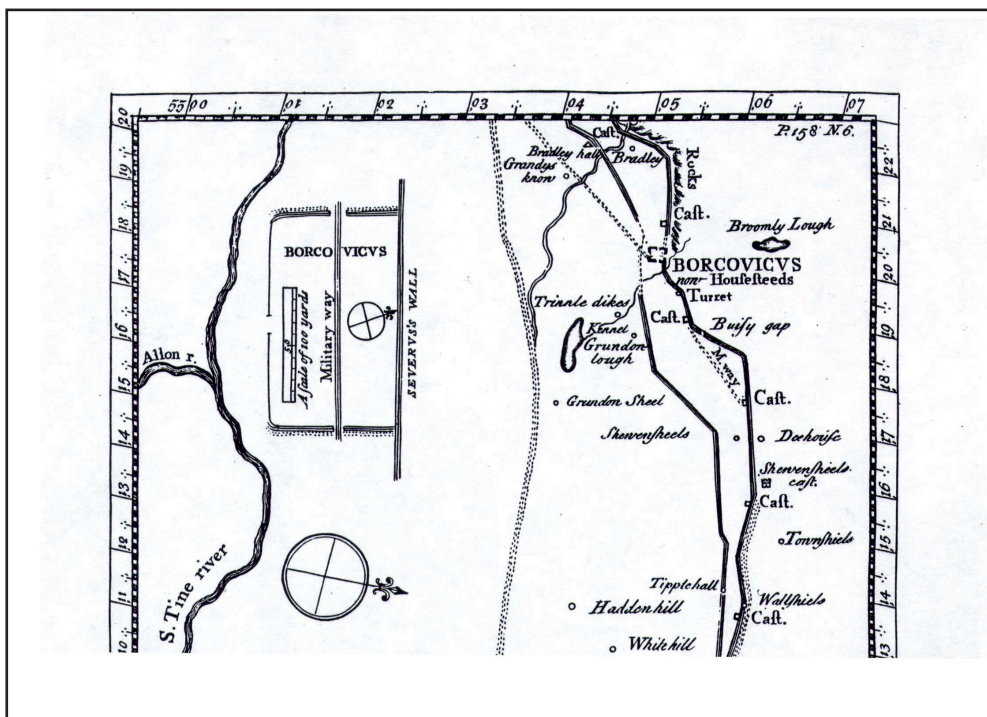


Figure 2: Map of the Roman Wall from Cilurnum to Borcovicus, John Horsley, Britannia Romana, 1732



Figure 3: 'A Survey of the Country between Newcastle and Carlisle...', Dugal Campbell & Hugh Debbeig, 1749 (mapping the line of the Military Road)

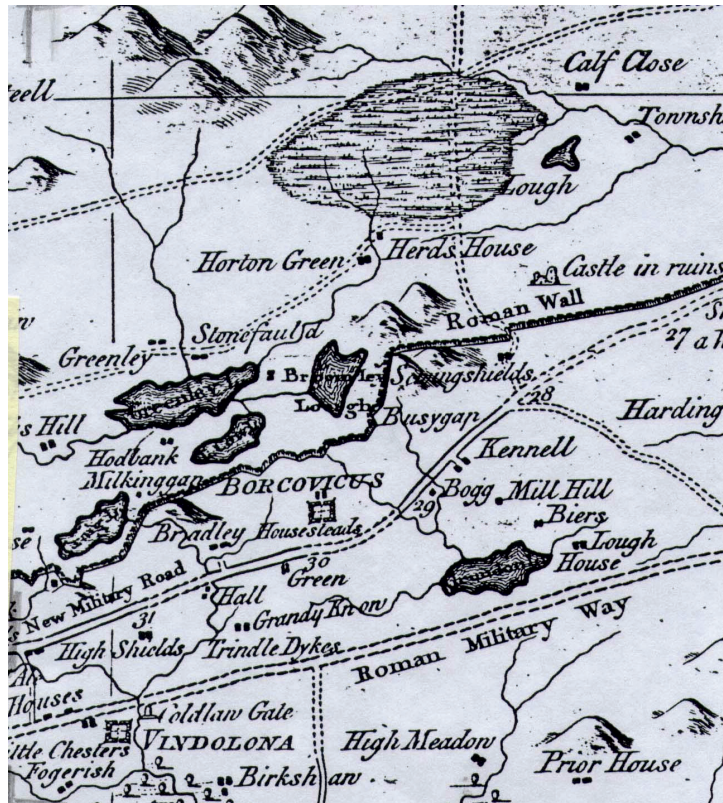


Figure 4: Extract from Armstrong's Map of the county of Northumberland 1769

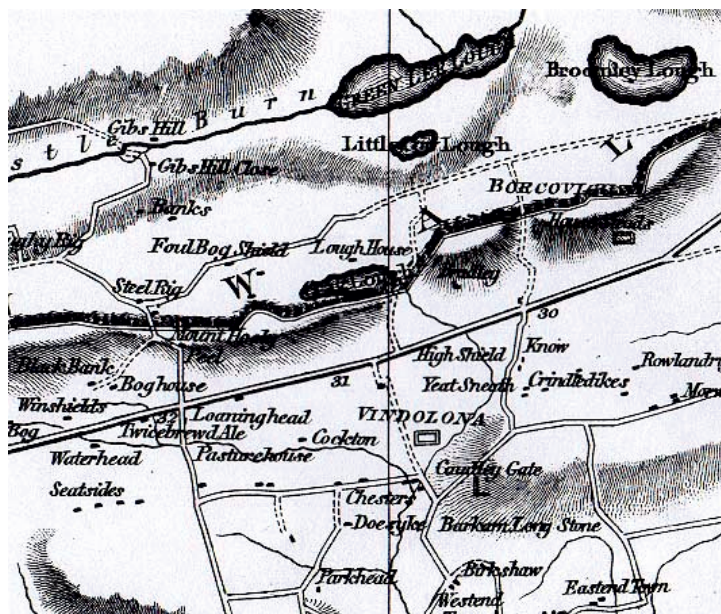


Figure 5: Extract from Fryer's Map of the County of Northumberland, 1820



Figure 6: Tithe map for Thorngrifton township (1842)



Figure 7: First edition Ordnance Survey Series, 1:1,2500, Sheet 83.12 (c.1860)

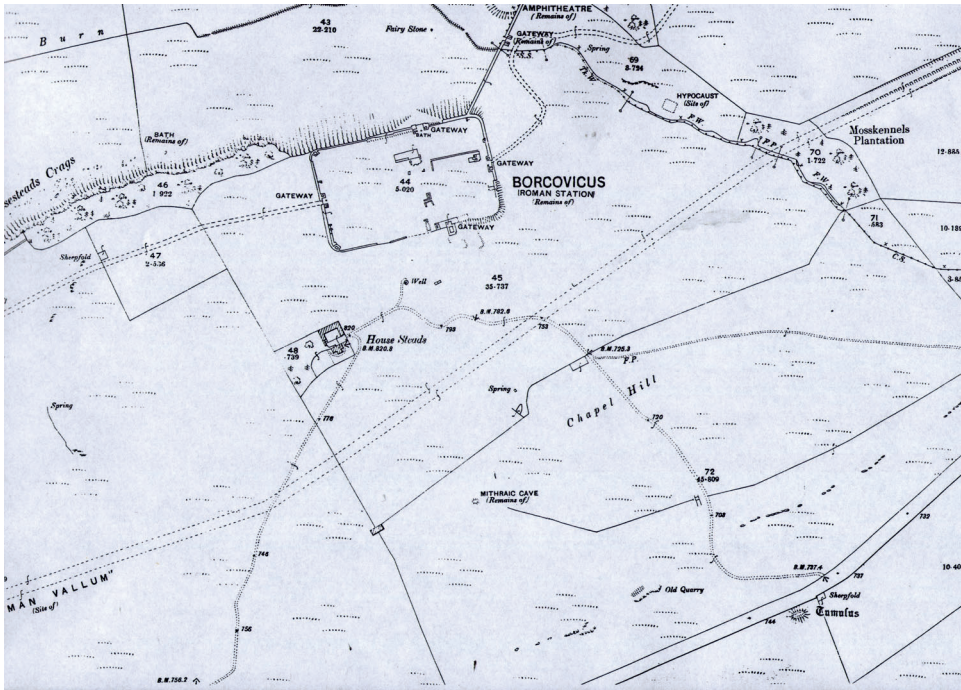


Figure 8: Second Edition Ordnance Survey Series, 1:12500, Sheet 83.12 (1896)

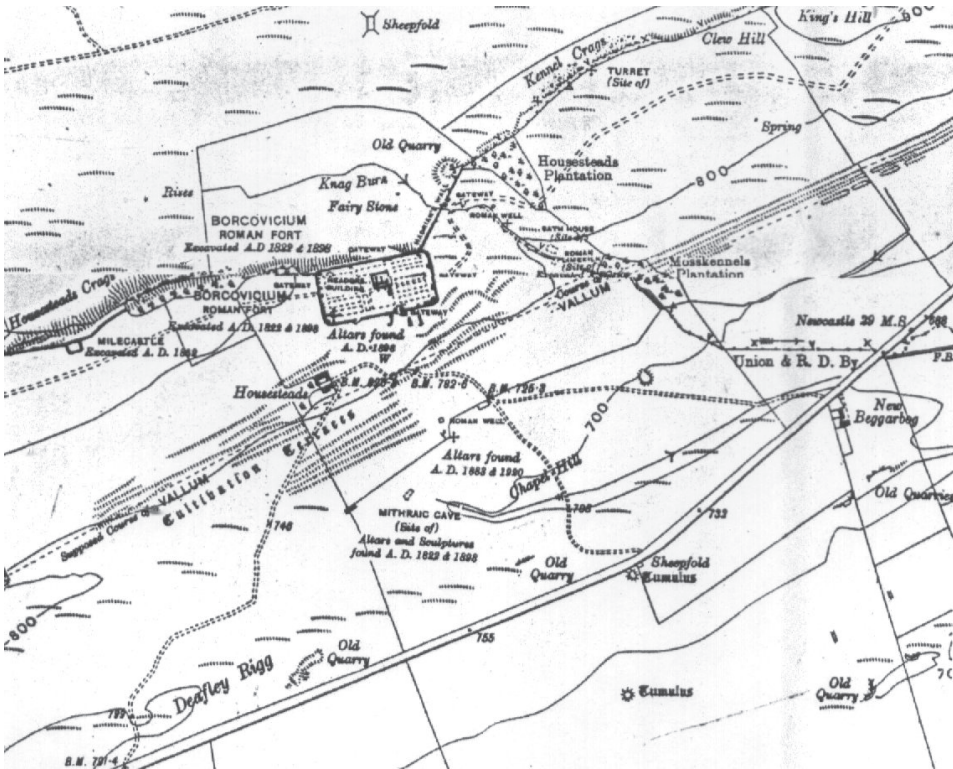


Figure 9: Third Edition Ordnance Survey Series, 6" to 1 mile, Sheets 81 SW & 90 NW (1922)

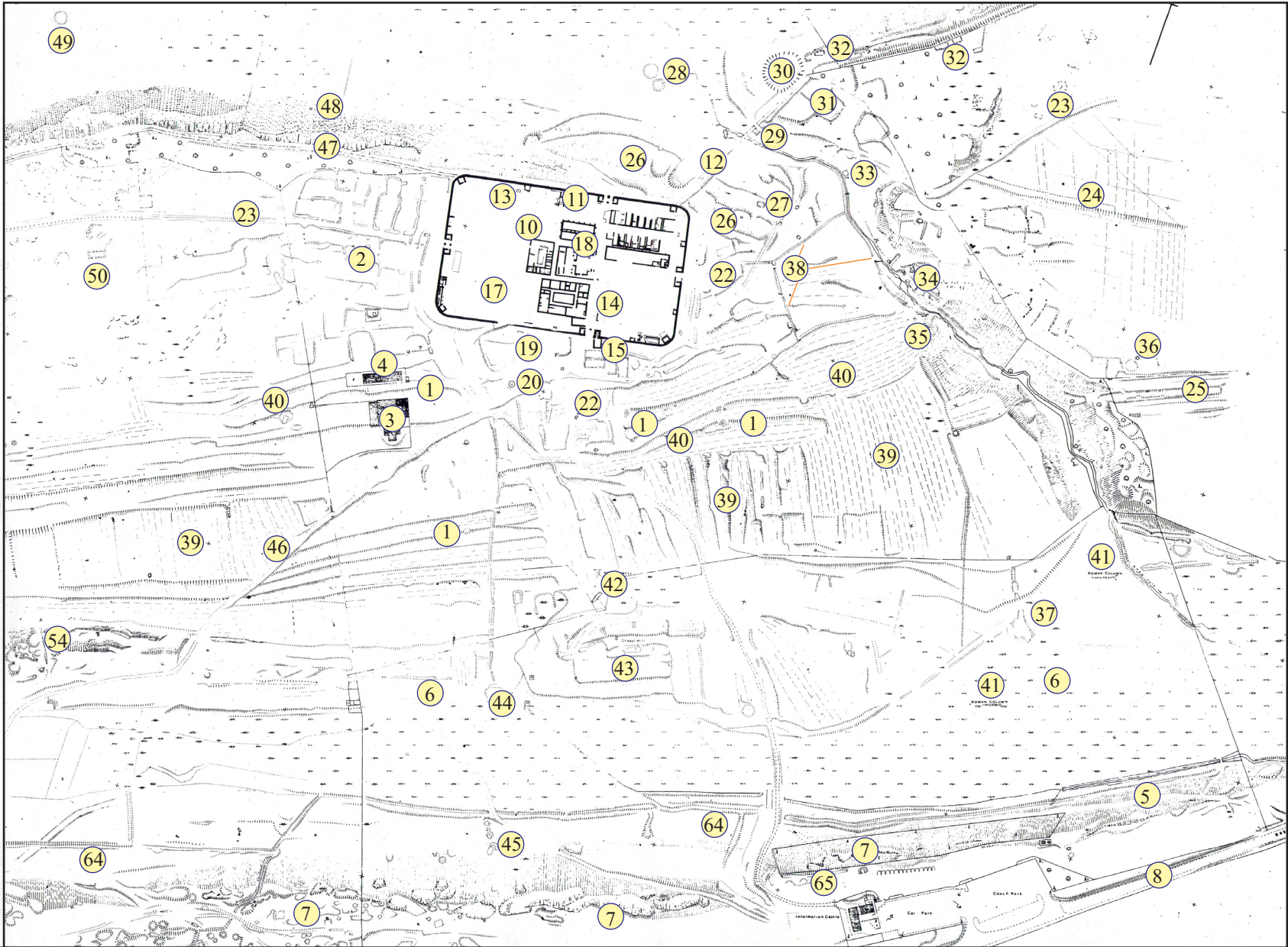


Figure 10: Sites of cultural heritage significance listed in the Catalogue (Section 4): Core area

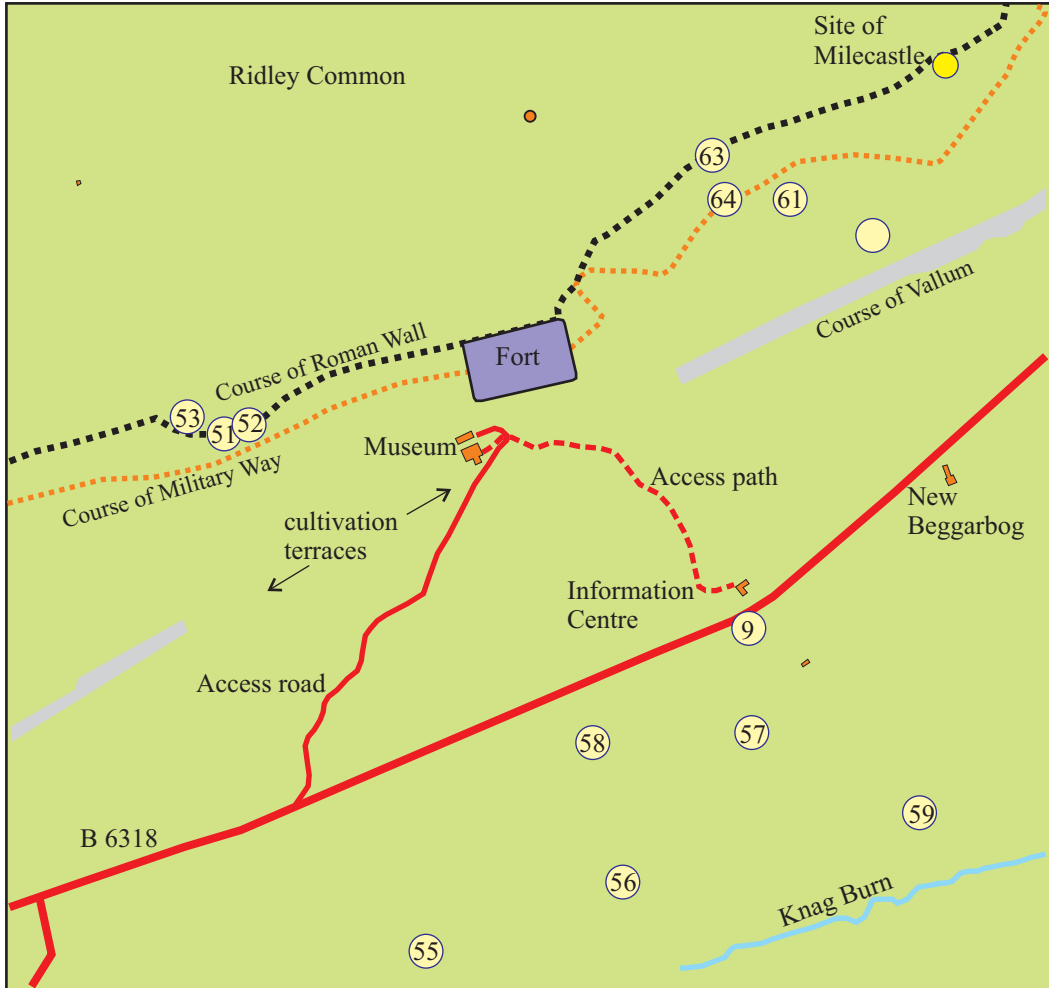


Figure 11:
Sites of cultural heritage significance listed in the Catalogue (Section 4): Wider area



Figure 12: Inclosure Award for Thorngraston township, 1797

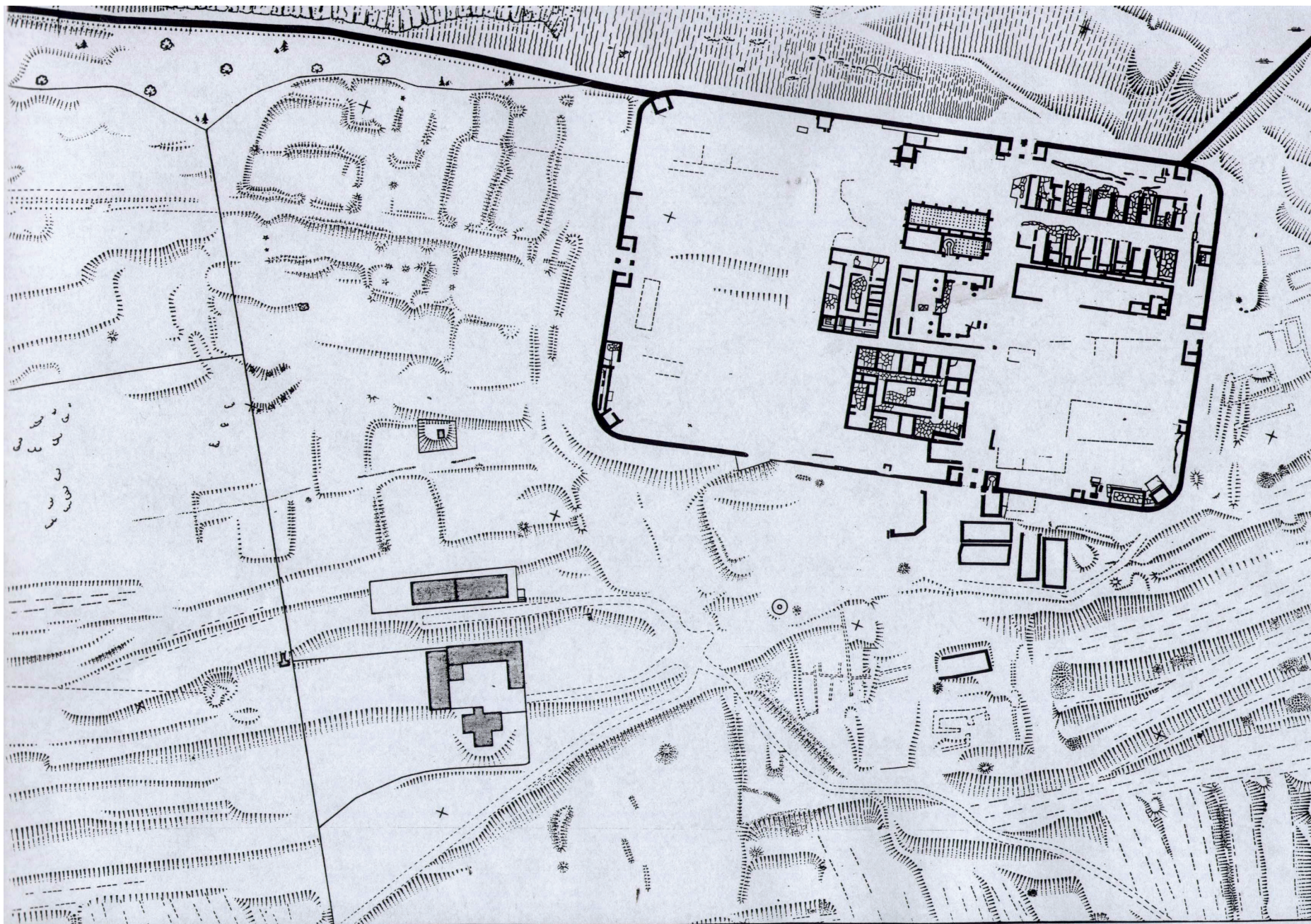


Figure 13: Detailed survey by the RCHME of the area of the fort and the farm, showing the terraces and enclosures

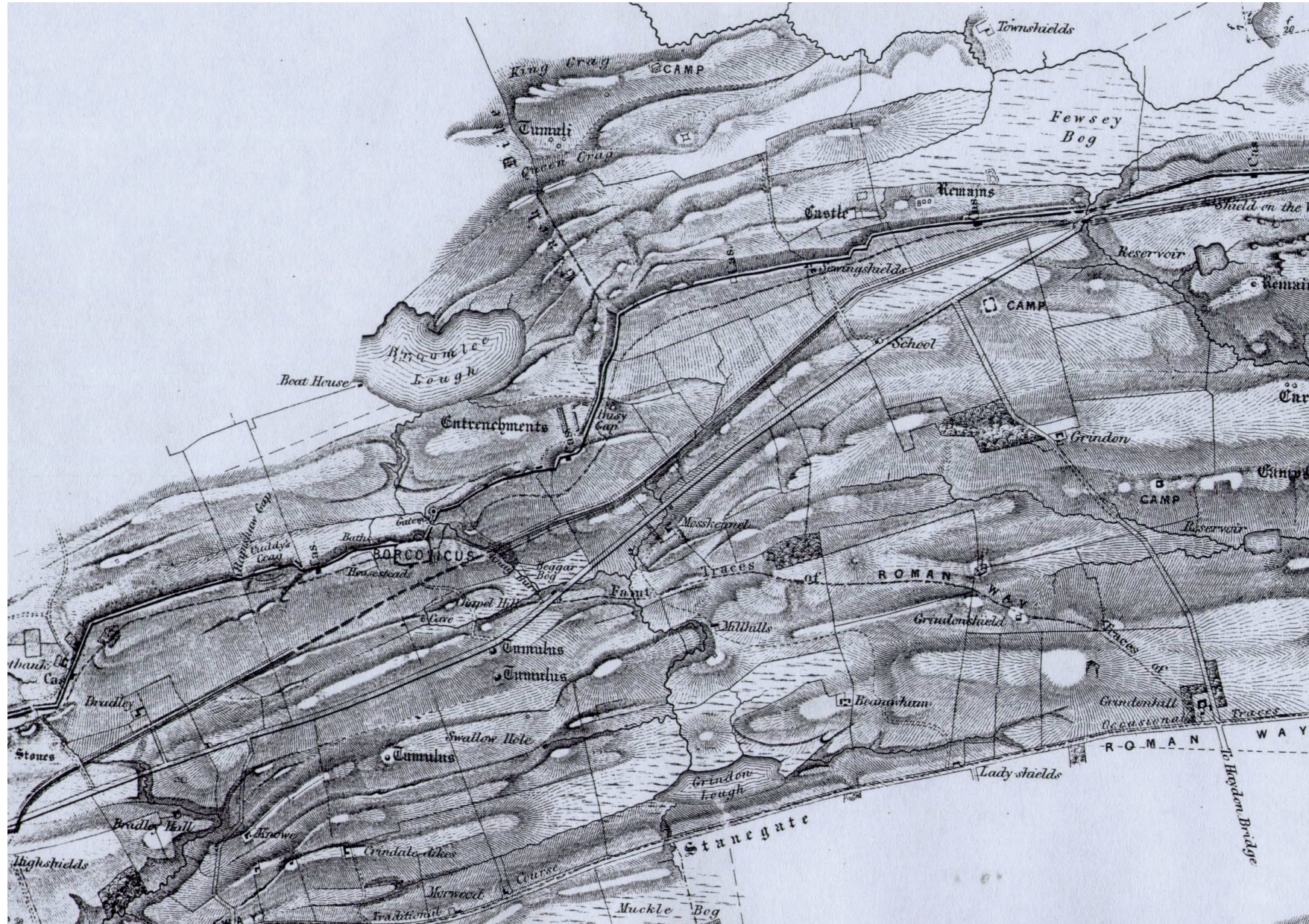


Figure 14: The wider area around Housesteads in MacLauchlan's 1852/4 Survey of the Roman Wall (1857), showing the tumuli South of the Military Road and suggested roman route from the Stanegate at Grindon

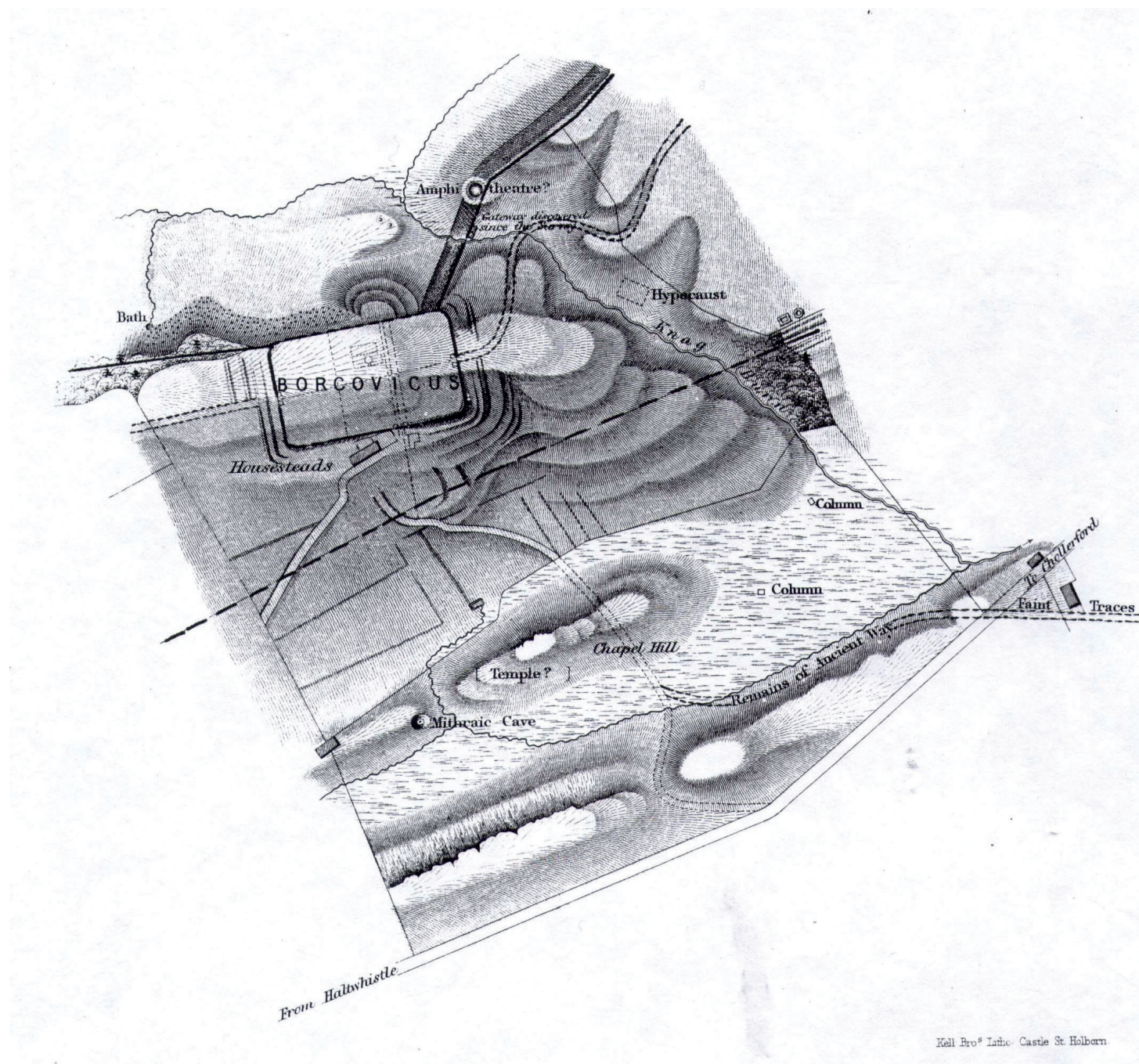


Figure 15: Detailed plan of Housesteads in MacLauchlan's 1852/4 Survey of the Roman Wall (1857)

Kell Bro^o Litho. Castle St. Holborn



Plate 1: The Dutch barn viewed from the north-west



Plate 2: The site of the proposed new wing of the Information Centre, viewed from the east



Plate 3: The terraces (with Chapel Hill in front) viewed from the south-west



Plate 4: Traces of quarrying along the ridge west of the Information Centre



Plate 5: The farm from the east; note the slope of the terrace scarp with the farmhouse standing on its own level platform beyond



Plate 6: The Museum and Custodian's Cottage from the south-east, with terrace scarp in foreground



Plate 10: The 'tumulus' opposite the Information Centre, viewed from the west



Plate 11: The holloway west of the 'tumulus', viewed from the north-west



Plate 9: Vertical aerial photograph of Housesteads taken by the RAF in 1930