

46 St Michael's Road, Kirkham, Lancashire



Archaeological Watching Brief



Oxford Archaeology North

December 2010

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OAN Issue No: 2010-11/1127

OAN Job No: L10180

NGR: SD 4327 3203

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SUMMARY

In August 2009, part of a substantial Romano-British masonry building, furnished with a heating system, was discovered during the course of an archaeological watching brief undertaken by Oxford Archaeology North (OA North) at 46 St Michael's Road, Kirkham, Lancashire (SD 4327 3203). Wooden structural remains, in the form of posts and stakes preserved by waterlogging, were also observed, together with part of a possible ditch and other deposits, though the precise relationship of most of these remains to the masonry structure could not be determined. The site lay approximately 70m north-east of the north-east angle of the known Roman fort at Kirkham, close to the south bank of the Carr Brook, in an area occupied today by residential housing.

Previously, several finds of Romano-British artefacts, including pottery, metalwork and leather, had been made in the general area, and traces of Roman timber buildings had been found on Myrtle Drive, immediately south of St Michael's Road. These discoveries were suggestive of the existence of an extramural settlement outside the presumed east gate of the fort.

The precise significance of the remains recorded during the watching brief could not be established. However, the masonry structure, which was constructed of red sandstone and brick and contained (or comprised) an apsidal or circular heated room, was clearly a building of some pretension and significance. It was, in all probability, the fort bath-house, built and occupied at the same time as the fort itself, *c* AD 120-50/60, though the possibility that it was part of another important structure, such as a *mansio*, cannot be ruled out. With the exception of a single, unstratified sherd of Black burnished ware Fabric 1, dating to after *c* AD 120, no datable Roman artefacts were recovered from the site.

ACKNOWLEDGEMENTS

OA North would like to express thanks to the property owner, Mr Lee Fenton, for commissioning the project, and for his co-operation and provision of on-site facilities. Thanks are also extended to Doug Moir, of Lancashire County Council's Archaeological Service (LCAS), for much helpful advice.

For OA North, the watching brief was undertaken by Pascal Eloy. The report was prepared by Pascal Eloy and John Zant, and the drawings were compiled by Marie Rowland. The finds (including the waterlogged wood) and the palaeoenvironmental samples were quantified and reported on by Christine Howard-Davis and Elizabeth Huckerby, respectively. The project was managed by Emily Mercer, and the report was edited by Murray Cook and Rachel Newman.

1. INTRODUCTION

1.1 CIRCUMSTANCES OF THE PROJECT

- 1.1.1 Oxford Archaeology North (OA North) was commissioned by Mr Lee Fenton to undertake an archaeological watching brief at 46 St Michael's Road, Kirkham, Lancashire (Fig 1). Planning permission to demolish a garage, and erect a new two-storey side extension to the existing house, was granted by Lancashire County Council, with a condition whereby all ground works associated with the project were subject to a programme of archaeological monitoring (watching brief). To this end, Lancashire County Council's Archaeological Service (LCAS) issued a formal brief (*Appendix 1*); this was subsequently amended verbally, permitting the breaking up and removal of the concrete hardstanding for the former garage without any archaeological monitoring.
- 1.1.2 The watching brief was undertaken in late August 2009. This report sets out, in summary form, the results of the archaeological works.

1.2 SITE LOCATION, GEOLOGY AND TOPOGRAPHY

- 1.2.1 The site is located towards the south-eastern edge of modern Kirkham (NGR SD 4327 3203; Fig 1), in the vicinity of the former hamlet of Dowbridge, c 70m north-east of the Roman fort (Howard-Davis and Buxton 2000) and east of the medieval settlement of Kirkham.
- 1.2.2 The solid geology of the Fylde is largely obscured by drift deposits laid down during the Devensian era (c 8000 BC), although the lowlands are underlain by a series of Permo-Triassic rocks, with Bunter sandstone to the east and mudstones to the west (Middleton *et al* 1995). Kirkham itself lies on a low glacial moraine, which runs through the Fylde westwards from Preston, and terminates in low sea cliffs at Blackpool (*ibid*).

1.3 ROMAN KIRKHAM: PREVIOUS ARCHAEOLOGICAL RESEARCH

- 1.3.1 Roman activity at Kirkham appears to have commenced in the late first century AD, with the establishment of a series of three temporary camps (Howard-Davis and Buxton 2000, 18-20), the first dating from the late AD 70s, the last to around the turn of the first/second century AD. These were located on the highest point of the glacial moraine (*Section 1.2.2*), east of the modern town centre. Later, a small fortlet or signal station was built on the same site (*op cit*, 25-6); this was in turn replaced around AD 120 by a full-sized fort with a substantial stone-fronted rampart and a deep defensive ditch (*op cit*, 35-7), perhaps with a defended annexe on its eastern side. The layout of the fort is poorly understood, but it may have been rectangular (Fig 1), its long axis aligned north-west to south-east (Buxton and Shotter 1996, 87), and c 2.8ha in extent (6.9 acres) over its ramparts (*ibid*). The installation was therefore seemingly of larger than average size for an auxiliary fort in Britain,

most of which fall within the range 1.4-2.4ha (3.5-6 acres) (Breeze 2002, 23). It is possible that the fort served to control and protect the conveyance of sea-borne goods up the River Ribble and along the road system to Ribchester, Walton-le-Dale and beyond (Howard-Davis and Buxton 2000, 77).

- 1.3.2 The fort garrison is not known, but its size suggests that it was built for one of the larger auxiliary regiments of the Roman army, such as a 1000-strong infantry unit (*cohors miliaria*) or 500 cavalry (*ala quingenaria*). Indeed, a cavalry presence at Kirkham is indicated by the discovery of a 'Reiter' tombstone, depicting a cavalry trooper riding down a barbarian enemy, when the parish church was rebuilt in 1844 (Edwards 2009, 78, table 4.4). Unfortunately, the monument appears to have been broken up for use as hardcore in a church path (*ibid*), and the identity of the cavalryman's unit was not recorded.
- 1.3.3 Immediately outside the fort defences, quite large areas of cobbling have been noted, perhaps creating a *cordon sanitaire* from which civilians were normally excluded (Howard-Davis and Buxton 2000, 73). Other evidence for extramural activity, though slight, is quite widespread, especially in the area immediately east of the fort. There, scattered discoveries of Roman artefacts, together with a number of small, amateur excavations undertaken from the 1930s to the early 1960s (Collingwood and Taylor 1928; LUAU 1998), and several more recent archaeological interventions (LUAU 1998; 2001), suggest a focus of settlement adjacent to the fort's east gate, presumably alongside the Ribchester road. Finds include coins and pottery, a shield boss, leather shoes and leather waste, mostly from the Myrtle Drive area, immediately south of the St Michael's Road site. The foundations of Roman timber buildings were also noted during an archaeological evaluation, again on Myrtle Drive (Lancashire County Council 2009, 1), and evidence for Roman burials has been found on the other side of the Carr Brook (Singleton 1980, 1). Other evidence for extramural activity is confined largely to some quite nebulous indications of industrial activity, ephemeral timber walls, and ditched enclosures of uncertain significance located to the south of the fort (Howard-Davis and Buxton 2000, 73).
- 1.3.4 The fort seems to have been abandoned around the mid-second century AD (Howard-Davis and Buxton 2000, 37). Evidence for continued Romano-British occupation at Kirkham after this date is sparse, though it is clear that some form of activity did occur, at least sporadically. A hoard of 35 *denarii*, found in Poulton Street, to the west of the fort, in 1853 (Shotter 2000, 56), must have been deposited no earlier than AD 238, the date of the latest coin present, whilst a hoard of mid-late third-century radiates was found in the 1950s near the railway line at Treales, c 1km north-east of the fort (*op cit*, 57). The precise composition of this hoard is unknown, but it contained at least one coin of Gallienus (AD 253-68), and one of the Tetrici (AD 270-3), whilst another coin of Gallienus was seemingly found at Treales in the 1920s (*ibid*). Given the distance from the fort, it is possible that the discoveries at Treales relate to a nearby Romano-British rural site rather than an extramural settlement associated with the fort itself (*op cit*, 57).

1.4 FIELDWORK METHODOLOGY

- 1.4.1 The watching brief was carried out in accordance with the brief prepared by the LCAS (*Appendix 1*). An L-shaped area was available for investigation, within the foundations for the proposed extension (Fig 2). The western arm of the 'L' (Trench 1) was aligned north-west to south-east, and measured approximately 4.75 x 1.3m. The southern arm (Trench 2) was *c* 5.5 x 0.75m; both were excavated to a maximum depth of 1.2m.
- 1.4.2 The work complied with current legislation and accepted best practice, including the relevant professional standards of the Institute for Archaeologists (IfA 2004), and the IfA Code of Conduct (IfA 2008). There was close liaison between OA North staff and the site contractors, and a permanent archaeological presence was maintained during excavation of the foundation trenches.
- 1.4.3 All archaeological features and deposits were fully described and recorded on OA North *pro-forma* recording sheets, and their location was accurately recorded in plan. In addition, a photographic record in colour slide and monochrome formats was compiled.

1.5 THE PROJECT ARCHIVE

- 1.5.1 The project archive has been compiled in accordance with the LCAS brief specification (*Appendix 1*), and to a professional standard in accordance with current English Heritage guidelines (1991). The archive includes *pro-forma* field recording sheets, a photographic archive, and hand-drawn large-scale plans.
- 1.6.2 The site records ('paper' archive) will be deposited with the Lancashire Record Office in Preston, and the material archive (finds) with Kirkham Museum. A copy of the report, together with an index to the archive, will be deposited with LCAS for inclusion in the Lancashire Historic Environment Record (HER).

2. RESULTS

2.1 TRENCH 1

- 2.1.1 **The early ditch:** the earliest feature on the western part of the site was recorded at the southern end of Trench 1, where part of what may have been a ditch (119), at least 1.25m wide and filled with an organic, charcoal-rich mid-dark grey-brown soil (120; not illustrated), was found (Fig 3). Its southern edge extended north-east to south-west across the full width of the area investigated. To the north it had been destroyed by the construction trench for a later masonry structure (Section 2.1.2). Four preserved wooden posts or stakes (135, 136, 137, 138) were found within this feature and a fifth (134) lay immediately outside its southern edge (Fig 3); it is unclear, however, whether any of these were directly associated with 119, or were later.
- 2.1.2 **The masonry structure:** the most significant discovery, located at the northern end of Trench 1, was that of a stone- and brick-built circular or apsidal structure of Roman date, furnished with an under-floor heating system (Fig 3). Only part of the south-western wall was seen, together with a small area of the interior, but if the curve of the inner wall face is projected northwards, it is possible to estimate that the structure may have had an internal diameter (or a north to south dimension, depending on whether it was a circular or apsidal feature) of *c* 2.9-3m. It may be significant that this measurement corresponds to ten Roman feet (*pedes Monetales*), taking the *pes Monetalis* as equalling 0.29617m (Walthew 2005, 273). The observed wall (117) was 1.3m wide, and comprised two surviving courses of large, fired clay bricks (Fig 3; Plate 1), standing to a maximum height of 0.3m within the area investigated. These were seemingly mortar-bonded, and had been laid above a basal course of roughly dressed red sandstone blocks (129). A deposit of almost pure pink-brown sand (133), seen immediately outside the wall, appeared to fill a curving cut, *c* 0.35m beyond the wall (Fig 3; Plate 2), that is most likely to represent the edge of the wall construction trench. Spatial evidence strongly suggests that this cut through ditch 119 (Section 2.1.1).
- 2.1.3 That the interior of the structure had been heated was clearly indicated by the presence of tile-built hypocaust stacks (*pilae*). Four complete examples (126) and fragments of what may have been a fifth, lay within the site (Fig 3; Plate 3); all survived to only a single course, and were composed of large, square tiles, measuring approximately 280 x 270 x 65mm. Overlying the geological clay at the base of the hypocaust system, and extending around the extant *pilae*, was a black deposit (125; not illustrated), up to 0.37m thick and composed almost entirely of charcoal; this presumably derived from the firing of the heating system, though no trace of a fire-pit or stoke hole was found within the area investigated.
- 2.1.4 The tile *pilae* had been robbed to their basal course in antiquity, and were sealed by deposits of mixed clay, earth, and gravel (123 beneath 122; not illustrated), containing charcoal and numerous brick/tile fragments. These levels, which perhaps relate to a phase of disuse or alteration of the structure,

were in turn overlain by a deposit of cobbles and sandstone rubble (118; Fig 3; Plate 4). This had the appearance of a deliberately laid surface, rather than demolition debris, and clearly respected the position of the excavated wall of the structure. If correctly interpreted, this surface was clearly laid down after the heating system had gone out of use and been dismantled, but before the structure itself was demolished.

- 2.1.5 **Modern deposits:** all the archaeology in Trench 1 (and also in Trench 2 (Section 2.2.4)) were directly sealed by modern deposits, probably dating from the time when the houses on St Michael's Road were built, and subsequently. These largely comprised dumps of redeposited orange-pink sandy clay, overlain by a deposit of mixed clay and brown sandy silt, that was itself sealed by modern topsoil.

2.2 TRENCH 2

- 2.2.1 A quite complex series of Roman features and deposits was recorded in a limited area within Trench 2, principally at the south-western end of the trench, at its junction with Trench 1. The earliest recorded deposit was a layer of fine, grey-brown sand, possibly a natural accumulation. This was overlain by a mid-dark grey-brown organic soil (111; Fig 3), up to 0.24m thick, containing small fragments of preserved, waterlogged wood. Above this was a well-laid surface of water-worn cobbles, pebbles and sandstone fragments (104), 0.15m thick, recorded in a limited area measuring *c* 2 x 0.75m (Fig 3; Plate 5). A setting of at least three large sandstone slabs (105) on the north side of this could not be adequately characterised, since they lay largely outside the area investigated (Fig 3; Plate 5). A single, roughly squared sandstone slab (106) was also located on the north-eastern periphery of surface 104, *c* 1m west of 105. Although 105, 106 and surface 104 were located little more than 0.3m south of the southern edge of ditch 119 in Trench 1 (Section 2.1.1), no stratigraphic relationship could be established between these deposits and that feature.
- 2.2.2 Two preserved wooden posts or stakes (109, 110) were seemingly associated with surface 104, and two larger posts (107, 108), possibly part of a north-east to south-west-aligned row, were located north-east of the surface (Fig 3). It is possible that 107 and 108, which were 100 x 130mm and 110 x 90mm in cross-section respectively, had been set in a post-trench that either defined the eastern edge of surface 104 or cut through it, but this is not certain.
- 2.2.3 A few Roman remains were also recorded at the north-eastern end of Trench 2, but these were spatially and stratigraphically isolated from the rest of the archaeology (Fig 3). There, a mid-dark grey-brown organic soil containing wood fragments (131; Fig 3); probably also 115 (not illustrated) was recorded; this could conceivably have been the same as the very similar deposit, 111, to the south-west (Section 2.2.1). It was cut by the stumps of two timber posts or stakes (128, 132), 120 x 80mm and 90 x 90mm respectively. A stratigraphically isolated spread of mixed dark soil (116) was also recorded in this area.

- 2.2.4 **Modern deposits:** all recorded archaeological features were directly sealed by modern deposits. These were the same as those recorded in Trench 1, immediately to the north (*Section 2.1.5*).

2.3 FINDS

- 2.3.1 Very few finds were recovered from the site. The assemblage comprises a single sherd of Romano-British pottery, and 49 pieces of Roman ceramic building material (eight complete bricks and 41 fragments).
- 2.3.2 The pottery fragment, which was unstratified, is from a jar in Black burnished ware Fabric 1. This cannot be dated with any precision, but is most likely to be of second-century date, and certainly after *c* AD 120 (Tyers 1999). Although of little value for dating the Roman remains recorded on the site, the sherd is consistent with the occupation of the auxiliary fort at Kirkham (with which the masonry structure at St Michael's Road is presumed to be associated), which was operational from *c* AD 120-50/60 (*Section 1.3.1; 1.3.4*).
- 2.3.3 The eight complete bricks derive from the hypocaust *pilae* (126) and walling (117) of the masonry building in Trench 1 (*Section 2.1.2*). At just under one Roman foot square, those used to construct the *pilae* can be identified as *pedales*, which were frequently employed for this purpose in Romano-British bath-houses (Brodribb 1987). Several of the bricks are heavily sooted, and some retain remnants of the mortar upon which they would have been bedded. At least two examples have makers' signatures, which, whilst not unusual, are of interest. The fragmentary material derives from several contexts, principally the debris (122, 123) filling the hypocaust, and the possible crude surface (118) laid within the heated room following the disuse of the hypocaust system (*Section 2.1.4*). Amongst the collection are small fragments of keyed flue/box tile, very probably derived from the heating system itself.

2.4 WATERLOGGED WOOD

- 2.4.1 Of the 11 waterlogged wooden posts/stakes recorded on the site, it proved possible to obtain samples from five (134, 136, 137, 138 in Trench 1; 132 in Trench 2). All show clear signs of working, at least two having been converted into squared timbers, and another sharpened for use as a stake. Provisional assessment suggests that at least two of the timbers are probably oak (though confirmation of this is required by a wood specialist), but it seems likely that neither retains heartwood or sapwood, which was probably removed in the course of their conversion.

2.5 ENVIRONMENTAL SAMPLES

- 2.5.1 In total, eight discrete deposits were sampled for possible preserved palaeoenvironmental remains, including seeds and other plant materials, and insects. In Trench 1, samples were taken from the fill (120) of putative ditch 119, which pre-dated the masonry building (*Section 2.1.1*); from the charcoal-rich deposit (125) at the base of the masonry structure's heating system (*Section 2.1.3*), doubtless formed when the hypocaust was fired; and from

deposits 122 and 123, which represent disuse of the heating system (*Section 2.1.4*). The four sampled deposits in Trench 2 were stratigraphically early organic soils 111, 115 and 131, conceivably separate parts of a more extensive soil accumulation (*Section 2.2.1; 2.2.3*), and 116, a stratigraphically isolated layer of mixed soil (*Section 2.2.3*). These are stored in conditions suitable for future analysis.

3. OVERVIEW

3.1 INTERPRETATION OF RESULTS

- 3.1.1 The watching brief undertaken at 46 St Michael's Road found clear evidence of intensive Romano-British occupation, *c* 70m north-east of the Roman fort at Kirkham, adjacent to the Carr Brook. The excavated remains seemingly relate to at least two phases of activity, the earliest represented by ditch *119*, at the southern end of Trench 1 (*Section 2.1.1*), the latest by the masonry structure with the heating system, also in Trench 1 (*Section 2.1.2-4*). The relationship of these features to the deposits recorded in Trench 2, to the south and south-east, could not be established. However, it seems likely that the archaeology in this area comprised the remains of external surfaces and other external deposits, possibly associated with a post-built timber structure. There, too, it is probable that more than a single phase of occupation was represented, but this could not be proven.
- 3.1.2 ***Ditch 119***: this feature could not be excavated, and was seen in too small an area to be adequately characterised, but it seemingly extended north-east to south-west, and therefore shared a broadly similar (but not identical) alignment with a putative row of posts located in Trench 2 (*Section 3.1.7*). The presence of wooden posts or stakes (*135, 136, 137, 138*) set (or driven) into the fill suggests that it may have been the construction trench for a timber wall. However, its width (in excess of 1.25m), if correctly established, seems excessive for this, so the possibility that it was a more substantial feature, such as a ditch, seems more likely. The posts/stakes within it might, therefore, have been related to the function of the ditch (whatever that may have been), or they could have been later, being driven into the earlier ditch fill (a stake (*134*; *Section 2.1.1*) was also driven into the natural clay adjacent to the southern edge of *119*). If later, the timbers could have been associated with the masonry structure that cut through ditch *119* (*Section 3.1.3*), or they might represent an entirely different phase of activity.
- 3.1.3 ***The masonry structure***: although a direct stratigraphic relationship could not be established, it seems certain, on spatial evidence, that ditch *119* was cut by the construction trench for wall *117/129* (*Section 2.1.2*). This clearly formed part of a Romano-British building of considerable importance, wholly or partly stone-built and furnished with at least one apsidal (or possibly circular) heated room. Evidence from Britain as a whole suggests that the civilian settlements which almost invariably grew up outside Roman forts in the province (Sommer 1984) were made up overwhelmingly of timber buildings, usually long, narrow structures of the 'strip-building' type (Shotter 2004, 116). Whilst stone, or stone-footed, buildings are known, only two stone building forms are found with any degree of frequency beyond the fort defences; the military bath-house (Rook 1992), which would have served the fort garrison and (perhaps) the inhabitants of the adjacent settlement (Sommer 1984, 46-7; Revell 2007, 234), and the *mansio*, which provided accommodation for military and civilian officials travelling on official business. *Mansiones* are

known from a number of fort sites in Britain (Black 1995), but it is by no means clear if a *mansio* was present outside every fort (probably not), and some known examples were wholly timber-built (*ibid*). Bath-houses, on the other hand, were provided at every fort (or very nearly so) in the province (Revell 2007, 230) and were invariably constructed of stone because of the high fire-risk posed by their heating systems (Johnson 1983, 220).

- 3.1.4 Although too little was seen of the Kirkham structure for its function to be established beyond question, the balance of probability suggests that it was a bath-house, though the possibility that it was part of a bath-suite associated with a *mansio* cannot be ruled out. This hypothesis is supported by the building's position adjacent to the Carr Brook, since the need for copious amounts of fresh water (including running water to fill washbasins, flush latrines, and so on) meant that many fort baths in Britain were built close to rivers or streams (Rook 1992). Whilst dating evidence from the Kirkham site is virtually non-existent (the single fragment of Black-burnished ware, dating to after *c* AD 120 (*Section 2.3.2*) was unstratified), the bath-house would almost certainly have been associated with the Hadrianic/Antonine fort, since baths were only provided for full-sized 'permanent' military establishments, not small installations such as fortlets or signal stations, or for temporary camps (Bidwell 1997). The building is therefore likely to have been in use for up to 30-40 years, from the establishment of the fort *c* AD 120 to its final abandonment around AD 150-60.
- 3.1.5 Only part of a single stone- and brick-built room was recorded; this was, however, provided with an underfloor heating system and had at least one curving wall, so it was probably apsidal, or possibly even circular. Apsidal heated rooms are not uncommon in bath-houses of all types in Britain (Rook 1992); usually, they represent part of one of the principal heated rooms, such as the hot-dry room (*laconicum*) or hot steam room (*caldarium*). In *caldaria*, small, heated apsidal rooms or alcoves are often found on one or more sides of the room, as at Chesters (Breeze 2006, 205) and Great Chesters (Daniels 1978, 181 (Fig 4)) on Hadrian's Wall; in most cases, these are thought to have served as hot baths. Examples of circular *laconica* are also known, most notably at nearby Ribchester (Edwards 2000, 35-8), and in the late first-century baths at Catterick, North Yorkshire (Wilson 2002, 48-51, fig 37 (Fig 4)), though they are generally less common than apsidal rooms. These could form an integral part of the bath-house, as at Ribchester and Catterick, or could be 'free-standing', as in the Hadrianic fort at Hardknott in Cumbria, and several other sites in northern England and Scotland (Bidwell *et al* 1999, 63). However, it has been suggested that the Hardknott example, together with other seemingly 'free-standing' examples at Corbridge (undated) and Templeborough (possibly Trajanic), may have been linked to the rest of the building by a timber changing area (*apodyterium*), all evidence for which had vanished (*op cit*, 63-4).
- 3.1.6 On the evidence available, it is not possible to tell whether the Kirkham structure may have formed part of a *laconicum* ('detached' or otherwise) or an apsidal room. At possibly *c* 3m in diameter, internally, it would have been considerably smaller than the *laconicum* in the Flavian baths at Catterick (*c*

4.7m; Wilson 2002, 49, fig 37), the 'free-standing' example at Templeborough (c 5.4m; Bidwell *et al* 1999, 62, fig 29.3). and even the 'detached' *laconicum* associated with the very small baths at Hardknott (c 4.35m; *op cit*; fig 29.1). On the other hand, it would have been larger than the 'detached' *laconicum* in the undated baths at Corbridge (only c 1.8m in diameter, internally; *op cit*, fig 29.2), so the possibility that it served this purpose cannot be ruled out.

- 3.1.7 ***The remains in Trench 2:*** the significance of the remains recorded to the south and south-east is difficult to determine, though they may well, like those in Trench 1, represent more than a single phase of activity. Whether some or all were associated with the stone- and tile-built structure to the north is not clear. The discovery of substantial wall-posts and stakes suggests that the structures in this area may have been either earlier than the building to the north, or, if contemporary, quite independent of it. However, examples are known of fort bath-houses in Britain which, though largely of stone construction, were provided with timber-built changing areas (*apodyteria*), the risk of fire in these areas being considerably less than in the rest of the building. The possible existence of timber *apodyteria* at Hardknott, Corbridge and Templeborough has already been noted (Bidwell *et al* 1999, 63-4), and several other examples are known from Britain and the German provinces (*ibid*). A few bath-houses are also known where other unheated elements of the structure, such as the cold room (*frigidarium*) were timber-built (*ibid*), though this seems to have been unusual.

3.2 SIGNIFICANCE AND POTENTIAL

- 3.2.1 The remains uncovered at 46 St Michael's Road are clearly of considerable importance in the context of understanding the character and extent of Roman occupation at Kirkham. The discoveries highlight the high potential of this part of the town for advancing understanding of the Roman settlement, and have provided extremely important information that will aid the interpretation and management of Kirkham's buried archaeological resource.
- 3.2.2 At least two phases of activity, representing seemingly intensive occupation north-east of the known second-century fort, were recorded. The earliest phase, comprising putative ditch 119 in Trench 1, and possibly (but not certainly) some of the wooden structural remains and other deposits in Trench 2, cannot be characterised or dated on present evidence. However, if the later masonry structure was indeed a military bath-house (*Section 3.2.6*), it was almost certainly in use during the operational lifetime of the fort (c AD 120-50/60 (*Section 1.3.1; 1.3.4*)), in which case, the earlier occupation might pre-date this.
- 3.2.3 Whilst the early activity is presumed, in the absence of any evidence to the contrary, to be of Roman date, the possibility that putative ditch 119 is pre-Roman cannot presently be discounted. In the absence of stratified pottery or other closely datable artefacts, the best chance of establishing a date for this feature lies with the soil sample taken from its fill (*Section 2.5.1*). Charcoal or other charred material extracted from this could, subject to appropriate archaeological assessment, potentially be dated by radiocarbon assay. Such an

approach would be in line with several initiatives set out in the North West regional *Research Agenda* for the Romano-British period (Philpott and Brennand 2007), which stress the need for additional information pertaining to the location of early Roman military installations relative to 'native' settlements (*op cit*, 59; Initiative 3.12), and the significance of any potentially 'pre-fort' phases of activity (*op cit*, 62; Initiative 3.19). The need for more radiocarbon dates from Romano-British sites of all types in the region, especially from early and late phases, is also highlighted (*op cit*, 57; Initiative 3.5).

- 3.2.4 Similarly, assessment of the waterlogged wood samples by a suitably experienced specialist would highlight the suitability, or otherwise, of these for dendrochronological dating. If dating proved possible, this could provide an important indication of whether or not these structural remains were contemporary with the putative bath-house and the fort. Such an approach would also be consistent with Initiative 3.17 of the Romano-British *Research Agenda* for the North West (Philpott and Brennand 2007, 61), which highlights the urgent need for further dendrochronological study of preserved timbers.
- 3.2.5 Assessment of the samples from the stratigraphically early soil deposits in Trench 2 (111, 115, 131 (Section 2.2.3)) would also establish the potential of these to shed light on the character of occupation on this part of the site. Site records indicate that these deposits contained many small, waterlogged wood fragments, which could be characterised (whether roundwood or construction offcuts, for example) and identified to species; roundwood studies are specifically highlighted as a research priority in Initiative 3.17 of the regional *Research Agenda* for the Romano-British period (Philpott and Brennand 2007, 61). It is also reasonable to suppose that other potentially significant palaeoenvironmental remains, such as insects, seeds and plant remains, will have been preserved, which could provide important information pertaining to economy and environment.
- 3.2.6 In all likelihood, the stone- and brick-built heated room recorded in Trench 1 represents the remains of the fort bath-house, the location of which had not previously been known. However, the possibility that it formed part of another important extramural building, such as a *mansio*, cannot be discounted, and is equally significant. The building is not presently dated, except through its presumed association with the adjacent auxiliary fort (Section 1.3.1; 1.3.4). However, some potential for dating lies with the sample taken from the charcoal-rich deposit (I25) found at the base of the heating system (Section 2.1.3), which presumably represents the remains of fuel used to fire the hypocaust. Assessment of this material would provide an indication of its suitability for radiocarbon dating, and also its potential to shed light on the types of wood used as fuel.
- 3.2.7 Regionally, upwards of 40 certain or probable Roman fort sites are known from North West England, from Cumbria south to Cheshire (Shotter 2004, figs 3.1, 4.1, 5.1). With the likely exception of some early, and possibly short-lived, forts, the majority of these would have been furnished with a bath-house located outside the fort defences. However, in total, the locations of only eight

or nine auxiliary baths are known from the North West (*Section 3.2.8*), including the probable example at Kirkham, and most of these are known either from antiquarian excavations, or from more recent investigations carried out under far from ideal circumstances. Consequently, current knowledge of many of these structures is restricted to fragmentary ground plans. Even on those sites where a complete plan is available, many of the buildings were excavated during the nineteenth and earlier twentieth centuries (or in some cases even earlier) using very rudimentary and unsystematic excavation techniques.

- 3.2.8 On the Cumbrian coast, the upstanding remains of the fort baths at Ravenglass (Breeze 2006, 413) represent one of the best-preserved Roman structures in Britain. In contrast, the likely position of the baths at Moresby, further up the coast, is known only from limited investigations during the 1950s (*ibid*). North of Hadrian's Wall, the baths associated with the outpost fort at Netherby were uncovered as long ago as 1732 (Daniels 1978, 313), whilst the bath-building within the fort at Bewcastle was excavated during the late 1940s and 1950s (Gillam *et al* 1993). Further south, the small baths at Hardknott were excavated in 1892, and the remains consolidated during the late 1950s (Bidwell *et al* 1999, 61). The baths at Ribchester, first discovered in 1837, were subjected to partial excavation in 1927 and were re-excavated in 1964 and 1978 (Edwards 2000, 35-8). These investigations resulted in the production of a partial plan of the building (*op cit*, 41; fig 18). At Lancaster, rescue excavations in the early 1970s revealed a bath-house of probable earlier second-century date. This structure underwent a number of extensive alterations and modifications during its lifetime, which extended on coin evidence into the third quarter of the third century (Jones and Shotter 1988, 19-20, 61-76). In 2005, excavations in the centre of Wigan (OA North 2008) revealed a hitherto unsuspected bath-house that was probably, but not certainly, associated with a nearby auxiliary fort. Whilst a complete, or near-complete, ground plan of this structure was recovered, and the surviving remains were fully excavated, it had been severely truncated by nineteenth-twentieth-century construction works, so that only sub-ground features had survived.
- 3.2.9 From this brief survey of the evidence, it can be seen that very few of the Roman military bath-houses that must have existed in the North West have been located, let alone investigated in modern times. The discoveries at Kirkham, therefore, restricted though they may have been, represent an important contribution to the limited dataset pertaining to this class of monument in the region, and as such, are worthy of more detailed assessment, analysis and publication. This would also be in line with Initiative 3.18 of the Romano-British *Research Agenda* for the North West, which stresses the need to prioritise the publication and dissemination of unpublished work from military and fort sites in the region (Philpott and Brennand 2007, 62).

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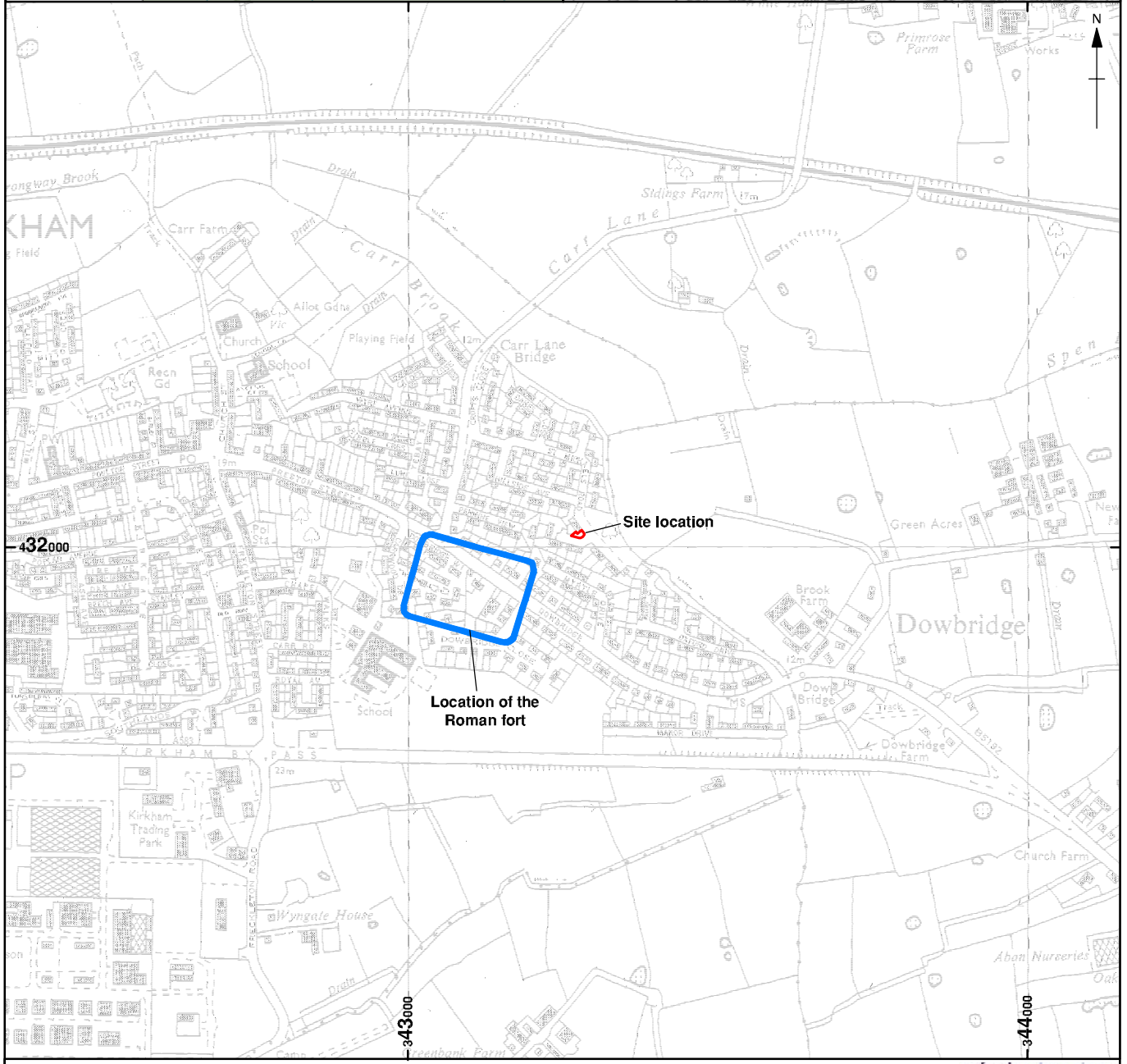
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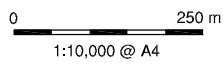
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Figure 1: Site location map

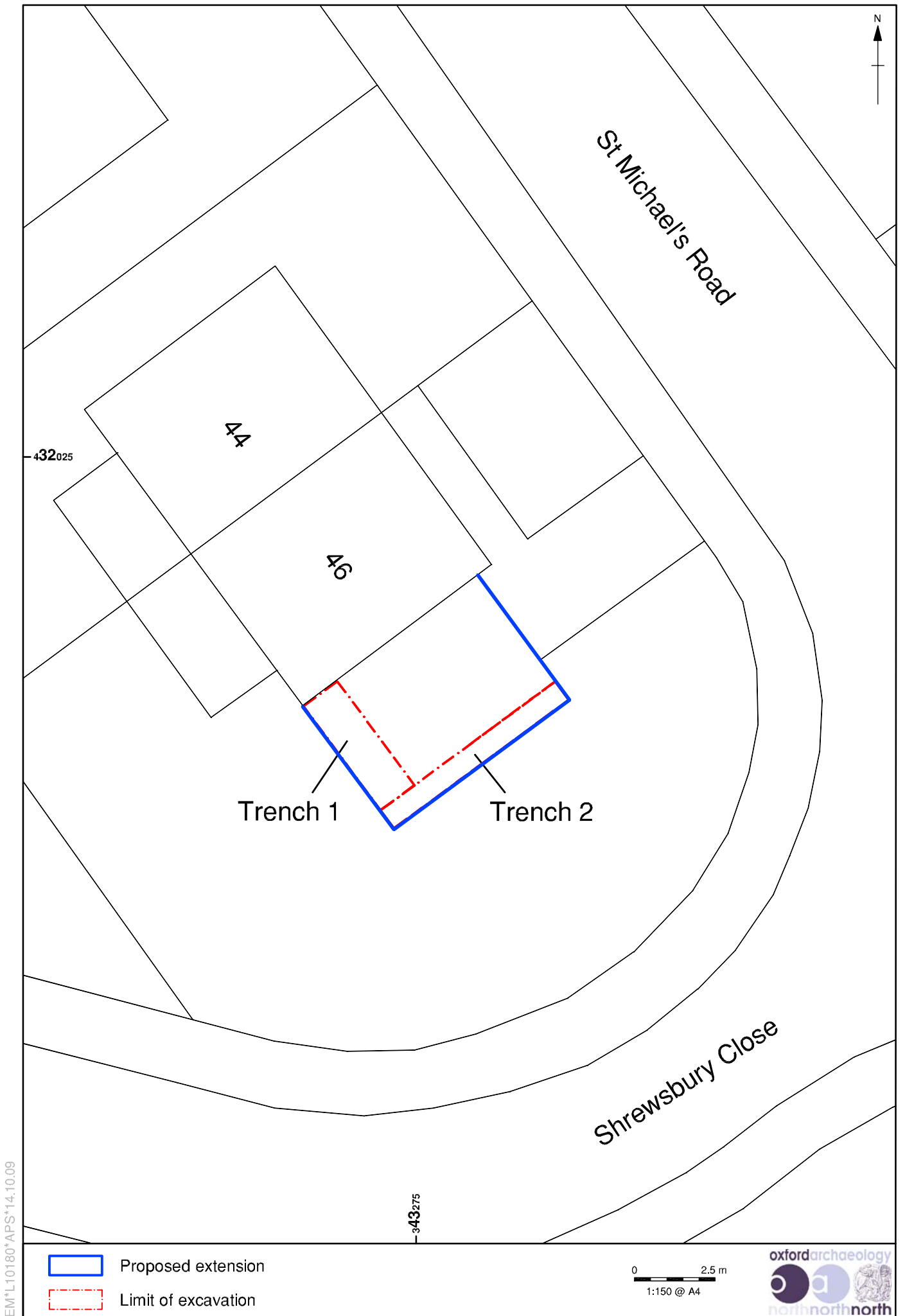


Figure 2: Site plan, showing the position of Trenches 1 and 2

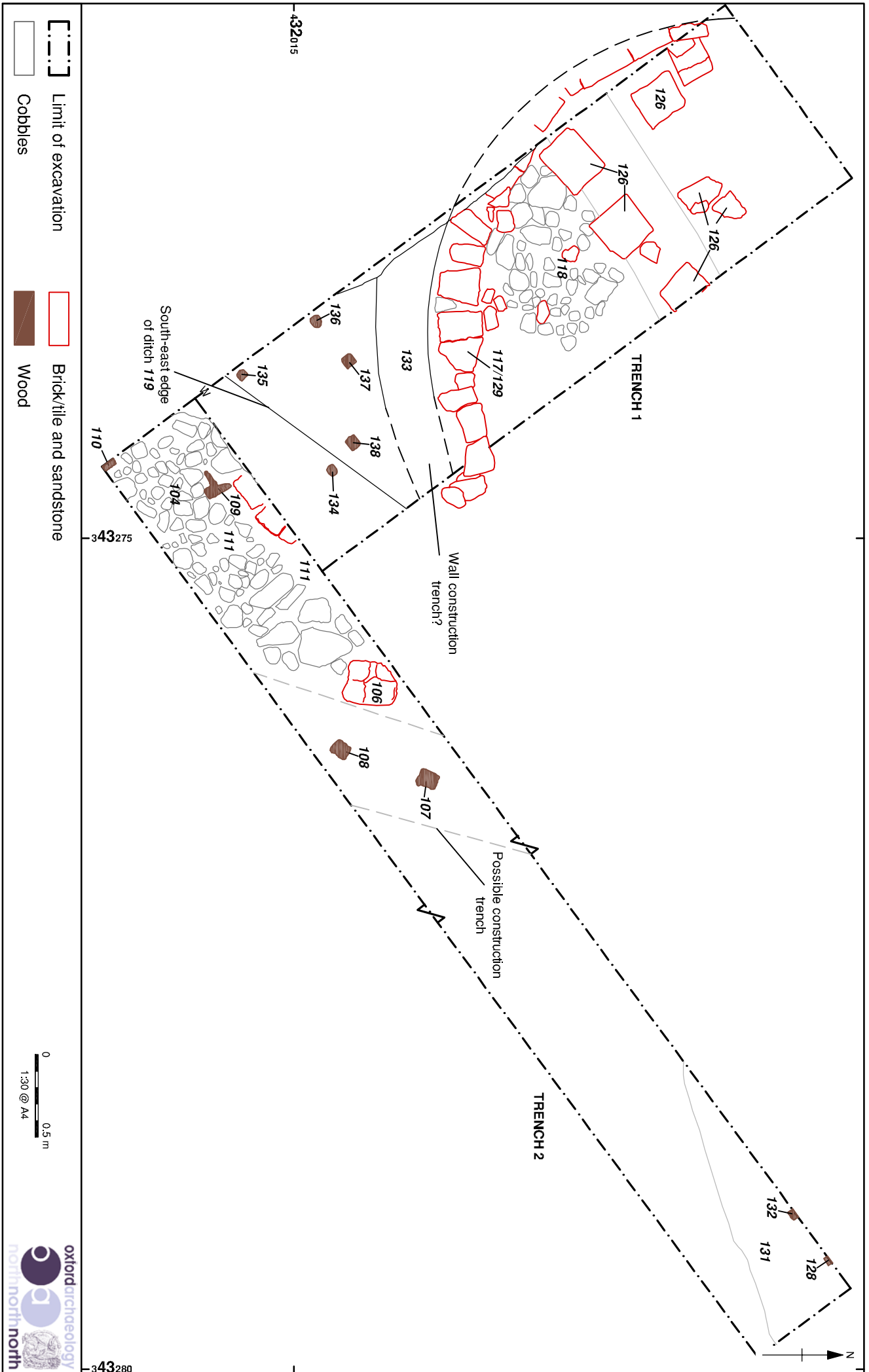
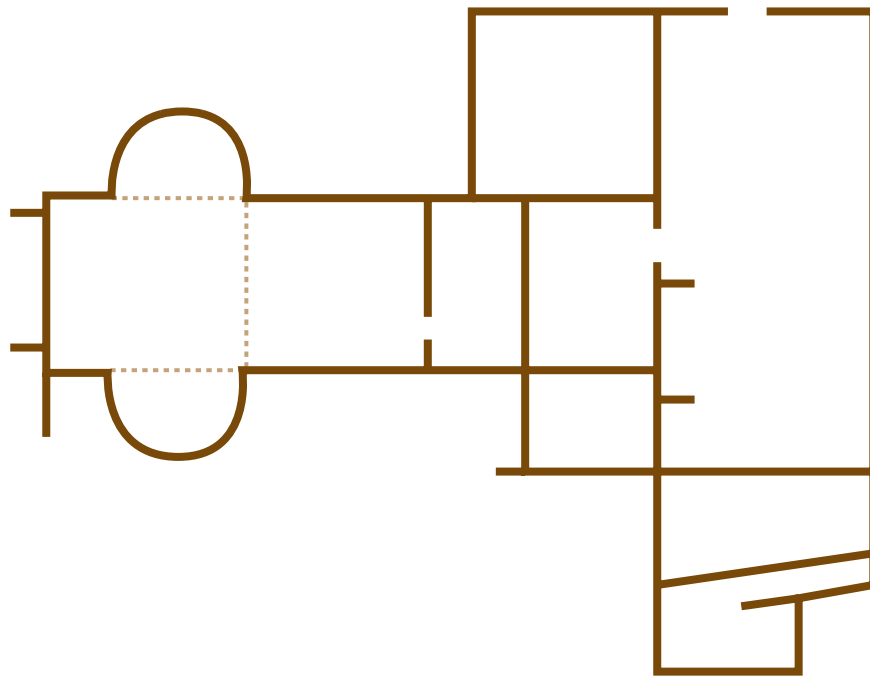
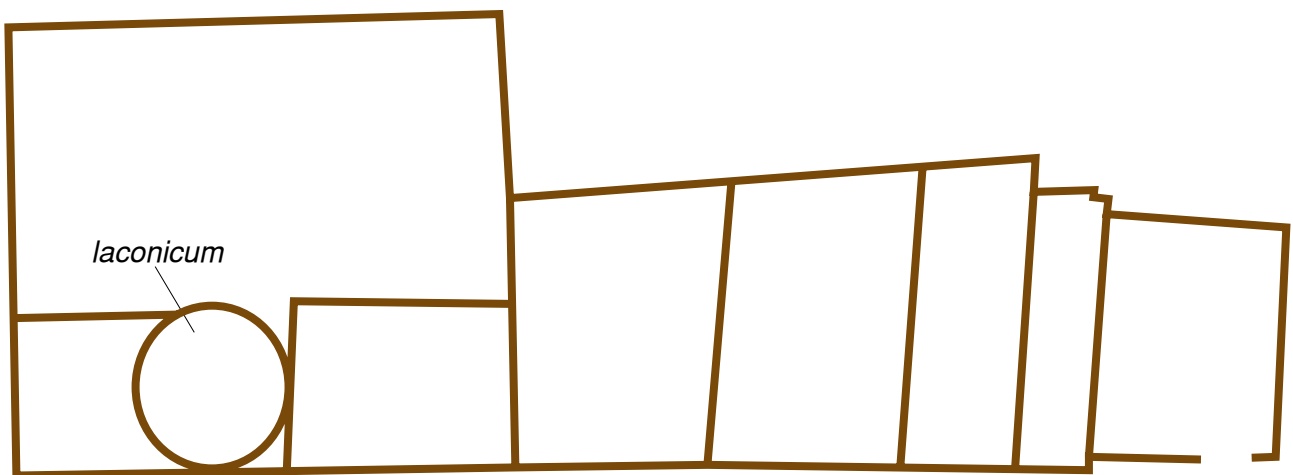


Figure 3: Plan of Trenches 1 and 2, showing principal archaeological features and deposits



Great Chesters
Mid-second century AD



Catterick
Late-first century AD

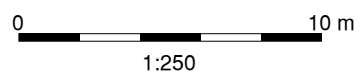


Figure 4: Apsidal rooms or alcoves in the fort baths at Great Chesters, on Hadrian's Wall, and the circular *laconicum* in the late first-century baths at Catterick, North Yorkshire



Plate 1: Trench 1, looking north: curving brick and sandstone wall **117/129**, enclosing possible late cobble surface **118**



Plate 2: Trench 1, looking north, showing the pale fill (*133*) of the construction trench for wall *117/129*, seemingly cutting the dark grey fill (*120*) of ditch *119*. Wooden post/stakes *134*, *135*, *136*, *137* and *138* are also visible



Plate 3: Trench 1, looking north-west: ceramic *pilae* 126, with the inner face of wall 117/129 to the rear



Plate 4: Trench 1, looking south: possible late surface 118, enclosed by wall 117/129



Plate 5: Trench 2, looking south-east: cobble surface **104**, bounded on the north by sandstone wall/setting **105**

APPENDIX 1: PROJECT BRIEF

Specification for an Archaeological Watching Brief at 46 St Michael's Road, Kirkham (SD 4327 3203)

Prepared on behalf of Fylde Borough Council for Mr Lee Fenton, applicant

1. Introduction

1.1 Planning permission (05/2008/1056) has been granted for the demolition of an existing garage; erection of a two storey side extension to include a new garage, additional bedroom and toilet facilities plus kitchen extension at 46 St Michael's Road Kirkham. It is a condition of the planning approval that the applicants undertake a programme of archaeological work in accordance with a written scheme of investigation.

1.2 This specification has been prepared by Lancashire County Archaeology Service (LCAS).

2. Archaeological Interest

2.1 The proposed development lies within the area of the Roman fort at Kirkham (Lancashire Historic Environment Record PRN 73), which was founded in the first century AD and rebuilt during the second century. A number of finds of archaeological interest have been found close to the site, including:

Leather shoes and waste (PRN 2051) at Carr Hill in 1958, a Roman pottery lamp (PRN 2052) found at Pennine View in 1960, a Roman shield boss (PRN 271), Roman pottery at 16 Myrtle Drive in 1997 (PRN 3484), and the foundations of Roman timber buildings (PRN 4149) during an evaluation at 14 Myrtle Drive,

There is therefore a considerable potential for further archaeological deposits associated with the Roman fort at Kirkham to be encountered by the proposals.

3. General Considerations

3.1 Prior to the commencement of *any work*, the archaeological contractor should confirm in writing adherence to this specification, or state (with reasons) any proposals to vary the specification. Should the contractor wish to vary the specification, then written confirmation of the agreement of LCAS to any variations is required prior to work commencing. The archaeologist carrying out the watching brief should be appropriately qualified and experienced. Any technical queries arising from the specification detailed below should be addressed to LCAS *without delay*.

4. Fieldwork Methodology

4.1 An archaeologist should be present on site during the excavation of any area below a depth of 0.15m. (approximately six inches) in the area of development, whether this be for the removal of the current garage floor slab, the excavation of new foundation trenches, service trenches or landscaping. The archaeologist should view the area as it is being dug and any trench sections after excavation has been completed. Where archaeology is judged to be present, the excavated area should be rapidly cleaned and the need for further work assessed. Where appropriate, any features and finds should then be quickly hand excavated, sampled and recorded, within the confines of the excavated trench.

4.2 Excavated soil should be searched as practicable for finds. The presence and nature of 19th and 20th century material should be noted (quantified and summarily described) but finds of this date need not be retained for processing. Finds judged to be 18th-century in date or earlier should be retained.

4.3 The actual areas of ground disturbance, and any features of possible archaeological concern noted within these areas, should be accurately located on a site plan and recorded by photographs, scale drawings (including height above O.D.) and written description sufficient to permit the preparation of a report on the site.

4.4 The intention of the archaeological watching brief is not to unduly delay the work of other contractors on site. This work should not, therefore prejudice the progress of the main or subsidiary contractor's work, except by prior agreement and on-site co-operation.

4.5 The archaeologist on site will naturally operate with due regard for Health and Safety regulations. In this case, where archaeological work is carried out at the same time as the work of other

contractors, regard should also be taken of any reasonable additional constraints that these contractors may impose. This work may require the preparation of a Risk Assessment of the site, in accordance with the Health and Safety at Work Regulations. **LCAS and its officers cannot be held responsible for any accidents that may occur to outside contractors engaged to undertake this survey while attempting to conform to this specification.**

5. Unexpectedly Significant or Complex Discoveries

5.1 Should there be, in the professional judgement of the archaeologist on site, unexpectedly significant or complex discoveries made that warrant more detailed recording than possible within the terms of this specification, then the archaeological contractor is to urgently contact LCAS with the relevant information to enable the matter to be resolved with the developer.

5.2 Any human remains that are discovered must initially be left in-situ, covered and protected. If removal is necessary, this must comply with the relevant legislation, any Home Office and local environmental health regulations and English Heritage's and The Church of England's *Guidance for best practice for treatment of human remains excavated from Christian burial grounds in England* (2005) where relevant.

5.3 The terms of the Treasure Act, 1996 must be followed with regard to any finds, which might fall within its purview. Any such finds must be removed to a safe place and reported to the local coroner as required by the procedures laid down in the "Code of Practice". Where removal cannot be effected on the same working day as the discovery, suitable security measures must be taken to protect the finds from theft.

6. Monitoring

6.1 The recording exercise will be monitored as necessary and practicable by the LCAS Advisory Service in its role as 'curator' of the county's archaeology. LCAS should receive **as much notice as possible in writing** (and certainly not less than one week) of the intention to start the watching brief. **A copy of the archaeological contractor's risk assessment of the site should accompany the notification.**

7. Post-Excavation/Post-Recording Work and Report Preparation

7.1 On completion of the fieldwork, any samples shall be processed and all finds shall be cleaned, identified, assessed, dated (if possible), marked (if appropriate) and properly packed and stored in accordance with the requirements of national guidelines. A fully indexed field archive shall be compiled consisting of all primary written documents, plans, sections, and fully labelled photographs. Labelling should be in indelible ink on the *back* of the print and should include film and frame number; date recorded and photographer's name; name and address of site; national grid reference. Photographic prints should be mounted in appropriate archivally-stable sleeves. **A quantified index to the field archive should form an appendix to the report.** The original archive is to accompany the deposition of any finds, providing the landowner agrees to the deposition of finds in a publicly accessible archive (see Section 8.1 below).

7.2 A report should be produced to provide background information, a summary of the works carried out, a description and separate interpretation of any features and finds identified. Details of the report's style and format are to be determined by the archaeological contractor, but it should include a full bibliography, a quantified index to the site archive and as an appendix, a copy of this specification. The report illustrations should include, as a minimum, a location map at a reasonable scale plus any drawings and photographs.

7.3 If nothing of archaeological interest is identified during the course of the watching brief, then a summary report will be adequate, as long as sufficient details are supplied for SMR purposes. Illustrations would not be required, although it would be anticipated that black and white prints would form part of the archival record. A summary record should include: (1) details of the commissioning body; (2) the nature of the development and resultant ground disturbance; (3) the approximate position of any ground disturbance viewed with relation to adjacent existing fixed points; (4) the date(s) of fieldwork; (5) name(s) of fieldworker(s); (6) written observations on the nature and depth of deposits observed (this may include annotated sketch sections); (7) the conditions under which they were observed (for example, details of weather conditions, ease of access and views, attitude of other organisations *etc.*); (8) a quantified index to the field archive; (9) details of the archives present location and intended deposition and (10) a copy of this specification.

7.4 The report should be produced within three weeks of completion of the fieldwork, unless otherwise agreed with the LCAS. Copies of the report should be supplied to the client and the Lancashire SMR. The report will become publicly accessible once deposited with the Lancashire Sites and Monuments Record.

7.5 Archaeological contractors must complete the online OASIS form at <http://ads.ahds.ac.uk/project/oasis/>. Contractors are advised to contact Lancashire HER prior to completing the form. Once a report has become a public document by submission to or incorporation into the HER, Lancashire HER may place the information on a web-site. Please ensure that you and your client agree to this procedure in writing as part of the process of submitting the report to the case officer (Ken Davies) at Lancashire HER.

8. Deposition of Archive

8.1 Before commencing any fieldwork, the archaeological contractor must contact the relevant District museum archaeological curator in writing (copied to LCAS) to determine the museum's requirements for the deposition of an excavation archive. In this case the contact is Edmund Southworth, Curator, Museum of Lancashire, Stanley Street, Preston, PR1 4YP; telephone 01772 534075, fax: 01772 534079.

8.2 It is the policy of the Museum of Lancashire to accept complete excavation archives, including primary site records and research archives and finds, from all excavations carried out in the County, which it serves.

8.3 It is the responsibility of the archaeological contractor to endeavour to obtain consent of the landowner, in writing, to the deposition of finds with the Museum of Lancashire.

8.4 It is the responsibility of the archaeological contractor to meet the Museum of Lancashire's requirements with regard to the preparation of fieldwork archives for deposition.

8.5 The museums officer named in 8.1 above should be notified in writing of the commencement of fieldwork at the same time as the Lancashire Sites and Monuments Record.

9. Further Details

9.1 Any queries about the contents of the specification should be addressed to Lancashire County Archaeology Service, Lancashire County Council, Highways & Environmental Management, Guild House, Cross Street, Preston PPR1 8RD Tel 01772 531734, fax 01772 533423

10. Valid period of specification

10.1 This specification will remain valid for up to one year from the date of issue. After that time it may need to be revised to take into account new discoveries, changes in policy or the introduction of new working practices or techniques.

Lancashire County Archaeology Service
Douglas Moir
Planning Officer (Archaeology)
E-mail: Douglas.moir@lancashire.gov.uk

August 2009