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Land to the rear of Glovers Garage, 2-6 Bridge Lane, Ilkley West Yorkshire

Archaeological Evaluation

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CLIENT

Glovers Garage Limited

Land to the rear of Glovers Garage, 2-6 Bridge Lane

Ilkley,

West Yorkshire

Archaeological Evaluation

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Summary

A staged programme of investigation confirmed the presence and survival of significant archaeological remains within the proposed development site. In addition to possible structural and ditched features, thought to relate to the nearby Roman fort, diverse and informative artefactual and ecofactual assemblages were also recovered. The results of the works elucidate the nature and development of Ilkley during the early Roman and post-medieval periods.

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1. Introduction

1.1 Archaeological Services WYAS undertook a staged programme of works in Ilkley at the request of Dodd Frankland Stocks Ltd, acting on behalf of Glovers Garage Ltd. The works took place in advance of, and during the construction of, an MOT testing centre on the site of an existing garage and yard area (Application Nos97/00821/FUL and 97/03421/FUL). Geologically the site is situated on boulder clay overlying Upper Carboniferous millstone grit (British Geological Survey 1974).

1.2 The development site consists of an irregularly shaped area of land located to the rear of 2-6 Bridge Lane, Ilkley, and covering an area of approximately 170m^2, centred at NGR SE11574784 (Figs 1 and 2). The work was carried out in order to evaluate the extent and character of archaeological remains on the site, and assess the impact of the proposed development on any such remains.

1.3 Four phases of archaeological evaluation took place on the site and this report presents the results of all stages of archaeological works. A brief synopsis of the archaeological background of the area is presented, with a description of the methodology employed during, and the results of, the various stages of works. Specialist analyses of the artefactual and environmental records from the investigations are also presented, as well as a discussion of the significance of the results within a local and regional context.

2. Archaeological Background

2.1 The development site was located within the core of Roman and medieval Ilkley, and north of the modern town centre on the eastern edge of the Pennines. The Roman fort, located immediately east of the development site, utilised the natural hillock of Castle Hill which drops down on its northern side to the river Wharfe and was thought to have been flanked by two brooks to the east and west. The first edition Ordnance Survey map of 1853 records the position of the brooks, the western of which runs in a north to south direction beyond this development site, although it is not known if it followed the same course during the occupation of the fort. The earliest description of the brook is provided by the 18th-century writer Whitaker (1773, in Woodward 1925, 149) in which he describes it as:

> '*a very lively current....given additional strength to a brow naturally steep, and rising about ten or fifteen yards above it.*'

2.2 The Roman fort, recorded in the Sites and Monuments Record (SMR) as Primary Record Number (PRN) 1688, is situated on the junction of Margary's (1967) roads 729 (York-Ribchester) and 720 (Manchester-Aldborough), and would clearly have occupied a prominent position within the network of communication routes which spanned the region during the Roman period. The fort has been investigated on several occasions this century and its location and dimensions were thought to have been well established (Woodward 1925; Hartley 1966 and 1987). Much of the fort now lies below modern building: Church Street and New Brook Street overlie part of the eastern and southern areas; All Saints Church and its churchyard occupy much of the central southern half, whilst the Manor House Museum and Castle Yard overlie large parts of the western side. The nineteenth century cutting of Castle Road resulted in the partial destruction of the fort's northern defences.

2.3 Given that the eastern edge of the development site lies approximately 12m from the western edge of the fort, the western defences were of particular relevance to this

evaluation. During partial excavation of the fort in 1962, under the auspices of Brian Hartley, three defensive ditches were identified immediately outside the western wall, each associated with different phases of the fort's construction (Hartley 1966 and 1987). A drop in the level of the land from Castle Yard down Castle Hill was utilised as a defensive embankment on which successive ramparts were constructed and terraced into the hillside. More recent investigations of the north-west angle of the fort by Archaeological Services WYAS, also identified part of the western wall and a rampart (Brown 1996). The presence of only one defensive ditch in each phase of the fort appears to be more an assumption than an established fact. The reporting of the previous investigations (Woodward 1925; Hartley 1966 and 1987) suggests there was little consideration given to the possibility of a second series of ditches further west of the Severan ditch (the westernmost ditch), which itself was not fully exposed. The lack of excavation in the area immediately north of the present site, where such remains might have been found, appears to have been based on the presence of 'recent filling' (Woodward 1925; Hartley 1966 and 1987). It should also be noted that the 1962 excavation of the western defences has been the only investigation into the ditched defences of the entire fort.

2.4 The 1962 and earlier excavations (Woodward 1925; Hartley 1966 and 1987) identified a number of buildings inside the north-west angle of the fort, including a probable stable block which was later replaced by a barracks and then an armourer's shop (*fabrica*). These buildings lay immediately west of the officers quarters (*praetorium*) which itself was subject to different phases of rebuilding, the final 4th century AD phase, including the addition of under-floor heating (hypocausts). The south-west angle of the fort which lay adjacent to the present development site, and is now occupied by the Parish Church and Castle Yard, is much less well understood. However, although conjectured from the known position of one of the internal roads (*via praetoria*), the western continuation of this road (*via decumana*), beyond the western gate (*porta decumana*), would have crossed within metres of the northern extent of the present development site.

2.5 The discovery of Roman period structures and finds from in and around Ilkley are numerous, and some of these have been used to suggest the probable locations of a cemetery (SMR PRN 2217) beyond the fort to the south, and a civilian settlement (SMR PRN 2213) to the south and east. Closer to the present development site finds of Roman pottery have been recovered from either side of Castle Hill road and around the Manor House (Hartley 1987), in addition to some decorated stonework described by Collyer and Turner (1885, 29):

> *'Another stone, about 2ft. by 10in., turned up when making the street West of Castle Hill, bore the figures of three animals and a few Roman letters below them.'*

2.6 Later activity and occupation in Ilkley appears to have been along Church Street, with farmsteads clustered around the parish church and manor house. A study of the first edition Ordnance Survey map of 1853, and later maps of 1891 and 1909, indicate that some of the yard area within the development site may not have been built on since the 19th century, and therefore the potential for the survival of Roman and medieval archaeology was high. The maps do however record some property boundaries and buildings on the northern and western sides of the site, particularly on the later maps.

3. Methodology

3.1 A total of two test pits and six trial trenches were excavated between 3rd November 1998 and 5th May 1999. This work was undertaken in order to determine the extent, character, quality, date and importance of any below-ground archaeological remains in the area to the rear of Glovers Garage, 2-6 Bridge Lane, Ilkley.

3.2 Phase I of archaeological works at the site involved the hand excavation of two test pits (Test Pits 1 and 2) towards the south and east of the development site. A second phase of works (Phase II) was a watching brief during machine stripping of overburden and topsoil across the development area. Phase III of the archaeological works involved the hand excavation of five trial trenches (Trenches 1-5) mainly located in the eastern half of the development site. Following the completion of this phase of works, a meeting was held between representatives of Glovers Garage Ltd, Dodd Frankland Stocks Ltd, Archaeological Services WYAS and WYAS Advisory Service. It was determined that alternative construction methods would be sought to minimise the impact of the development on surviving archaeological deposits. A revised scheme of works, based on piling less than 5% development site, was drawn up by Dodd Frankland Stocks Ltd and accepted by WYAS Advisory Service. The final stage of archaeological works on the site (Phase IV) was a watching brief during the hand excavation of a lift pit (Trench 6).

3.3 A written, drawn and photographic record was made of all material revealed during the course of the excavation, and an inventory of this primary archive data is presented in Appendix I. The on-site recording was undertaken in compliance with the standard Archaeological Services WYAS method (Boucher 1995). The trenches were all subject to single context planning by hand at a scale of 1:20. Representative sections of all trenches were drawn at a scale of 1:10. All sections and plans included spot-heights to Ordnance Datum in metres and the trenches were tied into Landline digital map data using a 600 series Geodimeter. All non-modern artefacts were collected, cleaned and labelled, and are held by Archaeological Services WYAS. Several artefacts were treated as 'small finds' and located three-dimensionally. Soil samples of up to 30 litres in volume were taken when appropriate, for subsequent environmental analysis.

4. Stratigraphic Record

4.1 A total of 92 contexts were recorded during the archaeological works at the site. An inventory of these contexts is presented in Appendix II. Phasing was attempted on the basis of stratigraphic relationships, the similarity of deposits in both colour, texture and inclusions, and on the spatial location of deposits and features. However, the fragmented nature of the works made overall phasing of the site problematic and the phasing presented below should be regarded as conjectural. In particular the initial interpretation of potential Roman ditch features in Phase 2, truncating earlier levels, is questionable and explored more fully in the discussion section (see 7) which follows on from the detailed artefactual (see 5) and environmental analysis (see 6). The relevant phase illustrations (Figs 4-7) still show the ditches as truncating earlier levels, as this is how the features were recorded in the field.

4.2 Phase 1a (Roman: 1st century AD)

4.2.1 Waterlogged deposits – earthwork bank and/or structure? (Figs 4, 9, 11, 12 and 13)

The first phase of activity was represented by a series of deposits identified at the base of Test Pits 1 and 2 and Trenches 1, 3, 4 and 5, which may have represented an earthwork

bank and/or a possible structure. The earliest stratigraphic deposit was a waterlogged layer of compacted mid orange sandy silt (104, 1006, 3011 and 5010) containing frequent sandstone and limestone inclusions. The layer, revealed at comparable depths in Test Pit 1, and Trenches 1, 3 and 5), was only exposed to a depth of 0.2m due to the limits of excavation. The only artefactual material recovered from the layer were fragments of animal bone in deposit 5010 (see 5.2).

Immediately above this layer, and revealed at comparable depths in Test Pit 2 and Trenches 4 and 5, was a waterlogged deposit of dark brown/black silt (207, 4016 and 5009). The deposit, up to 0.22m in depth, comprised a thin layer of compacted and degraded fibrous organic material, covering what appeared to be possible horizontal planking and vertical stakes. The timbers were only observed in slots excavated through the bases of Trenches 4 and 5, and appeared to extend to the north and south. The exact form of the organic material was not revealed as it was thought prudent to leave the excavation of the deposit to a latter stage of works. The only artefactual material recovered from the layer was pottery of late 1st-early 2nd century AD date (see 5.11) in deposit 5009.

Above the organic material, and revealed at comparable levels in Test Pit 2 and Trenches 4 and 5, were horizontal layers of grey silty clay (206; 4013, 4015; 5008, 5011 and 5013) and a layer of compacted yellow clay (205 and 4014). Possibly associated with these deposits, and revealed at the same level in Trench 3, was a deposit of dark brown silty clay (3011), 0.25m in depth. With the exception of deposit 5008 (see 4.3.1), artefactual material from the these layers were limited to a few sherds of pottery of Flavian-Trajanic and late 1st-2nd century AD date from deposit 5011 (see 5.11), fragments of animal bone from deposit 205 (see 5.2), and small fragments of burnt clay in deposit 3011 (see 6.2).

4.3 Phase 1b (Roman: 1st – early 2nd century)

4.3.1 Skeleton 5007 (Figs 5 and 13)

At the interface of deposits 5008 and 5011 in Trench 5 was a disturbed extended inhumation, Skeleton 5007 (see 5.7). The articulated inhumation was incomplete and did not appear to be lying within an obvious grave cut. However, some care had clearly been taken in the placing of the skeleton, which was aligned in a north to south direction, and the position of a few stones on the eastern side of the inhumation may have represented the truncated remains of a stone lining. The deepening of deposit 5008 in the area of the burial, and the potential disturbance to the burial caused by a later ?ditch, also suggested that there may have originally been a cutting for the grave. Pottery of Flavian-Trajanic and 1st-early 2nd century AD date, recovered from an underlying deposit (5011), provides a reliable *terminus post quem* for the burial. The only other artefactual material recovered from the deposit (5008) containing the burial were fragments of hammerscale (see 5.9).

4.4 Phase 2a (Roman: 2nd century AD)

4.4.1 Ditch 4008/5012 (Figs 6, 12 and 13)

Later than the Phase 1 (?bank and burial) deposits, and revealed at comparable depths in Trenches 4 and 5, were a series of deposits (4009, 4010, 4012, 5006 and 5014) initially interpreted as the filling of a ditch (4008/5012) 'cut' through earlier layers. The possible ditch (4008/5012) traversed the eastern side of Trench 5 in a north to south direction before turning through 90° in Trench 4 and running west. The ditch sloped gently down from its cutting at an angle of 30° towards its base. The full extents of the ditch were not

revealed, although it measured at least 1m in width and 0.8m in depth. It was not clear to what extent the ditch continued to the south as Test Pit 2 appeared to be too far west to have been on the projected line of the feature. With the exception of a deposit (4012) of compacted gravel and stone, the majority of the silty clay deposits (4009, 4010, 5006 and 5014) filling the ditch had few stone inclusions. However, occupation material in the form of fragments of animal bone, brick, glass, hammerscale and pottery (see section 5) were recovered. The pottery, which included the only definitively Hadrianic samian from the site (dated AD120-160), is predominantly Hadrianic-Antonine in date.

4.4.2 Ditch 105/1008/3013 (Figs 6, 9, 10 and 11)

Also later than the Phase 1 (?bank and burial) deposits, and revealed at comparable depths in Test Pit 1 and Trenches 1, and 3 , were a series of deposits (103, 1007, 3012 and 3015) provisionally interpreted as the filling of a second ditch (105/1008/3013). The ditch lay approximately 3.3m to the west of Ditch 4008/5012.

The eastern edge of the ditch (105/1008/3013) was observed on a slightly irregular alignment; running from north-west to south-east in Trench 3 (3013), then north to south in Test Pit 1 (105), before turning and running in a north-east to south-west direction in Trench 1 (1008). The full extents of the ditch were not revealed within the limits of excavation, but it measured at least 0.75m in width and 0.5m in depth, and was filled by deposits of silty clay (103, 1007, 3012 and 3015). Only in Trench 3 was an appreciable section of the eastern side of the ditch visible, sloping down from the top of the cutting at an angle of approximately 30°, and steepening towards the base of the trench. The pottery recovered from the filling of the ditch is not particularly diagnostic, and whilst Hadrianic-Antonine material is most frequent, the range 1st-3rd century AD is also common (see 5.11). Other finds from the filling of the ditch included animal bone, brick and tile, glass and hearth material (see section 5).

4.5 Phase 2b (Roman: late 2nd-early 3rd century AD)

4.5.1 Ditch 4018/5016? (Figs 7, 12 and 13)

The postulated Phase 2a ditch 4008/5012 appeared to have been recut (4018 and 5016) within its western side, exposing the deposits filling the earlier ditch. Once again the full extents of the ditch were not visible within the limits of excavation, but it measured at least 1.24m in width and 0.76m in depth. The visible western side of the recut ditch sloped down gently from its cutting at an angle of 25°, before dropping sharply at an angle of 55° towards the base of the trench. The silty clay deposits (4005-4007, 4011; 5002, 5004-5 and 5015) filling the recut contained abundant angular sandstone inclusions, and fragments of animal bone, brick, pottery, hearth bottom and hammerscale (see section 5). The pottery is predominantly Hadrianic-Antonine in date, however, the only pottery sherd of definitively 3rd-4th century AD date from the site was recovered from deposit 4011, the visible basal fill of the recut.

4.6 Phase 2c (Roman: late 2nd-early 3rd century AD)

4.6.1 Wall 203 (Figs 7 and 9)

Occupying the area between, and possibly contemporary with or later than, ditches 4018/5016 and 105/1008/3013, was a wall foundation (203) and a post-hole (209) in Test Pit 2. Wall 203 ran in a north to south direction along the western side of the test pit before turning through 90° and running east. The wall measured approximately 0.38m in width and was formed of loosely clay bonded sandstone blocks with occasional river

cobbles, up to three courses in depth (three stones and at least 0.6m in width). Within the area defined by the wall was a single post-hole (209), measuring 0.6m in width and 0.3m in depth. Numerous stones in the filling (208) of the post-hole appeared to represent post-packing. Pottery recovered from deposits which underlay (204), and sealed (202), the wall and post-hole were predominantly Hadrianic-Antonine in date.

4.7 Phase 3 (medieval and post-medieval)

4.7.1 Medieval activity on the site appears to have been represented by deposits sealing secure Roman contexts, some of which were subsequently disturbed in the post-medieval period. Post-medieval features and/or deposits were present in the upper levels of Test Pits 1 and 2 and Trenches 1 and 3. Trenches 2 and 6 appeared to comprise solely post-medieval remains, and a post-medieval wall was observed to the north of Trench 4.

4.7.2 **Plough or garden soil 101 (Figs 9, 10, 11and 13)**

Several deposits (101, 102, 201, 202, 1001-4, 3007 and 5000) may have formed part of a more extensive plough or garden soil developing throughout the medieval and post-medieval periods. The deposits comprised a fairly homogenous dark brown/black sandy silt, measuring up to 1.08m in depth. Pottery of 12th-15th and 11th-14th century date were recovered from deposits 101 and 102, although some probably intrusive 17th century material was also present. Pottery of 11th-13th century date was recovered from deposit 3007, in addition to residual Roman material which included a copper alloy decorated strip (see 5.8). Pottery of 12th-13th century date, and a probably intrusive post-medieval brick, were recovered from deposit 5000. Probably contemporary with these deposits were layers 1001, 1002/3 and 1004 in Trench 1. However these deposits were mixed with a considerable component of both post-medieval and Roman material, and their provenance is therefore less precisely understood.

4.7.3 **Wall 6008 (Figs 8 and 13)**

A substantial wall foundation (6008) traversed the northern extent of Trench 6 in an east to west direction, before turning through 90° in the eastern section of the trench and running south. Wall 6008 was formed of large unmortared and faced sandstone blocks, with a maximum stone size of 0.7m and 0.25m by 0.22m. The wall was up to five courses in depth (two stones and 0.7m in width) and was probably associated with a wall (2001) of similar build and alignment in Trench 2, thus forming the north-eastern corner of a structure. No construction cut was visible for the wall foundation , which in Trench 6 was sealed by a series of deposits (6003-6006) interpreted as levelling. Pottery of 18th century and earlier date was recovered from these deposits. In Trench 2 the wall (2001) appeared to lie within a deposit (2002) from which 18th century and earlier pottery was also recovered.

4.7.4 **Wall 3005 (Figs 8 and 11)**

A wall foundation (3005) traversed the centre of Trench 3 in an east to west direction, before turning through 90° and running north. Wall 3005 was formed of large heavily mortared sandstone blocks, with a maximum stone size of 0.7m and 0.45m by 0.2m. The wall was up to three courses in depth, up to 0.45m in width, and appeared to form the south-eastern corner of a structure. No construction cut was visible for the wall foundation which was abutted in section by a stone floor (3001), one stone in depth. The remains of the wall and floor were overlain by a north to south running concrete foundation for a modern brick wall (3006). The wall appeared to have been placed above deposit 3007 (see 4.7.2) and associated with the walls were a cobbled surface (3002) and

a series of levelling layers (3003, 3004, 3008, 3009 and 3010) from which pottery of 19th-20th century date and earlier was recovered.

4.7.5 **Wall 4017 (Fig. 8)**

Immediately north of Trench 4, was a wall foundation (4017) formed of large faced sandstone blocks, with a maximum stone size of 0.4m and 0.3m by 0.18m. The wall ran in an east to west direction and was one course in depth, two stones and at least 0.4m in width. Pottery dating to the 18th century was recovered from within the make-up of the wall.

4.7.6 **Wall 5001 (Fig. 8)**

Running 3.3m to the south of, and parallel to, Wall 4017, was a further wall foundation (5001) traversing the centre of Trench 5 in an east to west direction. The wall was formed of two large unmortared dressed sandstone blocks, one course in depth and at least 0.4m in width. The wall appeared to have been placed above deposit 5000 (see 4.7.2).

5. Artefact Record

5.1 A total of 737 artefacts were recovered from the archaeological works, the majority of which were fragments of animal bone and pottery, and these are listed by context and category in Appendix III. Some artefacts were recovered during the environmental processing of soil samples, and these cases have been marked with an asterisk in the inventory. Individual specialist reports for each category of artefact are reproduced below. Illustrated artefacts are identified by a hachure in these reports.

5.2 **Animal Bone** by Dr J. Richardson

5.2.1 The animal bones came from either Roman or disturbed contexts, the latter of which tended to incorporate Roman, medieval and/or post-medieval pottery. As a result, only bones from Roman deposits were analysed, although the complete assemblage is tabulated here. Of 263 bone fragments, 159 were assigned to the Roman phases and 104 fragments came from disturbed deposits. Even the total fragment count falls well below the minimum reliable sample size of around 500 (van der Veen and Fieller 1982, 296). Consequently the subsequent interpretations should be treated with extreme caution.

5.2.2 All the bone fragments were recorded, although some joins were noted and the adjoining fragments were excluded. In addition to species groups, lower order categories were used (such as large-sized and small-sized mammal) and unidentified fragments were quantified. Preservational factors and bone treatment were assessed with reference to condition, erosion, fragment size, gnawing, burning and butchery. The fusion data given by Silver (1969) were used to analyse the slaughter patterns of cattle, sheep and pig, but too few teeth were retrieved to justify the study of dental eruption and wear patterns. The assemblage was also deemed too fragmentary to warrant the recording of metrical data.

5.2.3 Retrieval of bone occurred without the use of on-site sieving and it is likely that bone was missed during excavation (cf. Payne 1992). Soil samples that were processed in the laboratory, however, did not introduce any new species, although the flot retents did account for 71% of the small-sized mammals (sheep/goat and small-sized mammals), but only 19% of the large-sized mammals (cattle, horse and large-sized mammals). This clearly indicates that retrieval by hand biased against the smaller species most severely.

5.2.4 Bone preservation was assessed with the calculation of condition and erosion indices. As a value of 1.0 denotes well preserved bone, a condition index of 0.94 and an erosion index

of 0.97 indicate that the majority of bone was well preserved. The assemblage was highly fragmented, however, (a size index of 0.22 indicates that nearly all the fragments represent less than 25% of the complete bone) and a significant number of the animal bones from Roman deposits were coated in mineral concretions. An analysis of bone treatment indicates that 8.6% of the assemblage were burnt, 7.3% were gnawed and 4.0% were butchered. The butchery evidence from Roman contexts amounted to cut or chop marks on four cattle or large-sized mammal bones and two sheep(/goat) bones. These all indicate the division of carcasses into smaller parts.

5.2.5 The faunal assemblage from Roman contexts is dominated by cattle bones, with sheep/goat second. Pig bones are not particularly prevalent and are only slightly more common than horse. Occasionally, chicken may have provided an alternative meat source to beef, lamb and pork (Table 1, Appendix V). Despite the small sample size, the proportions of cattle, sheep/goat and pig bear striking similarities to the fort and vicus of Roman Castleford (Berg 1999, 258; see Table 2, Appendix V). Such a beef-rich diet has been identified from the majority of Roman military sites in Britain (King 1991). Although no analysis of the animal bones from disturbed contexts has occurred, fragment identification and quantification are detailed in Table 3 (Appendix V).

5.2.6 The body parts present for cattle and sheep/goat are dominated by the meat-rich limb bones and may indicate that dressed carcasses were brought into the fort and/or the surrounding settlement. Unfortunately the possibility that animals were introduced on the hoof cannot be discounted entirely as the assemblage is not statistically valid (see above). Few pig bones were recovered, but limb bones were present once again.

5.2.7 Epiphyseal fusion data were extremely limited, although some variation in animal procurement was recognised. Fusion data for cattle indicate the slaughter of some sub-adult and adult animals (Table 4, Appendix V). Apparently some prime beef was available, but the adult animals may represent breeding stock, milch cows or traction cattle. In contrast, no adult sheep/goats or pigs were identified and this indicates that lamb and pork were the primary target. Given the possibility that these bones represent waste from the Roman fort, it is perhaps not surprising that the highest quality meats were available.

5.2.8 The small sample size and the number of bones assigned to disturbed contexts compromised the statistical validity of the animal bone assemblage from the site. Nevertheless a 'typical' Roman military diet was identified with cattle offering most in terms of meat weight. Sheep/goat and pig were utilised for meat when their flesh was still tender and chicken provided a supplementary meat source.

5.3 **Ceramic Building Materials** by S.G. Neville

5.3.1 The ceramic building materials recovered comprised a small sample of Roman and post medieval date (Table 5, Appendix V).

5.3.2 The Roman material comprises tile, brick and daub. Six fabrics were identified (Table 6, Appendix V). Betts identified three distinctive fabric groups from tile found in the fort area near Ilkley Church, but could not assign them to a particular source (Betts 1985, 268). It was not possible to compare his fabrics with the tiles from this site.

5.3.3 There are two fragments of imbrex, each with a thickness of between 19-22mm. There is only one identifiable fragment of tegula flange. There are five fragments of box flue tile, ranging between 16-19mm thick. Where the flue tile has been keyed, the keying has been made by a comb. The comb used to make the keying for one of the fragments had nine

teeth. The type of keying is significant as it changes over time. Combed keying probably came into use during the 2nd century AD (Betts & Crowley 1993, 55). An unusual feature on a combed fragment from context 103 are the imprints of what appears to be a triangular bladed implement (Fig. 14,3). This fragment is also unusual in that one of its edges has been knife trimmed.

5.3.4 The category of brick may include flat fragments of tegula which can be indistinguishable from brick commonly used in hypocaust or wall bonding. The brick fragments range from 21-31mm thick.

5.3.5 There are two small pieces of daub from context 202. One of the pieces has a flattened surface on one side, with impressions of wattle rods about 7mm across on the other.

5.3.6 There were a few fragments of post medieval brick. These were in well refined fabrics, and had signs of machine manufacture which would point to a late 19th century or 20th century date. There were a few undiagnostic pieces which could range in date from the medieval period to the mid-19th century. However, it is equally possible that these fabrics are in fact Roman.

5.3.7 This small sample indicates that there was a hypocaust in the area (there is known to be a bathhouse associated with the nearby fort), and also buildings substantial enough to have tiled roofs. The presence of daub could indicate timber-framed buildings or perhaps ovens. The combed keying on the flue tile probably indicates building work of a 2nd century or later date. The range of fabrics points to varied sources for the tiles. Although small, this sample has indicated a useful range of tile types and fabrics which will help characterise the ceramic building material from the Ilkley area.

5.4 Clay tobacco pipe

5.4.1 Four undiagnostic stem and two bowl fragments of clay tobacco pipe were recovered, all from contexts containing post-medieval pottery.

5.5 Flint

5.5.1 The flint recovered comprised a single fragment from a possible core. The lack of tooling on the fragment suggest that it may be derived from a naturally cracked pebble.

5.6 Glass by Dr H.E.M. Cool

5.6.1 The glass recovered was separated into that of Roman (Table 7, Appendix V) and post-Roman date (Table 8, Appendix V). Only the Roman glass is reported in detail.

5.6.1.1 In total eight fragments of Roman glass vessels were recovered. The fragments of Roman date are all relatively small and undiagnostic, and it is difficult therefore to be precise about the date. As they are all made in blue/green glass, a 1st-3rd century AD date is indicated. The only form that can be identified is the prismatic or square bottle here represented by nos. 3-5 recovered from contexts 1004 and 4009, and possibly no. 6 recovered from context 103 (Table 7). These were very common during the later 1st-early 3rd century AD. Another closed vessel is indicated by the shoulder fragment no. 1 from context 201. Only one item of tableware appears to be present represented by the base fragment no. 2, recovered from context 3010 (Table 7). Such bases are commonest on bowls and jugs of 2nd-3rd century AD date.

5.7 **Human Remains** by A. Burgess

5.7.1 Most of the single inhumation (Skeleton 5007) was recovered on the site. Further fragments of the skeleton were recovered from an environmental sample of the 'grave fill' (5008).

5.7.2 The overall condition of the bone was very poor; the remains had clearly been subject to a number of post-depositional processes which had led to damage, fragmentation and destruction of the bone. The bones of the limbs and the cranial vault were fairly well-represented but all of the elements were incomplete. The remainder of the skeleton, such as the vertebrae and the hands and feet, was largely absent, and the facial bones and dentition were completely absent.

5.7.3 All of the bones present were fragmented and almost all of these breaks had occurred prior to the excavation (as evidenced by staining and erosion of the broken edge). Fragmentation exposes the fragile interior of the bone to erosion, particularly affecting the epiphyses (the ends of the bones). The long bones displayed some damage to the outer cortical bone and in most cases the less dense cancellous bone of the epiphyses had been completely eroded, leaving only the shafts. The cranial fragments had been less affected by erosion, some cortical damage was still evident but the lack of cancellous bone in these elements meant that preservation was reasonably good and that the majority of the breaks could be reconstructed.

5.7.4 All of the bones were stained black. This was not due to burning and, given the location of the site, this colouration was probably caused by diesel or oil contamination.

5.7.5 Although the skeletal remains were suitable for age and gender determination, the incomplete and fragmented condition of the bone precludes the use of the full range of methods of analysis, reducing the potential accuracy of the results. In addition, this incompleteness and erosion of bone surfaces may have removed some morphological changes indicative of pathologies.

5.7.6 The remains were those of an older adult female. The bones are gracile and her height was probably around 156cm (5'1''). Some slight pathological changes were observed on the bones (at the surviving joint surfaces and margins), but none of these were indicative of any condition other than the normal wear and tear associated with activity and/or ageing. Given the age of this individual these pathologies should not be considered abnormal.

5.8 **Metalwork** by H.E.M. Cool

5.8.1 The metalwork recovered is, unfortunately, not very diagnostic. A catalogue of the metalwork is provided in Table 9 (Appendix V). The assemblage would not be out of place within a Roman milieu, especially a military one. Short iron nails such as those from contexts 5003 and 202, for example, are often very common finds on fort sites as very large numbers were used in timber cladding. The tin-plating on the strip (Fig. 14,1) from context 3007 might also hint at a military origin as the technique was popular on military metalwork such as belt fittings and harness trappings in the later 1st-earlier 2nd century AD (see for example Bishop and Couston 1993, 98 & 91). The cabled pattern used to decorate the strip, however, is not typical of military equipment of that period, and the identification of it as a piece of military equipment is not secure.

5.9 **Metalworking debris** by J. Cowgill

5.9.1 A very small assemblage of iron-smithing debris was recovered. The presence of hammerscale in some quantity in ditch fill 4009 suggests that smithing was occurring in the vicinity when this fill was exposed. Hammerscale is easily blown about by the wind and the size and fresh appearance of the pieces in this fill suggest that this was how it was transported. The hearth bottom from ditch fill 4011 could have been produced in the same smithy. The other hearth bottom, from deposit 3002, was probably produced during the post-medieval period when the use of coal for smithing became common. A catalogue of the metalworking debris is provided in Table 10 (Appendix V).

5.10 **Medieval and later pottery** by Dr C.G. Cumberpatch

5.10.1 The medieval and post-medieval pottery assemblage totalled 150 sherds (Table 11) including a single sherd of ambiguous date, a fragment of brick or tile and a piece of an unidentified fired clay object.

5.10.2 The later post-medieval wares (18th and 19th centuries) have been classified in accordance with the terminology set out by Barker and Ford (1999) while the details of the earlier types may be found in the forthcoming report on the pottery from Pontefract Castle (Cumberpatch, forth.). Table 11 includes notes on variations to the basic types.

5.10.3 Very few of the sherds of medieval pottery were of recognised types (identified to specific sources), but all were recognisable as elements of the very strong local medieval pottery tradition, based on a distinction between gritty textured wares and sandy textured wares (Cumberpatch 1997). This has been used to classify the various types, with details of individual sherds given in Table 11. The largest number of medieval sherds were of Gritty ware types, although very few were recognised West Yorkshire types. The majority were most probably of local manufacture with the products of as yet undiscovered potteries varying in the detail of their composition, while conforming to traditional expectations as to the nature of domestic pottery. Typically the Gritty wares contain angular quartz grit measuring up to 1.00mm along the longest axis, but more often between 0.4mm and 0.8mm. The vessels, particularly those dated to the 11th and 12th centuries, are normally finely made and wheel thrown in spite of the coarse texture of the fabric. The scarcity of defined types such as Hillam ware and the later Northern and Orange (or Oxidised) Gritty wares is further evidence of a local pottery. Further work on a larger assemblage would be required in order to adequately characterise this putative pottery workshop. Dates have been assigned on the basis of the technical characteristics of the sherds. Known types are dated according to the established date ranges.

5.10.4 The pottery assemblage from the investigations was characterised by a high degree of mixing and residuality. In general terms the 11th to 13th centuries were well represented (given the small size of the assemblage), as were the later 17th to 19th centuries. There appeared to be a general lack of material dating to between the later 14th and 16th centuries, presumably indicating an lack of activity in the immediate vicinity of the site. This is slightly unexpected, given the location of the site in the core of the town. It is not possible, on the basis of the small assemblage discussed here to do more than note this phenomenon and to suggest that it be considered when planning future excavations in the town.

5.11 **Roman pottery** by Dr J. Evans

5.11.1 The Roman pottery comprised some 170 sherds dating from the Flavian-Trajanic period until the mid 3rd century AD, with most being of Hadrianic-Antonine date. The occurrence of BB1 and BB copy lattice decorated sherds rather demonstrated this with nine of the Hadrianic-Antonine acute lattice decoration to a single example of the 3rd to 4th century obtuse lattice. The occasional rustic ware sherd demonstrate some Flavian-Trajanic occupation as does the Noyon mortarium base and some South Gaulish samian. Samian mortarium sherds and Nene Valley colour-coated sherds demonstrate occupation in the later Antonine period. The collection is too small to examine the probable later Hadrianic-early Antonine evacuation; 3rd century samian is absent. All of the decorated samian, and examples of the plain samian and coarsewares are illustrated in Figures 14-15.

5.11.2 The collection is also too small to determine much about fabric supply to the site. Table 12 (Appendix V) shows the major ware categories present. The commonest fabric type are well fired sandy greywares, of general types found in quantity throughout the north-east in the later 1st to mid 3rd centuries. Samian wares are the second commonest fabrics class, followed by oxidised wares, a few of which might possibly be Ebor products. BB1 is not common at 8.8%, as might be expected in the north-east in the 2nd century, but BB2 is absent. Mortaria are mainly local oxidised products, with no Mancetter material represented, although this becomes a dominant source in the north-east in the later 2nd century. Amphorae are represented at a fairly low level 2.4%, with both Dressel 20s and Gallic material being present. Whitewares include a number of Verulamium region sherds. Also of note is a buff sandy tazza bodysherd. Finewares are very well represented in the collection at 29.4%, most being samian. This very high level might not be expected outside a military context. The comparatively low representation of amphorae, however, is lower than might be expected from deposits within the fort.

5.11.3 The functional analysis of Roman vessels from the site is shown in Table 13 (Appendix V). The assemblage is dominated by tablewares with very low jar levels and fairly high levels of drinking vessels and mortaria. The pattern is similar to those from other early military assemblages (Evans 1993). The spot dates for the Roman pottery from the site are shown in Table 14 (Appendix V).

5.11.4 A comparison of the context of pottery deposition from previous and current investigations may warrant further research. For example, a rustic decorated Flavian-Trajanic sherd from the filling of the western Flavian ditch (Hartley1966, 35, p55-56) was paralleled by a sherd (Fig. 14,8) found in the primary deposit (5006) of Ditch 5012. In addition, an oxidised ring-necked flagon cup recovered from the *Praetoria* (Hartley 1966, 1, p53) was paralleled by a similar rim (Fig. 15,13) from a ?clearance deposit (4001) in Trench 4.

5.12 **Oyster shell**

5.12.1 Five fragments of oyster shell, a common find on the sites of Roman forts (Hartley 1966), were recovered during the investigations, although only one (202) of the deposits, from which the shell was recovered, was a secure Roman context.

5.13 **Quernstones** by G. Gaunt

5.13.1 Two fragments of rotary querns were recovered during the investigations and neither would be out of place in a Roman context. The quern recovered from a levelling deposit

(101) in Test Pit 1 was Millstone-Grit Sandstone, pale grey in colour, medium to (mainly) coarse grained, poorly sorted. The quern recovered from an upper ditch fill (4003) in Trench 4 was also Millstone-Grit Sandstone and pale grey in colour, medium to (less commonly) coarse grained, moderately sorted, with sparse white feldspar grains.

6. Environmental Record

6.1 A total of seventeen soil samples of up to 30 litres were collected on site for General Biological Analysis (GBA), an inventory of which is presented in Appendix IV. The samples were subjected to a system of wash-over, collecting the resulting flot in a 500μm sieve. The retent was scanned by eye, in order to identify any small artefacts or ecofacts. Following a preliminary assessment the remains were subject to full analysis.

6.2 **Botanical remains** by Dr M. Bastow

6.2.1 The soil in this area tends to be of a calcareous nature, not usually suitable for the preservation of botanical remains with the exception of those which have been carbonised. However, some of the lower deposits encountered during the excavations were waterlogged and contained organic material in which identifiable remains were preserved. As most of the trenches produced finds of pottery dating from the Roman period, it appears that most of the botanical remains also dated from this time. The exception is Deposit 6006 from Trench 6 which contained post-medieval pottery.

6.2.2 The results are shown in two main groups relating to each of the 1998 and 1999 excavations (Tables 15 and 16). Those relating to particular test pits or trenches have been grouped together. The finds from each sample examined have been noted in all cases including those with no identifiable remains. The results from the most productive samples have been summarised (Tables 17 and 18). In most cases actual species could be identified, but in some such as *Juncus* spp. and *Carex* spp. it was not possible to determine any further than the genus.

6.2.3 Remains representing twenty nine species were recovered. Only a few of these were carbonised cereal grains. Unfortunately these were in such poor condition, probably due to repeated movement and crushing, that full identification was not possible, although one or two appeared to be wheat. The low numbers of charred grains suggests they reached the deposits accidentally. Although many samples contained tiny fragments of carbonised material these were far too small for identification.

6.2.4 The possible ditch deposit (3015) from Trench 3 produced a few fragments of charcoal large enough to display that the wood was diffuse porous with aggregate rays typical of *Corylus* (hazel). This species was frequently used to make charcoal. The levelling deposit (6006) from Trench 6 produced charcoal from ring porous wood which was either *Quercus* (oak) or *Fraxinus* (ash).

6.2.5 The non-carbonised remains can be grouped into four habitat types (Table 19). The largest group is from waste ground which is usually a temporary or secondary habitat. However, the largest number of remains fall into this category so there is a strong indication that an area close to the ditch was waste ground. This appears to have been colonised by clumps of nettles, brambles, dock and brome grass, somewhat similar to the edges of a farmyard. Another large group is associated with marshy ground, including rushes, sedges, meadow sweet and creeping buttercup. The presence of Montia fontana (water blinks) is interesting as this species prefers a habitat where there is a very shallow, gently trickling water. This suggests that there may have been a shallow stream with boggy areas adjacent to the ditch.

6.2.6 Some species such as meadow buttercup, stitchwort and sorrel are typical of grassy areas. The fourth group is associated with woodland or shady areas. These include hazel, elder, violets and hogweed, and possible nettles and brambles and forget-me-nots. However, there is no indication of larger arboreal species (i.e. trees).

6.2.7 The general picture is probably that of an area of waste ground with grassy areas close to the boundary of the Roman fort. Adjacent to that there appears to have been a shallow stream and marshy areas. Despite the large quantities of artefacts recovered from the site, there is almost no ecofactual evidence to indicate refuse disposal. Although there is scant evidence of occupation (e.g. food remains or crop storage), the plant remains do indicate the nature of the environment close to the fort.

7. Discussion

7.1 It is unfortunate that more definitive interpretations could not be made of the features, deposits and structures revealed by the archaeological investigations of this site. The major problems in this regard have been the limited size of the areas investigated and the apparent mixing of particularly the upper deposits at the site. The apparent lack of disturbance in the earliest stratigraphic deposits was mirrored in the artefactual evidence, where the provenance of Roman features was relatively convincing and Roman contexts were more securely dated. Where artefactual evidence provided conflicting dates, a reasoned judgement was made as to whether material was residual or intrusive.

7.2 The sharp horizon between deposits containing solely Roman finds and deposits containing post-medieval and residual Roman material suggests a degree of truncation on the site and the mixing of the upper deposits. This was supported by the apparent lack of deposits containing solely medieval finds. Although a reasonably sized sample of medieval pottery is present, it is almost without exception mixed with earlier pottery or post-medieval and even modern material. It seems unlikely that there was no activity on the site between the deposition of 4th century and 18th century material, but unfortunately evidence of this in the form of securely dated deposits or features had simply not survived in the stratigraphic record.

7.3 Roman period

7.3.1 Roman period activity appears to have been confined to the eastern side of the site, with the finds, in particular the pottery and animal bone, indicating that the various features, deposits and structures were associated with the Roman fort immediately to the east. The dating of the artefactual material implies some activity on the site during the Flavian-Trajanic period, a concentration of activity contemporaneous with the Hadrianic-Antonine occupation, and little or no activity beyond the Severan period. The environmental evidence has also indicated the conditions expected immediately beyond the fort and near a stream.

7.3.2 The apparent predominance of Hadrianic-Antonine pottery (see 5.11) from the investigations may be misleading. The dates from the samian ware for example, indicate only a few definitively Hadrianic sherds. An Antonine date for the deposition of the majority of the material seems more plausible given that the fort was seemingly unoccupied from AD120-160. Hartley (1966; 32 and 1987; 26) previously noted the almost entire absence of Hadrianic and Hadrianic-Antonine pottery and the relative abundance of Antonine pottery from the site when discussing the probable Hadrianic abandonment and Antonine reoccupation.

7.3.3 Phase 1: Earthwork bank and/or structure and burial

Assuming that the original ground surface slopes from east to west, it is hard to conceive the 'natural' accumulation of horizontal layers incorporating Roman pottery and potentially timbers and stakes in the manner observed in Trenches 4 and 5. If the information provided by the descriptions of 18th century writers and the first edition Ordnance Survey map of 1857 are to be accepted, the deposits are also too far east and at too high a level to be associated with the brook known to traverse the western side of the fort, although this raises the further question of how the deposits became waterlogged. The description of the lowest deposits observed in each trench and the material overlying the possible stakes and planking was reminiscent of the Flavian rampart material identified at the fort in previous investigations (Brown 1996; Hartley 1966 and 1987), but their location would seem too far west to represent a counterscarp bank for the Flavian ditch at Castle Hill. Two likely explanations for these deposits are favoured; the first is that the deposits form part of a counterscarp bank, and the second is that the deposits form the upper filling of a ditch.

Allowing for some conjectural ditch and bank projections based on the dimensions provided by the previous excavations (Hartley 1966 and 1987), the deposits would have been in approximately the correct location to represent the start of a second counterscarp bank for a Flavian or Antonine ditch located immediately east of the development site and west of those previously identified. A major constituent of the Antonine rampart at Castle Hill was yellow clay (Hartley 1966), and the distinct clay band (205 and 4014) in the material forming the possible Phase 1 bank may indicate a similar construction date. The ceramic evidence from the Phase 1 deposits certainly favours an Antonine if not an earlier date. The presence of a burial in what may have been the top of an outer bank would not be that surprising given that a road leaving the western gate of the fort almost certainly passed very close to the northern edge of the development site. Burials were frequently located beyond forts and settlements and along the sides of roads, and a number of Roman burials are attested close to the probable routes of Roman roads within Ilkley (Wrathmell 1991). However, the stratigraphy observed, and the use of timbers and stakes, would represent considerably more detail than previously noted for the construction of such a bank (Hartley 1966).

In the second scenario, most of the deposits are 'naturally' accumulated, but within a ditch which extended below and beyond the limits of the trenches. The stakes and planking may perhaps have been part of a timber revetment or walkway which had collapsed into the ditch. The presence of the burial (5007) in what would have been the upper filling of the earlier ditch (5008), and its truncation by the Phase 2 ditch (4008/5012) cutting along the same line, would perhaps be more conceivable than a burial inserted into the top of a bank. However, the horizontal nature of the stratigraphy, and the lack of tip lines and slumping within the deposits, suggest they were unlikely to have been filling a ditch. The spatial sequence of the ditches would also be a reverse of the previous sequence, with the later ditch cut inside and to the east of the earlier ditch.

One further possibility is that the timbers represent part of a structure associated with the western gate (*porta decumana*) of the first fort. There are no parallels for the possible stake and timber structure from previous investigations within the fort at Ilkley, although their spatial arrangement, and the association with waterlogged organic material, has strong similarities with a wattle wall and planked structure identified seemingly within the western side of the Flavian Roman fort at Castleford (Structure H, Abramson et al 1999). However, the structure at Castleford was associated with a midden and no corroborating

evidence for such a feature was forthcoming from the present site within the limits of excavation. Without more detailed investigations into the western defences of the fort, it is unlikely that the origin of these deposits can be resolved.

7.3.4 Phase 2: Ditches and Building

The ceramic dates indicate that the Antonine occupation was the most likely period during which the postulated ditches (4008/5012 and 105/1008/3013) were constructed. Of the two features, the easternmost ditch (4008/5012) is the more convincing as a definite feature, and the observed profile of this ditch was consistent with that of the Antonine ditch identified by Hartley (1966). It seems likely that the 90° turn in the ditch to the west respected the line of a road leaving the western side of the fort. However, it was not clear within the excavated area whether the ditch was likely to have traversed the whole circuit of the fort or was simply a smaller ditch segment providing an additional defensive barrier close to the road. It is more common for circuit ditches beyond Roman forts to terminate prior to road lines. However, an example of ditches respecting road lines in the manner observed at Bridge Lane include the Agricolan fort at Fendoch, Perthshire (Collingwood and Richmond 1969). If the two ditches (4008/5012 and 105/1008/3013) are contemporary, the distance between them does not allow much room for a gap either side of a contemporary bank, although the pattern of the primary episodes of deposition particularly in the easternmost ditch, suggest that this material could have been derived from such a bank. The irregular alignment of the cut for the westernmost ditch (105/1008/3013) was not consistent with the regularity of the easternmost ditch, or that observed for the previously investigated ditches (Hartley 1966). This might indicate that rather than being a ditched feature, the apparent cut of the ditch in section was the beginning of a drop in the level of the original ground surface towards the brook that is thought to have lain to the west of the site. This was to some extent supported by the lack of Roman period activity within the western side of the site and the depth of later post-medieval building foundations in this area, which were considerably deeper than those to the east.

The form of the deposits filling the ditch recut (4018/5016) closely resemble those identified previously filling the upper levels of the Antonine ditch (Hartley 1966). However, unlike the previous investigations, the recutting of the ditch does not appear to represent a wholly separate phase of occupation, as the ceramic evidence from the filling of the ditch and recut are similarly dominated by Hadrianic-Antonine material. In addition, the recut ditch (4018/5016) followed its precursor (4008/5012) on a much closer line than any of the previously observed ditches, and may be a reflection of the lack of available space between the fort and brook to the west.

The most likely alternative, and a convincing explanation for the stratigraphy observed in Trenches 4 and 5, is that the deposits attributed to the filling of Ditches 4008/5012 and 4018/5016, were filling the 'upper' levels of an Antonine ditch extending below and beyond the eastern limits of excavation, and contemporary with what was initially interpreted as the earlier Phase 1 bank. What appears to be a cut in section is the interface of deposits forming the bank and deposits filling the upper levels of a ditch. A similar pattern of stratigraphy was observed in the section through the western defences of the fort at Castle Hill in relation to the Flavian ditch and a contemporary counterscarp bank (Hartley 1966). Therefore, the deposits which appear to be primary episodes of filling in Ditch 4008/5012 are probably later in the sequence of infilling, and the recutting episode (4018/5016) represents the use of the upper levels of the Antonine ditch as a repository for the clearance of Antonine levels from within the fort at the beginning of the Severan

occupation. In support of this are the Ordnance Survey levels at which the deposits were encountered. Comparisons with previous investigations (Hartley 1966 and Brown 1996) suggest that the deposits were revealed at too high a level to be filling the lower levels of ditches contemporary with those at Castle Hill, but were at a level consistent with those deposits filling the upper levels of the ditches. The distinct bands of yellow clay within the Phase 1 bank were also consistent with the material known to have been used in the rampart of the Antonine fort, as opposed to the turf rampart of the Flavian fort.

Little more can be definitively said regarding the structure formed by the wall and post-hole. The presence of daub from the same location provides an association with the buildings of the Antonine fort, which had wattle and daub infillings to their walls (Hartley 1987), and the ceramic evidence strongly supports such a date. However, most of the buildings in the Antonine fort were of timber construction and the location of the structure so close to the projected line of the Antonine ditch suggests that the two features could not have coexisted. In plan and construction materials, the building closely resembles the stone gatetowers flanking the northern entrance to the Severan fort (Woodward 1925), but the wall is isolated and located south of and much further west of the expected location of the *porta decumana*. A Severan date for the structure seems likely, even if its function remains unclear.

One further possibility is that much of the Roman material from the site is residual and that the ditches traversing the site and the wall and post-hole, are in fact post-Roman in date. However, without any positive substantiating evidence this would seem a most unlikely scenario.

7.4 Medieval and Post-Medieval periods

7.4.1 Phase 3: Structures and topsoil

Medieval activity within the site seems to have been confined to the dumping of clearance levels from within the fort and would account for the large amount of Roman material within later deposits. It is known for example that a medieval building was located within the north-west angle of the fort, the construction of which involved the reducing of Roman levels (Hartley 1966). The Roman material may have been deposited in a garden or plough soil which continued to develop into the post-medieval period. This soil then appears to have been disturbed by the construction of several buildings during the later post-medieval period, hence the presence of medieval and earlier material in post-medieval contexts.

The structures represented by walls in the upper levels of Trenches 2-6 appear to closely correspond with the location of buildings shown on the O.S. (1853) first edition and later maps (1891 and 1909) of the area. Artefacts recovered from deposits associated with these walls appear to confirm an 18th century or later date for these structures. It seems likely that many of the upper deposits in all the test pits and trenches, which contained earlier residual Roman and medieval material, can be attributed to the construction of these later buildings.

8. Conclusion

8.1 The results of the archaeological investigations at Bridge Lane, Ilkley are significant in having identified what appears to be an additional Antonine ditch and an associated bank and burial to the west of the previously defined limits of the western defences of the fort. The provenance of a second ditch was much less secure. It may have represented the top of a natural slope descending down to a brook, which traversed the site of the fort to the west. The defensive nature of this slope may have been strengthened by the presence of the counterscarp bank for the Antonine ditch on the eastern side of the natural scarp. The turning of the Antonine ditch through 90° appears to confirm that a road leaving the western side of the fort ran within metres of the northern extent of the development site. The final activity on the site during the Roman period appears to have been the construction of a building, probably at the commencement of the Severan occupation. The dating of the artefactual material recovered from the site appears to confirm that there was no alteration to the defences beyond the early 3rd century AD.

8.2 The investigations produced considerably more Roman material than previous investigations into the western defences of the fort at Castle Hill (Hartley 1966). However, the material was consistent with that found in earlier Roman military contexts and in such close proximity to a fort. The results from the investigations suggest possible activity on the site during the Flavian-Trajanic period, a concentration of activity contemporaneous with the Antonine occupation, and little activity beyond the beginning of the Severan period. Unfortunately, and like the previous investigations (Woodward 1925; Hartley 1966), the current work has provided little insight into the post-Roman development of the area, at least until more recent times, when the stone foundations of several buildings appeared to have heavily disturbed earlier levels.

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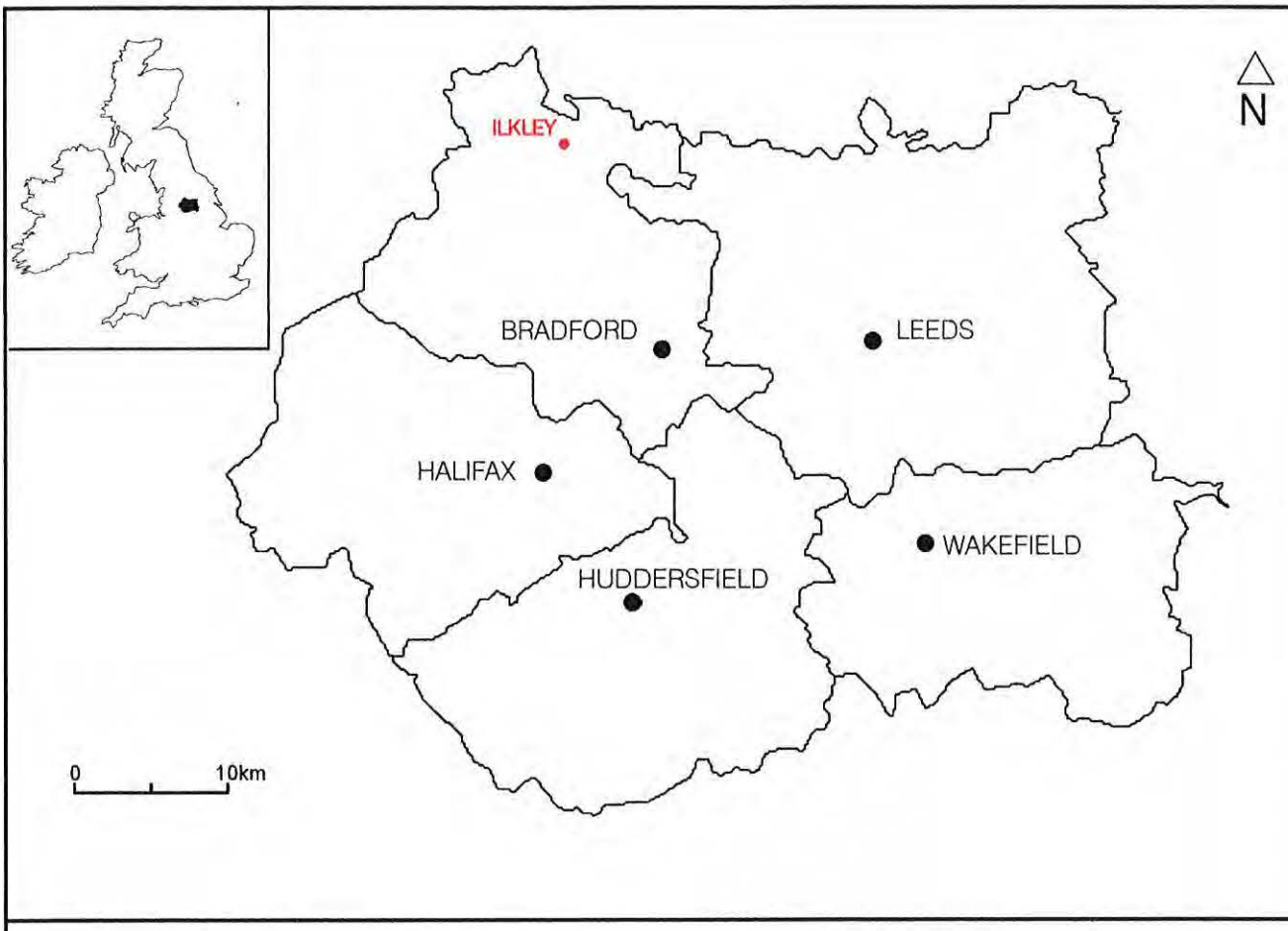
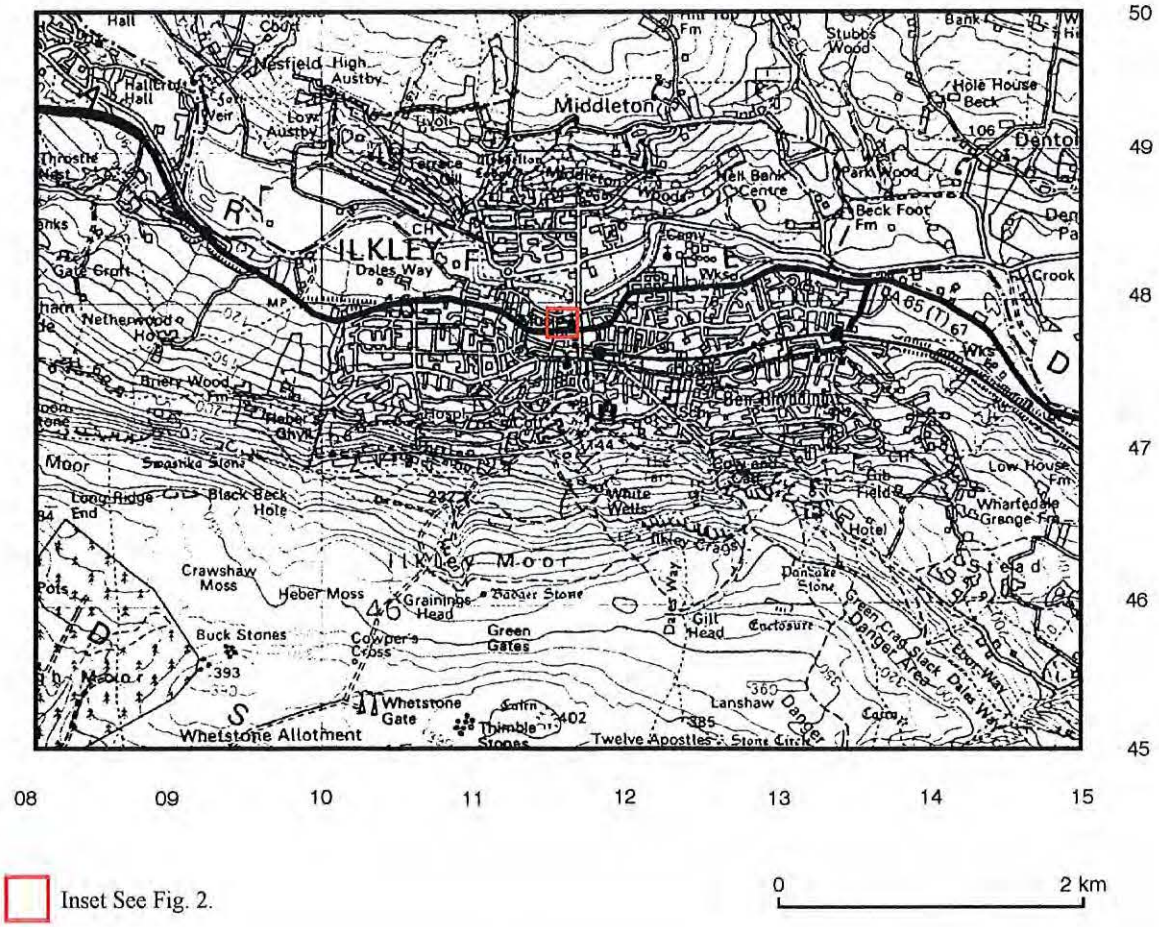
Margaret Bastow PhD, Hilary Cool PhD, Jane Cowgill, Chris Cumberpatch PhD, Jerry Evans PhD, Geoff Gaunt, Yannick Minvielle-Debat, Jane Richardson PhD





Inset See Fig. 2.

Fig. 1. Site Location

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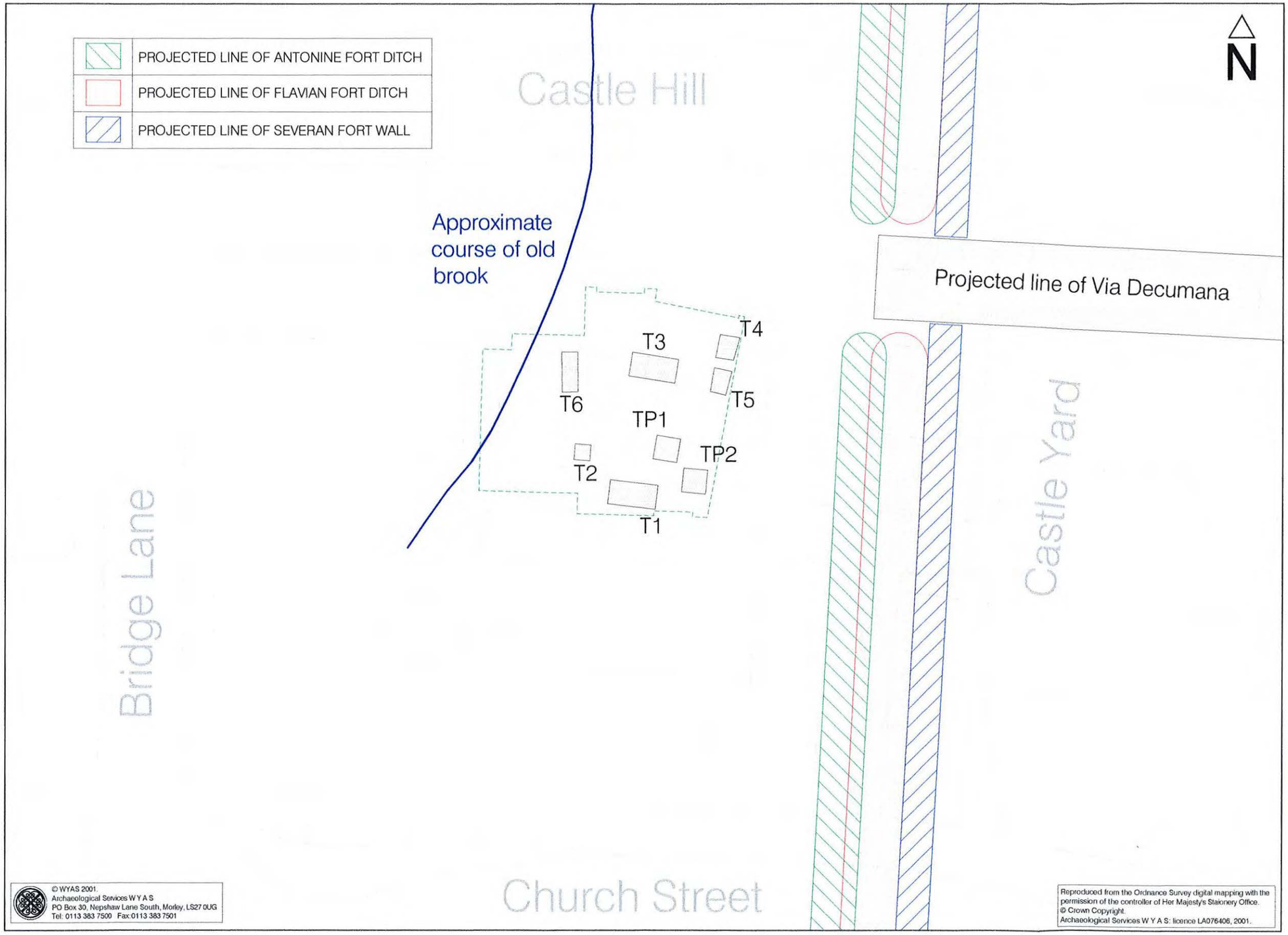

Fig. 2 Detailed site location

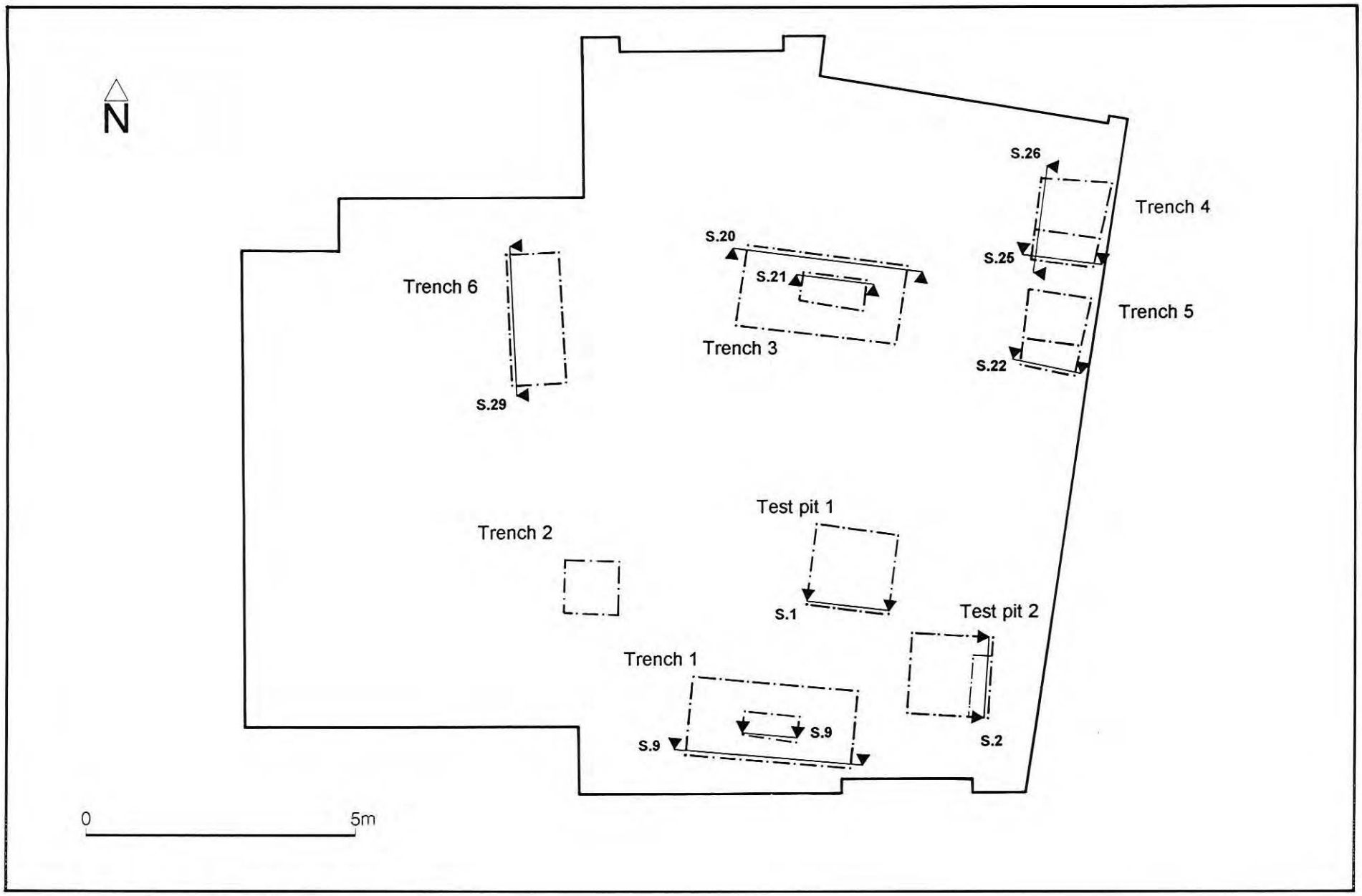

Fig.3. Plan showing section locations

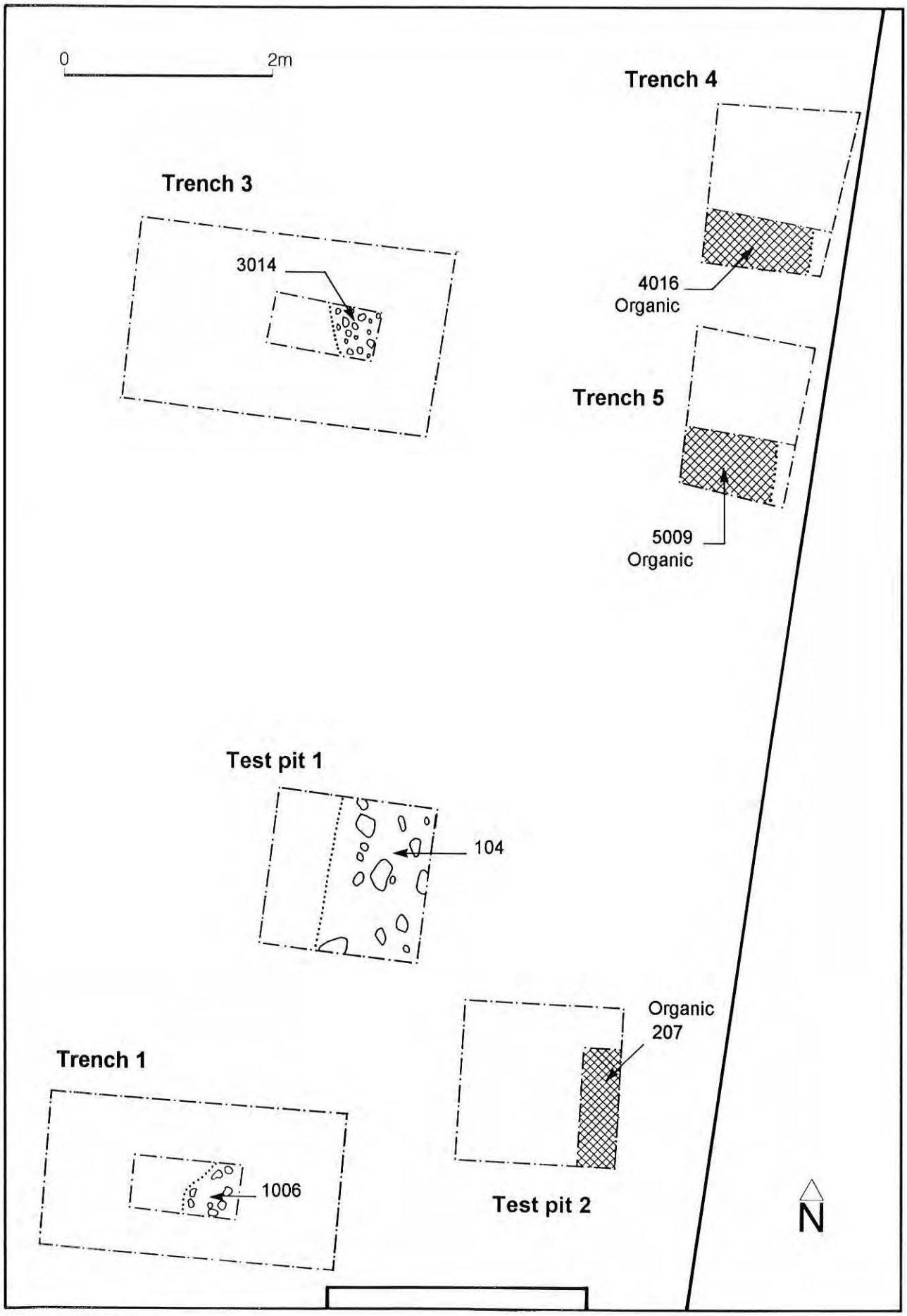

Fig.4. Phase 1a

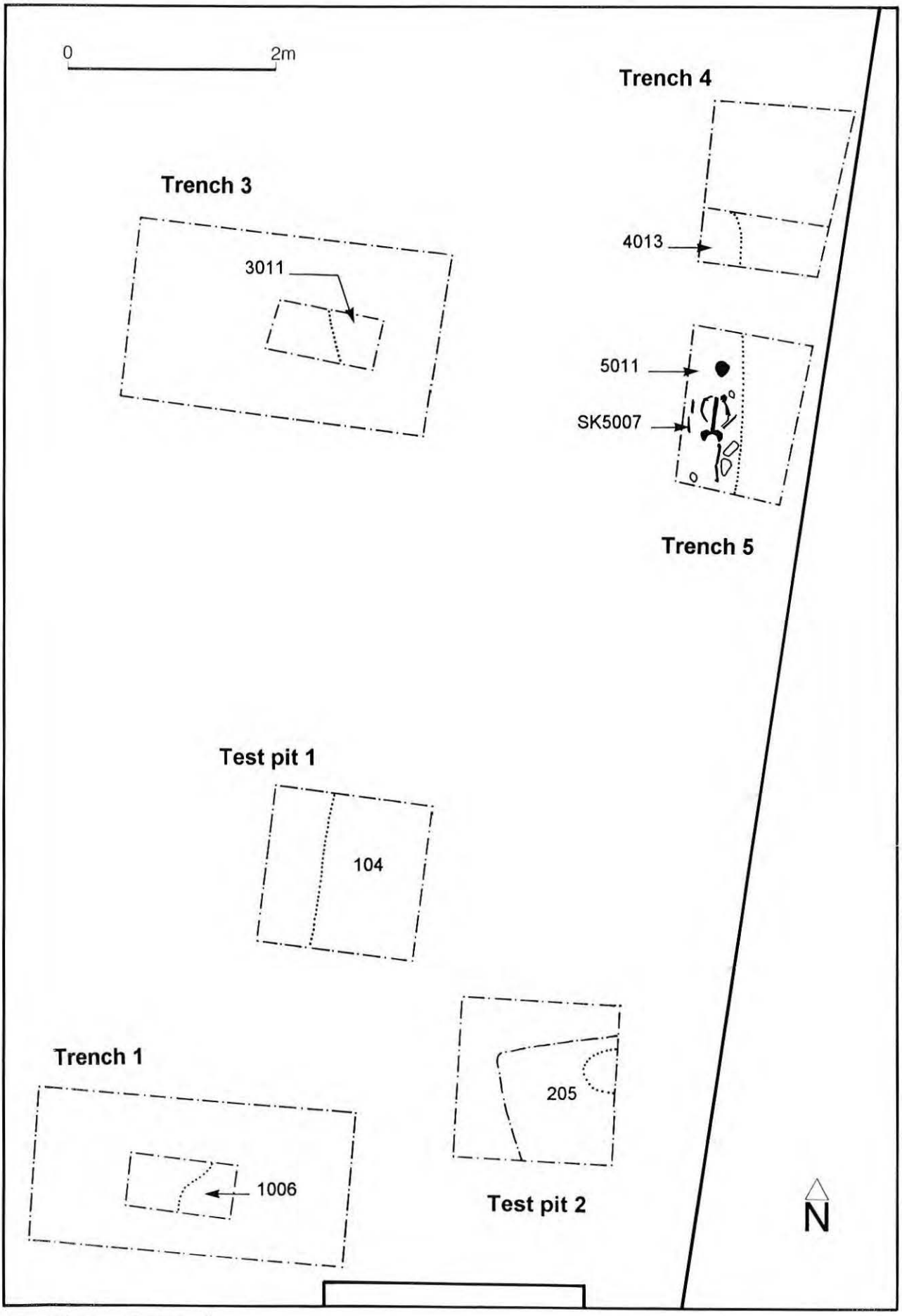

Fig.5. Phase 1b. Burial

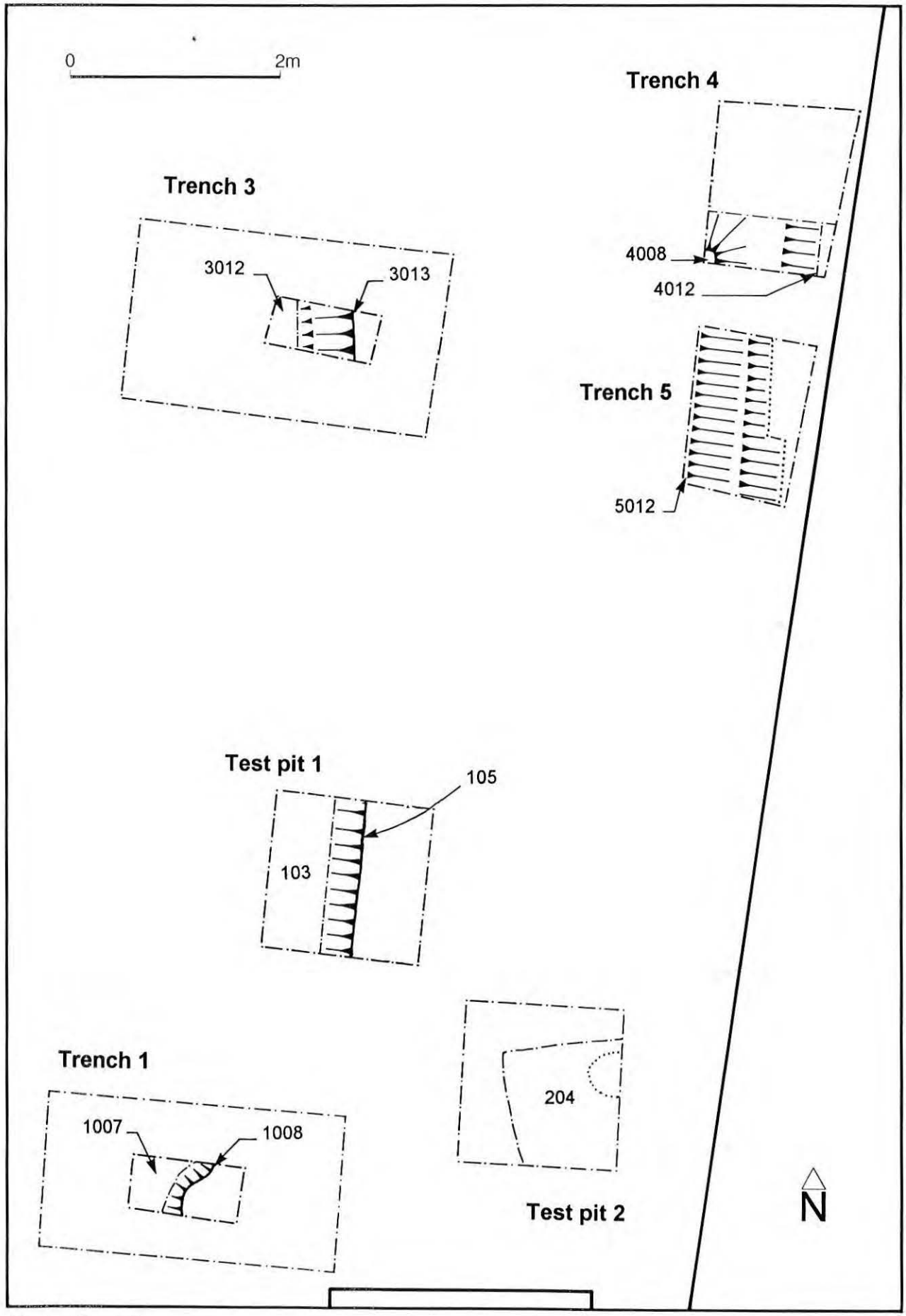

Fig.6. Phase 2a

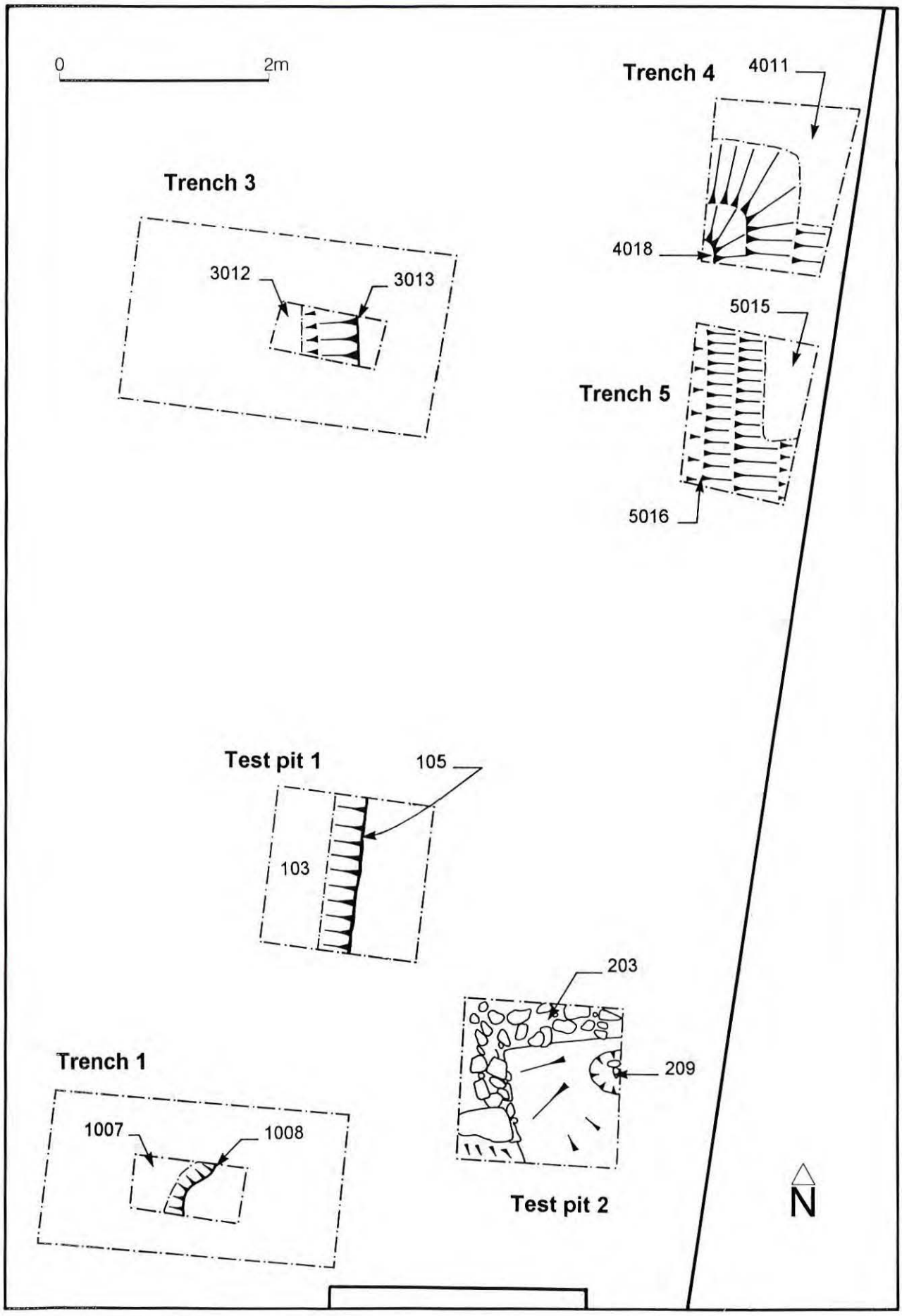

Fig.7. Phase 2b & 2c

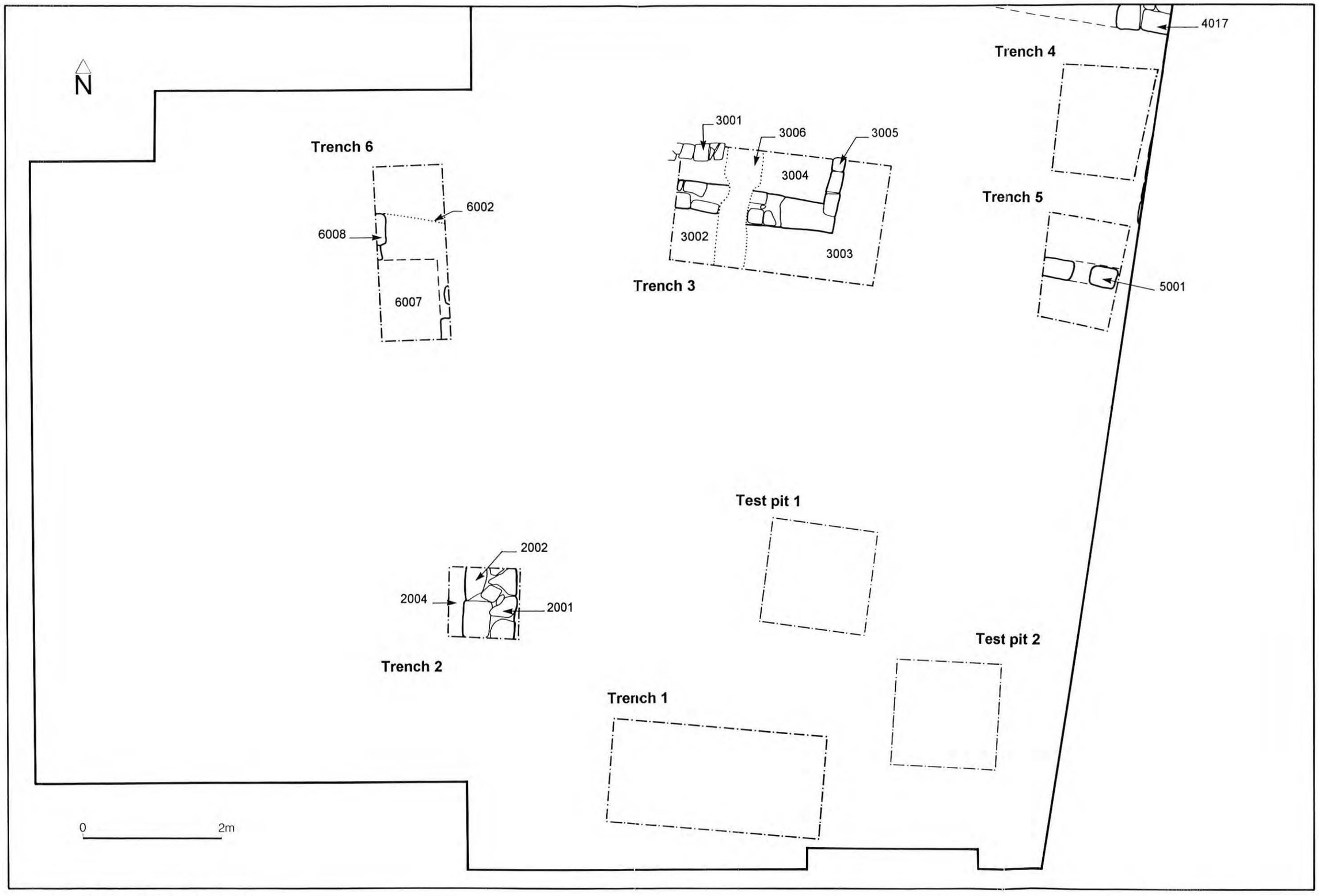

Fig.8 Phase 3. Post-Medieval Structures

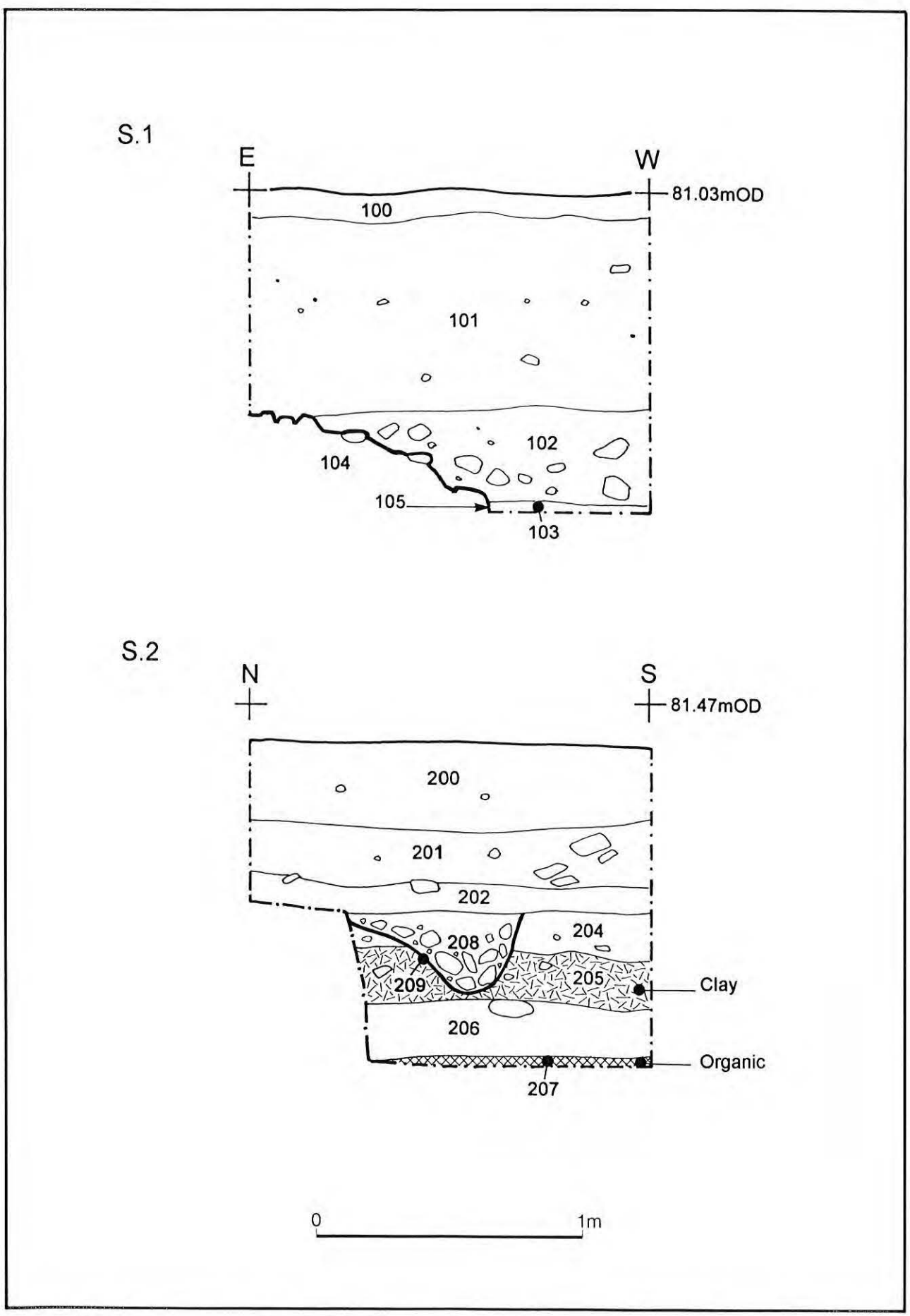

Fig.9. North-facing section through Test Pit 1 and west-facing section through Test Pit 2.

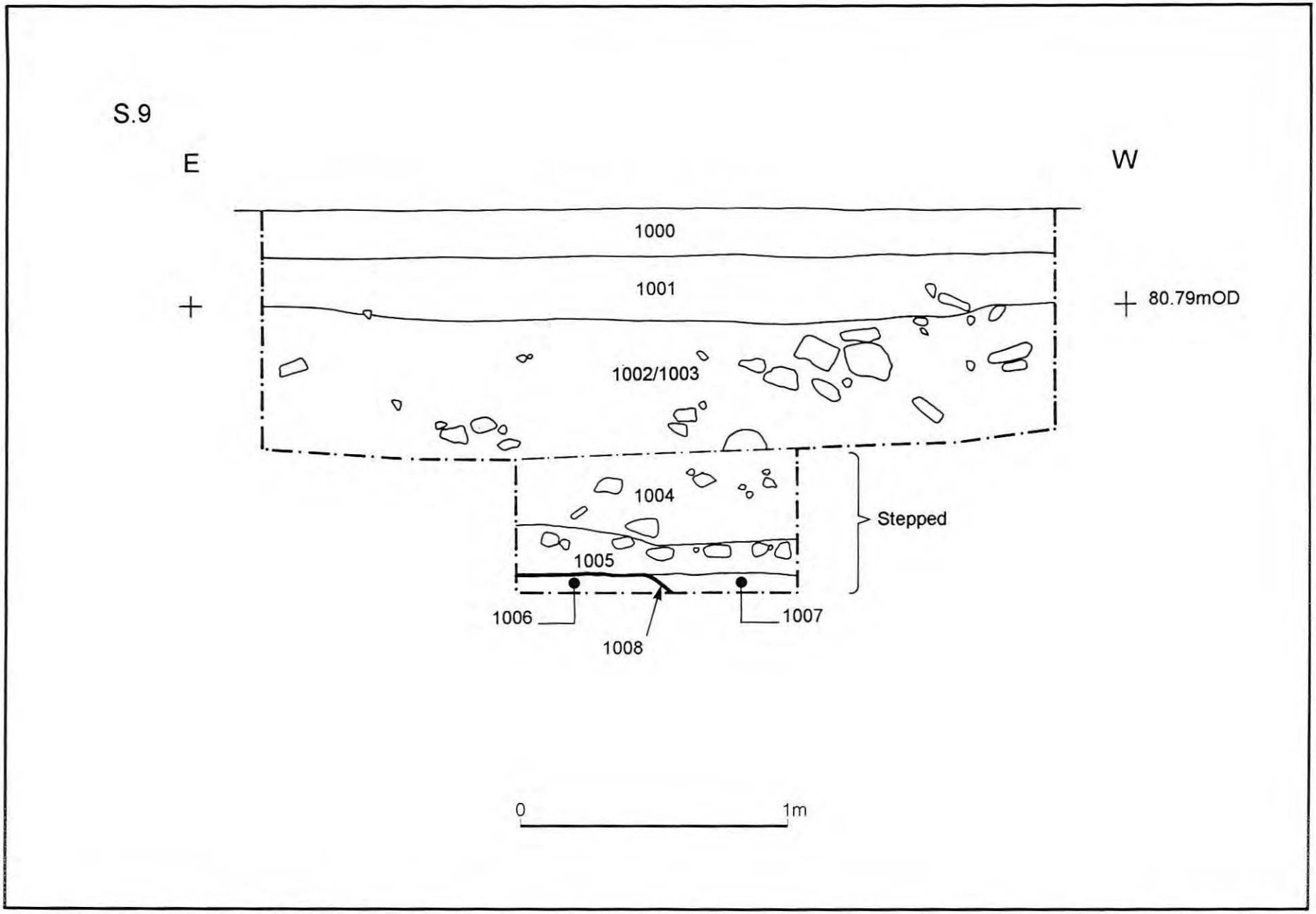

Fig.10. North-facing section through Trench 1

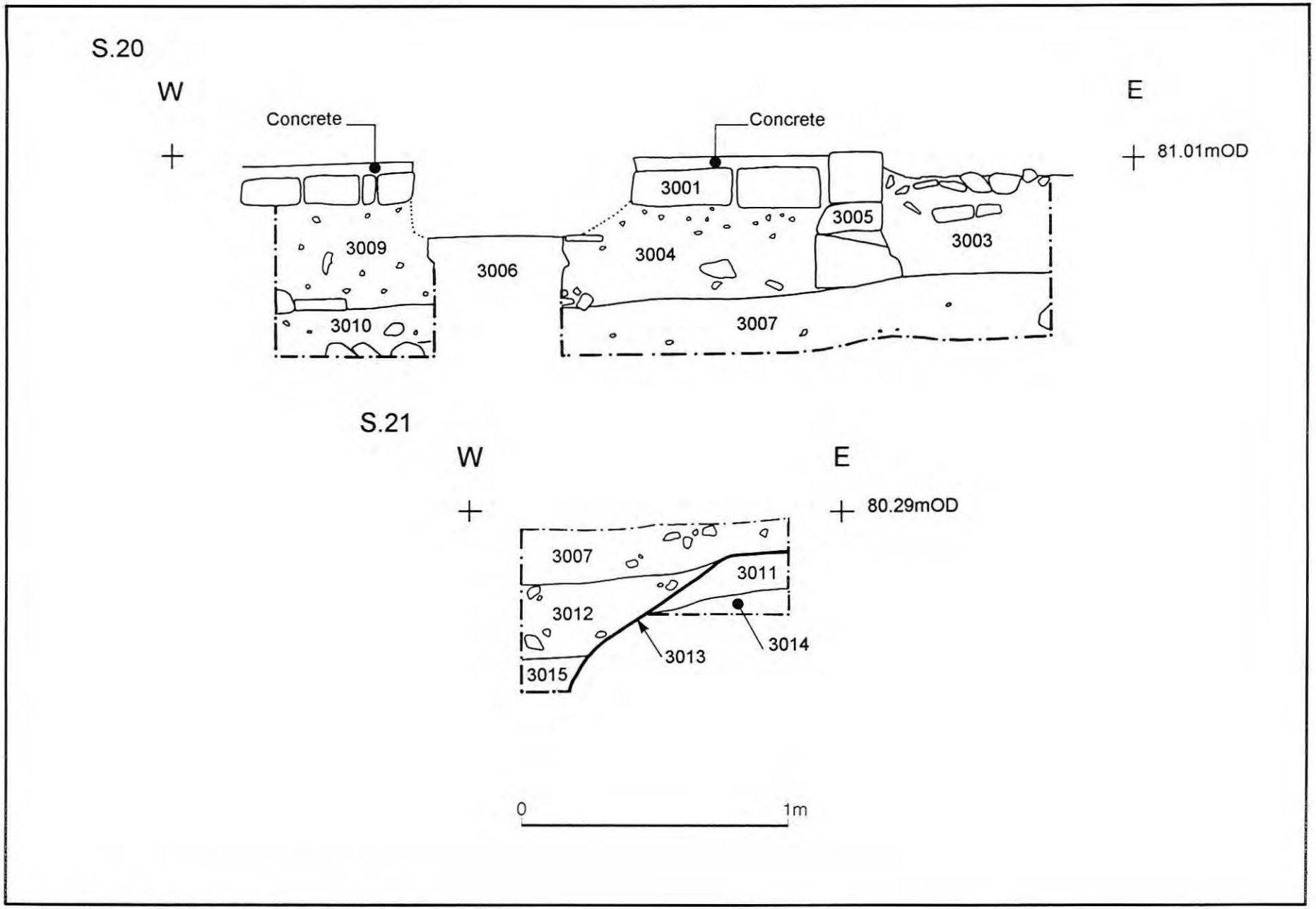

Fig.11. South-facing section through Trench 3

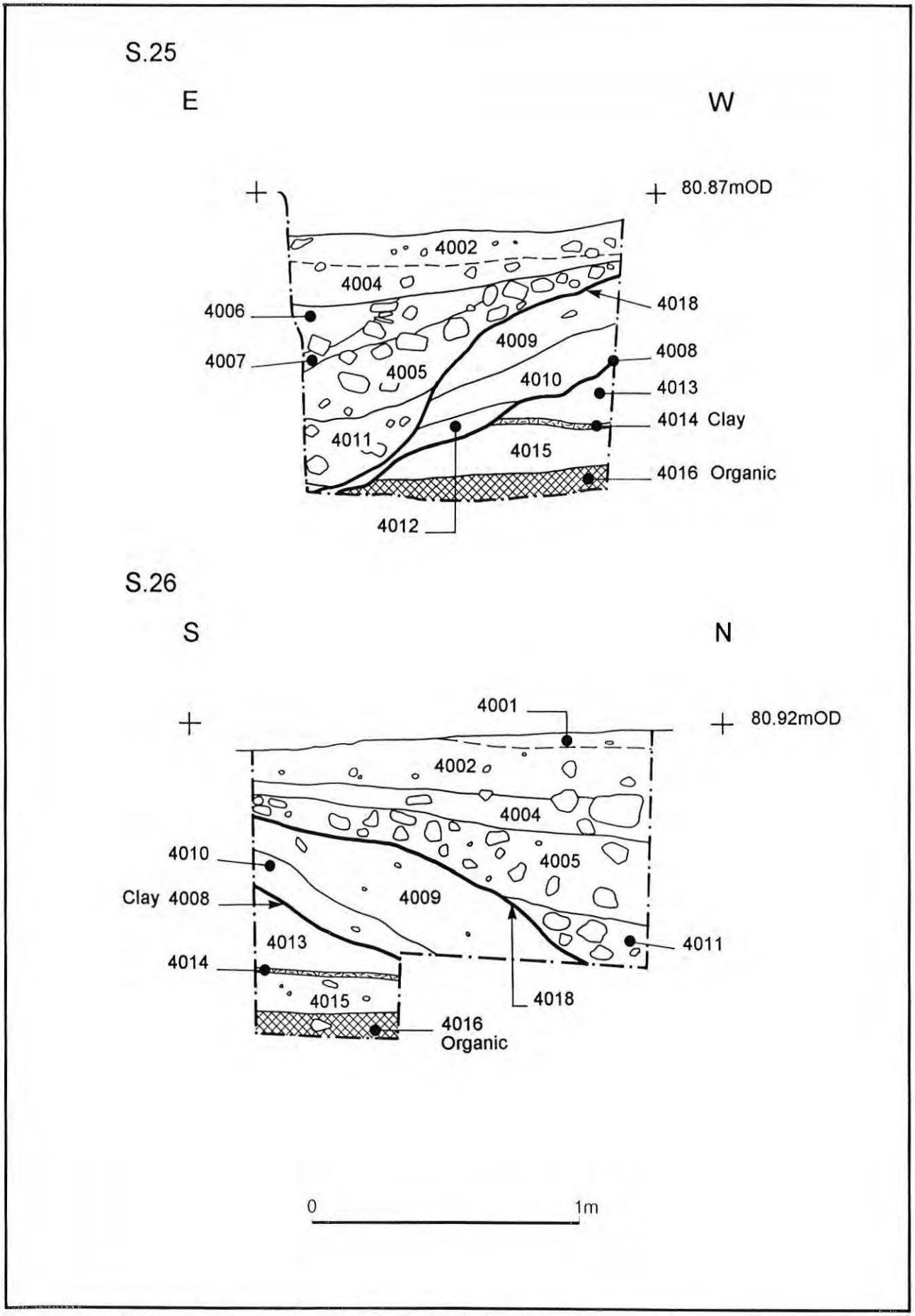

Fig. 12. North-facing and east-facing sections through Trench 4

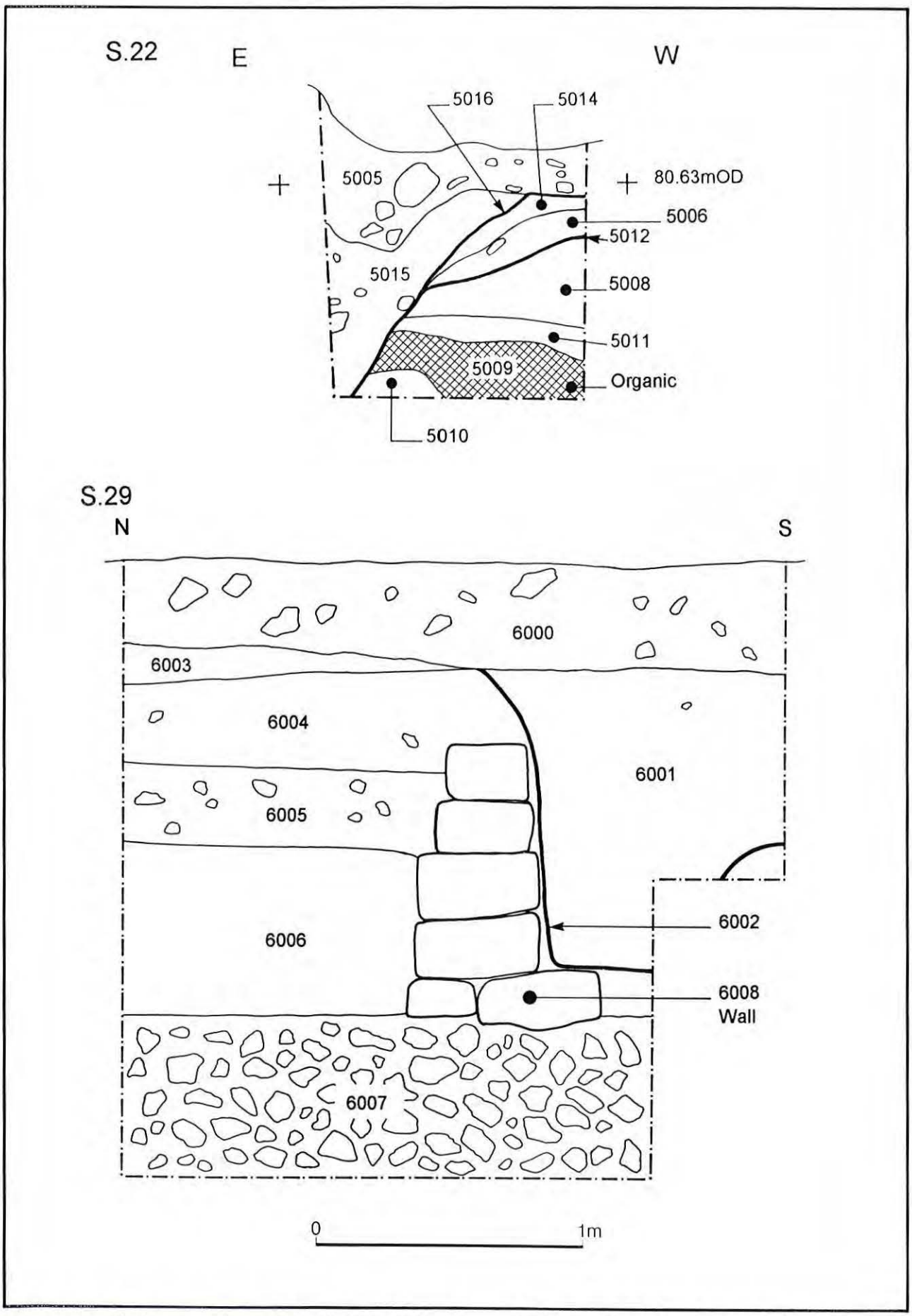

Fig.13. North-facing section through Trench 5 and east-facing section through trench 6

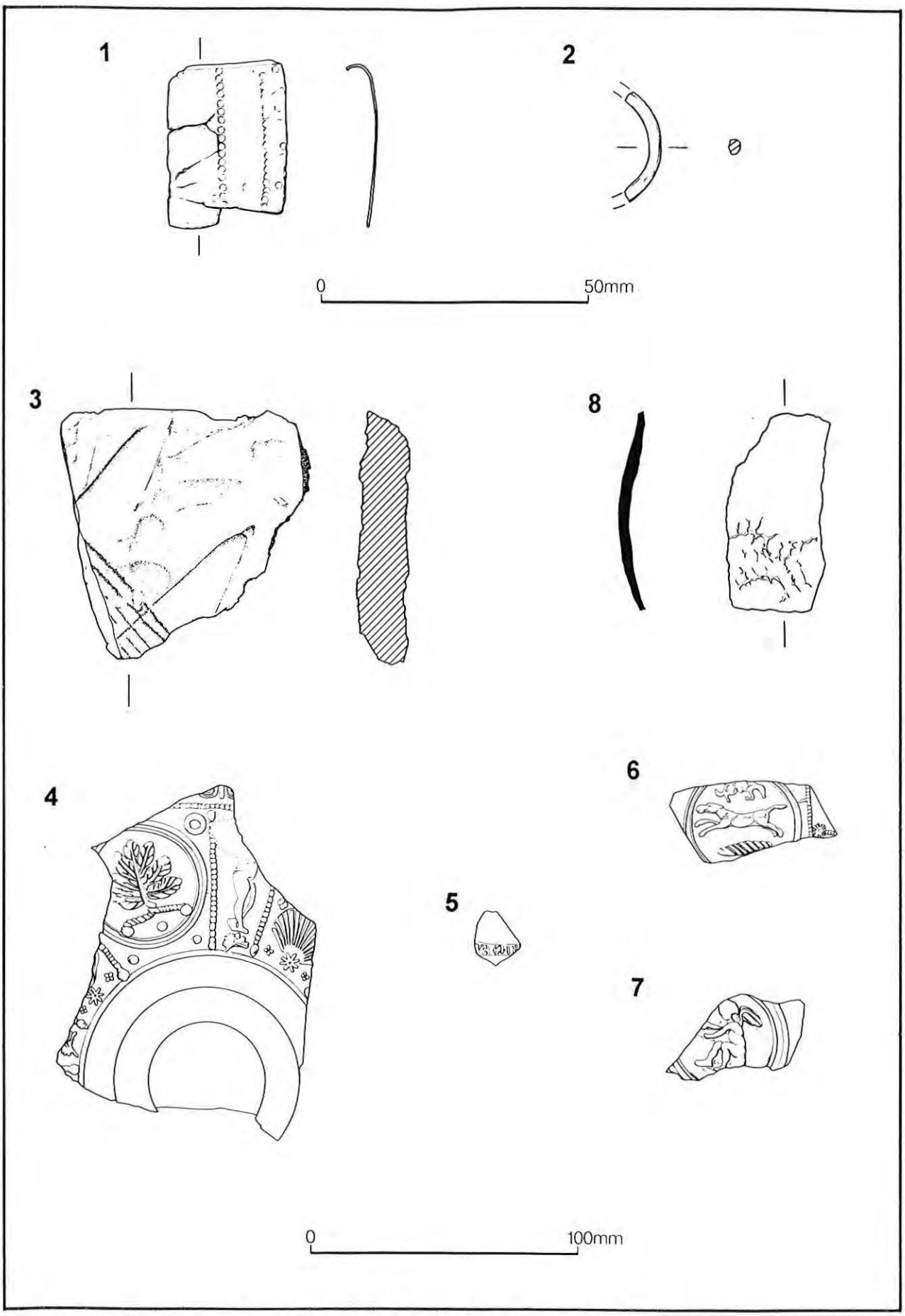

Fig.14. Finds Illustration: metalwork (1-2), flue tile (3), decorated Samian & coarseware pottery (4-7)

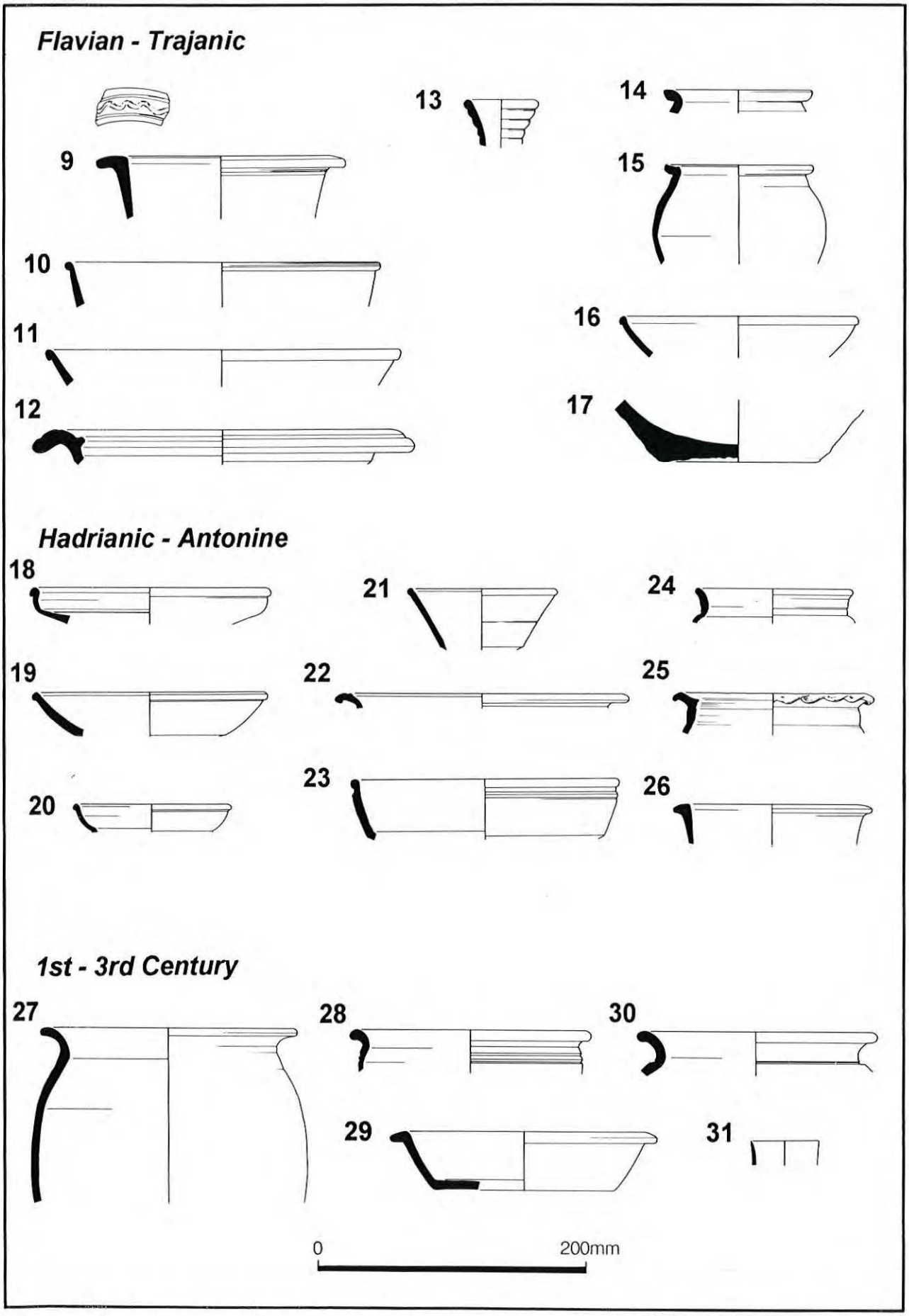

Fig.15. Finds Illustration: Plain Samian and Coarseware pottery (9-31)

Appendix I

Inventory of Archive

File No.	Contents	Quantity
File 1	**Archaeological specification, strategies, interim and evaluation reports (Phases I-IV)**	
	Specification for archaeological evaluation prepared by WYAS Advisory Service	1 report
	Provisional archaeological strategy for machine stripping (Phase II)†	1 report
	Archaeological strategy for trial trenching (Phase III))†	1 report
	Methodology for archaeological excavation of one lift pit (Phase IV))†	1 report
	Phase I: Archaeological evaluation preliminary results (Test Pits 1-2))†	1 report
	Phase II: Archaeological watching brief)†	1 report
	Phases III and IV: Archaeological evaluation preliminary results (Trenches 1-6))†	1 report
File 2	**Phase I, Archaeological test pitting (BLI'98): contexts, samples and artefacts**	
	Summary	2
	Context register	2
	Context sheets*	16
	Trench sheets*	2
	Levels information	1
	Artefact inventory	1
	Environmental samples register	1
	Environmental samples forms	2
	Environmental laboratory forms	11
	Environmental sample summary	1
File 3	**Phase I, Archaeological test pitting (BLI'98): drawings and photographs**	
	Drawing register	1
	Permatrace drawing sheets	6
	Photographic record sheets	2
	Monchrome contact prints (film 5588)	1
	Colour transparencies (film 5602)	1
File 4	**Phases III & IV, Archaeological evaluation (BLI'99): contexts, samples and artefacts**	
	Summary	1
	Context register	6
	Context sheets*	73
	Trench sheets	
	Levels information	
	Artefact inventory	
	Environmental samples register	1
	Environmental laboratory form	14
	Environmental sample summary	1
	Small finds register	3
	Ceramic building materials recording sheets (S. Garside Neville)	15
	Conservation record cards, XRF and SEM information (Y. Minvielle-Debat)	5
	X-ray sheet	1
File 5	**Phases III & IV, Archaeological Evaluation (BLI'99): drawings and photographs**	
	Drawing register	3
	Permatrace drawing sheets	21
	Photographic record sheets	10

File No.	Contents	Quantity
	Monchrome contact prints (film nos 5623, 5616, 5632, 5633, 5659)	5
	Colour transparencies (film nos 5624, 5615, 5630, 5631, 5658)	5
Loose	Bound copy of evaluation report (WYAS R888)	1 report

*- denotes double-sided

† denotes prepared by Archaeological Services WYAS

Appendix II

Inventory of Contexts

Context	Trench	Description
100	Test Pit 1	Deposit: layer, levelling
101	Test Pit 1	Deposit: layer, topsoil
102	Test Pit 1	Deposit: layer
103	Test Pit 1	Deposit: fill of 105
104	Test Pit 1	Deposit: bank ?
105	Test Pit 1	Cut feature: ditch ?
200	Test Pit 2	Deposit: layer, levelling
201	Test Pit 2	Deposit: layer, topsoil
202	Test Pit 2	Deposit: layer
203	Test Pit 2	Masonry: layer, wall
204	Test Pit 2	Deposit: layer, bank ?
205	Test Pit 2	Deposit: layer, bank ?
206	Test Pit 2	Deposit: layer, bank ?
207	Test Pit 2	Deposit: waterlogged organic layer
208	Test Pit 2	Fill of 209
209	Test Pit 2	Cut feature: post-hole
1000	Trench 1	Deposit: layer, levelling
1001	Trench 1	Deposit: layer, topsoil
1002	Trench 1	Deposit: ditch fill/levelling
1003	Trench 1	Deposit: lens within 1002
1004	Trench 1	Deposit: levelling
1005	Trench 1	Deposit: ditch fill/ levelling
1006	Trench 1	Deposit: layer, bank ?
1007	Trench 1	Deposit: fill of 1008
1008	Trench 1	Cut feature: ditch ?
2000	Trench 2	Deposit: layer, modern levelling
2001	Trench 2	Masonry: wall
2002	Trench 2	Deposit: wall bonding
2003	Trench 2	Deposit: layer, modern levelling
2004	Trench 2	Deposit: layer, same as 2005
2005	Trench 2	Fill of 2006
2006	Trench 2	Cut feature: modern disturbance
3000	Trench 3	Masonry: concrete surface
3001	Trench 3	Deposit: layer, modern levelling
3002	Trench 3	Masonry: cobbling
3003	Trench 3	Deposit: modern levelling
3004	Trench 3	Deposit: levelling
3005	Trench 3	Masonry: wall
3006	Trench 3	Masonry: concrete foundation
3007	Trench 3	Deposit: layer
3008	Trench 3	Deposit: levelling
3009	Trench 3	Deposit: levelling
3010	Trench 3	Deposit: levelling
3011	Trench 3	Deposit: layer, bank ?
3012	Trench 3	Deposit: fill of 3013
3013	Trench 3	Cut feature: ditch ?
3014	Trench 3	Deposit: layer, bank ?

Context	Trench	Description
3015	Trench 3	Deposit: fill of 3013
4001	Trench 4	Deposit: layer, levelling
4002	Trench 4	Deposit: layer, levelling
4003	Trench 4	Deposit: layer, levelling
4004	Trench 4	Deposit: levelling
4005	Trench 4	Deposit: fill of 4018
4006	Trench 4	Deposit: fill of 4018
4007	Trench 4	Deposit: fill of 4018
4008	Trench 4	Cut of ditch
4009	Trench 4	Deposit: fill of 4008
4010	Trench 4	Deposit: fill of 4008
4011	Trench 4	Deposit: fill of 4018
4012	Trench 4	Deposit: fill of 4008
4013	Trench 4	Deposit: layer, bank ?
4014	Trench 4	Deposit: layer, bank ?
4015	Trench 4	Deposit: layer, bank ?
4016	Trench 4	Deposit: waterlogged organic layer
4017	Trench 4	Masonry: wall
4018	Trench 4	Cut of ditch, recut
5000	Trench 5	Deposit: layer
5001	Trench 5	Masonry: wall
5002	Trench 5	Deposit lens within 5003
5003	Trench 5	Deposit: layer
5004	Trench 5	Deposit: same as 5005
5005	Trench 5	Deposit: fill of 5016
5006	Trench 5	Deposit: layer, fill of 5012
5007	Trench 5	Skeleton within 5008
5008	Trench 5	Deposit: bank ?, fill of grave ?
5009	Trench 5	Deposit: organic waterlogged layer
5010	Trench 5	Deposit: layer, bank ?
5011	Trench 5	Deposit: layer, bank ?
5012	Trench 5	Cut of ditch
5013	Trench 5	Deposit: layer
5014	Trench 5	Deposit: fill of 5012
5015	Trench 5	Deposit: fill of 5016
5016	Trench 5	Cut of ditch, recut?
6000	Trench 6	Deposit: layer, levelling
6001	Trench 6	Deposit: fill of 6002
6002	Trench 6	Cut of drainage trench
6003	Trench 6	Deposit: layer, levelling
6004	Trench 6	Deposit: layer, levelling
6005	Trench 6	Deposit: layer, levelling
6006	Trench 6	Deposit: layer, levelling
6007	Trench 6	Deposit: layer, levelling
6008	Trench 6	Masonry: wall

Appendix III

Inventory of Artefacts

Context	Test Pit/ Trench	SFN	Fabric	Quantity	Details
101	Test Pit 1		Animal bone	1	
102	Test Pit 1		Animal bone	3	
103	Test Pit 1		Animal bone	7	
103	Test Pit 1		Animal bone	9*	
200	Test Pit 2		Animal bone	3	
201	Test Pit 2		Animal bone	2	
202	Test Pit 2		Animal bone	26	
204	Test Pit 2		Animal bone	11*	
205	Test Pit 2		Animal bone	9*	
208	Test Pit 2		Animal bone	1	
208	Test Pit 2		Animal bone	12*	
1004	Trench 1		Animal bone	9	
1005	Trench 1	19	Animal bone	2	
1007	Trench 1		Animal bone	2*	
2002	Trench 2		Animal bone	2	
3001	Trench 3		Animal bone	3	
3002	Trench 3		Animal bone	20	
3003	Trench 3		Animal bone	20	
3007	Trench 3		Animal bone	14	
3008	Trench 3		Animal bone	3	
3009	Trench 3		Animal bone	2	
3010	Trench 3		Animal bone	5	
3012	Trench 3		Animal bone	6*	
3015	Trench 3		Animal bone	1*	
4001	Trench 4		Animal bone	8	
4005	Trench 4		Animal bone	5	
4007	Trench 4	27	Animal bone	3	
4009	Trench 4		Animal bone	12	
4009	Trench 4		Animal bone	5*	
4010	Trench 4		Animal bone	5	
4010	Trench 4		Animal bone	1*	
4011	Trench 4		Animal bone	6	
4011	Trench 4		Animal bone	6*	
5000	Trench 5		Animal bone	10	
5005	Trench 5		Animal bone	10	
5006	Trench 5		Animal bone	7	
5010	Trench 5		Animal bone	3	
6003	Trench 6		Animal bone	1	
6004	Trench 6		Animal bone	1	
6006	Trench 6		Animal bone	7	
Total				**263**	
103	Test Pit 1		CBM	8	
202	Test Pit 2		CBM	4	
1001	Trench 1		CMB	1	
1004	Trench 1		CBM	1	
1005	Trench 1	34	CBM	1	
1005	Trench 1	18	CBM	1	

Context	Test Pit/ Trench	SFN	Fabric	Quantity	Details
1007	Trench 1		CBM	1	
3003	Trench 3		CBM	1	
3010	Trench 3		CBM	1	
4003	Trench 4		CBM	1	
4010	Trench 4		CBM	1	
5000	Trench 5		CBM	1	
5005	Trench 5		CBM	1	
5006	Trench 5		CBM	1	
6003	Trench 6		CBM	1	
6006	Trench 6		CBM	1	
Total				**26**	
200	Test Pit 2		Clay pipe	2	Stem
2002	Trench 2		Clay pipe	1	Bowl fragment
3002	Trench 3		Clay pipe	1	Stem
3008	Trench 3		Clay pipe	1	Bowl fragment
3009	Trench 3		Clay pipe	1	Stem
Total				**6**	
1002	Trench 1		Cu alloy object	1	Nail
3007	Trench 3	47	Cu alloy object	1	Decorated strip
Total				**2**	
202	Test Pit 2		Fe objects	2	Nails
3009	Trench 3		Fe object	1	Nail
5003	Trench 5		Fe object	1	Nail
Total				**4**	
200	Test Pit 2		Flint	1	? Core fragment
Total				**1**	
103	Test Pit 1		Glass	1	Roman, body frag.
201	Test Pit 2		Glass	1	Roman shoulder jug/flask/bottle frag.
1001	Trench 1		Glass	2	Modern
1002	Trench 1		Glass	2	Modern
1004	Trench 1		Glass	2	Modern
1004	Trench 1	15	Glass	2	Roman, handle and body bottle frags
3001	Trench 3		Glass	8	Modern
3001	Trench 3		Glass	2	Modern
3002	Trench 3		Glass	60	Modern
3003	Trench 3		Glass	4	Modern
3008	Trench 3		Glass	1	Modern
3009	Trench 3		Glass	8	Modern
3010	Trench 3		Glass	2	Modern
3010	Trench 3		Glass	1	Roman, base bottle frag.
4009	Trench 4		Glass	1*	Roman, frag.
4009	Trench 4	25	Glass	1	Roman, body bottle frag.
4011	Trench 4		Glass	1	Roman, body frag.
6000	Trench 6		Glass	1	Modern
6001	Trench 6		Glass	1	Modern
6004	Trench 6		Glass	1	Modern
Total				**102**	
5008	Trench 5		Human bone	28*	
5007	Trench 5		Human skeleton	1	Adult female, of probable Roman date
1001	Trench 1		Oyster shell	1	

Context	Test Pit/ Trench	SFN	Fabric	Quantity	Details
200	Test Pit 2		Oyster shell	3	
202	Test Pit 2		Oyster shell	1	
Total				**5**	
1004	Trench 1	16	Pb alloy object	1	Ring
Total				**1**	
101	Test Pit 1		Pottery	5	Roman/Medieval
102	Test Pit 1		Pottery	6	Roman/Medieval/Post-Medieval
103	Test Pit 1		Pottery	19	Roman
200	Test Pit 2		Pottery	11	Roman/Medieval/Post-Medieval
201	Test Pit 2		Pottery	1	Roman
202	Test Pit 2		Pottery	11	Roman
204	Test Pit 2		Pottery	1	Roman
1001	Trench 1		Pottery	25	Roman/Medieval/Post-Medieval
1002	Trench 1		Pottery	7	Roman/Medieval/Post-Medieval
1002	Trench 1	1	Pottery	1	Roman
1004	Trench 1		Pottery	21	Roman/Medieval/Post-Medieval
1004	Trench 1	5	Pottery	1	Roman
1004	Trench 1	6	Pottery	1	Roman
1004	Trench 1	7	Pottery	2	Roman
1004	Trench 1	8	Pottery	1	Roman
1004	Trench 1	9	Pottery	2	Roman
1004	Trench 1	10	Pottery	4	Roman
1004	Trench 1	14	Pottery	3	Roman/Medieval
1005	Trench 1	11	Pottery	2	Roman
1005	Trench 1	17	Pottery	4	Roman
2002	Trench 2		Pottery	6	Medieval/Post-Medieval
3001	Trench 3		Pottery	9	Post-Medieval
3002	Trench 3		Pottery	13	Post-Medieval
3003	Trench 3		Pottery	10	Roman/Medieval/Post-Medieval
3004	Trench 3		Pottery	2	Medieval/Post-Medieval
3007	Trench 3	39	Pottery	3	Roman/Medieval
3007	Trench 3	40	Pottery	3	Roman
3007	Trench 3	41	Pottery	7	Roman/Medieval
3009	Trench 3		Pottery	29	Post-Medieval
3010	Trench 3		Pottery	5	Roman/Post-Medieval
3012	Trench 3	46	Pottery	3	Roman
3015	Trench 3		Pottery	7*	Roman
4001	Trench 4		Pottery	4	Roman
4003	Trench 4		Pottery	3	Roman
4004	Trench 4		Pottery	1	Roman
4004	Trench 4	2	Pottery	2	Roman
4004	Trench 4	4	Pottery	1	Roman
4005	Trench 4		Pottery	1	Roman
4005	Trench 4	12	Pottery	2	Roman
4005	Trench 4	13	Pottery	3	Roman
4005	Trench 4	20	Pottery	3	Roman
4006	Trench 4	21	Pottery	2	Roman
4007	Trench 4	22	Pottery	3	Roman
4007	Trench 4	23	Pottery	1	Roman
4009	Trench 4	11	Pottery	1	Roman

Context	Test Pit/ Trench	SFN	Fabric	Quantity	Details
4009	Trench 4		Pottery	2	Roman
4009	Trench 4	24	Pottery	1	Roman
4009	Trench 4	26	Pottery	1	Roman
4010	Trench 4	28	Pottery	3	Roman
4010	Trench 4	29	Pottery	2	Roman
4011	Trench 4		Pottery	13	Roman
4011	Trench 4	30	Pottery	3	Roman
4011	Trench 4	31	Pottery	3	Roman
4011	Trench 4	32	Pottery	1	Roman
4017	Trench 4		Pottery	2	Post-Medieval
5000	Trench 5		Pottery	2	Medieval
5000	Trench 5		Pottery	1	Roman
5005	Trench 5		Pottery	3	Roman
5005	Trench 5		Pottery	1	Roman
5005	Trench 5		Pottery	4	Roman
5006	Trench 5	33	Pottery	1	Roman
5006	Trench 5	35	Pottery	2	Roman
5009	Trench 5	44	Pottery	1	Roman
5009	Trench 5	45	Pottery	1	Roman
5011	Trench 5	42	Pottery	1	Roman
5011	Trench 5	43	Pottery	1	Roman
6000	Trench 6		Pottery	2	Post-Medieval
6001	Trench 6		Pottery	2	Post-Medieval
6004	Trench 6		Pottery	1	Post-Medieval
6006	Trench 6		Pottery	4	Medieval/Post-Medieval
6007	Trench 6		Pottery	1	Medieval
Total				**320**	
101	Test Pit 1		Quern stone	1	
4003	Trench 4	3	Quern stone	1	
Total				**2**	
102	Test Pit 1		Slag *		Hammerscale
103	Test Pit 1		Slag *		Iron prill
103	Test Pit 1		Slag	2	Hearth lining
205	Test Pit 2		Slag *		Not hammerscale
3002	Trench 3		Slag	3	Hearth bottom
3012	Trench 3		Slag *		Hammerscale
4009	Trench 4		Slag *		Hammerscale
4010	Trench 4		Slag *		Hammerscale
4011	Trench 4		Slag	1	Hearth bottom
4011	Trench 4		Slag *		Hammerscale
5008	Trench 5		Slag *		Hammerscale
Total				**6**	

*artefacts recovered from scan of environmental retent samples

Appendix IV

Inventory of Environmental Samples from Test Pits 1&2

Sample No	Context No	Description	Type
1	103	Fill of ditch	GBA
2	204	Deposit	GBA
3	205	Deposit	GBA
4	206	Silt deposit below wall foundation	GBA
5	207	Organic deposit below 206	GBA
6	102	Fill of ditch	GBA
7	207	Organic deposit below 206	GBA
8	208	Deposit	GBA

Inventory of Environmental Samples from Trenches 1-6

Sample No	Context No	Description	Type
1	5008	Grave fill	GBA
2	3011	Deposit	GBA
3	3012	Secondary fill of ditch 3013	GBA
4	5009	Water-logged deposit	GBA
5	3015	Primary fill of ditch 3013	GBA
6	3014	Deposit	GBA
7	1006	Deposit	GBA
8	1007	Deposit	GBA
9	4011	Fill of ditch 4008	GBA
10	4016	Water-logged deposit	GBA
11	4009	Fill of ditch 4008	GBA
12	4010	Fill of ditch 4008	GBA
13	4012	Fill of ditch 4008	GBA
14	6006	Deposit	GBA

Appendix V

Tables

Table 1. Summary of the animal bones from Roman contexts

Context	Frags	Cattle	Sheep/ goat	Pig	Horse	Cf. Chicken	Large-sized mammal	Small-sized mammal	Unid.
103	7	2		1			4		
103*	*9*		*1*	*1*			*4*	*2*	*1*
201	2	1							1
202	26	4	2	2			13	5	
204*	*11*		*2*				*2*	*6*	*1*
205*	*9*		*1*					*3*	*5*
208	1		1						
208*	*12*						*4*	*1*	*7*
1005	2	2							
1007*	*2*						*1*	*1*	
3012*	*6*		*1*					*5*	
3015*	*1*			*1*					
4001	8	4	1			2	1		
4005	5	3			1		1		
4007	3	3							
4009	12	2	1			1	7	1	
4009*	*5*						*2*	*3*	
4010	5					1	4		
4010*	*1*						*1*		
4011	6	3					3		
4011*	*6*						*3*	*1*	*2*
5005	10	4		1	1		4		
5006	7	5	1				1		
5010	3				3				
Total	**159**	**33**	**11**	**6**	**5**	**2**	**56**	**29**	**17**

*Artefacts recovered from environmental samples

Table 2. Comparisons of species proportions from Roman contexts at Bridge Lane, Ilkley and the vicus and fort at Roman Castleford (from Berg 1999)

Sites	Cattle %	Sheep/goat %	Pig %
Roman Ilkley	66	22	12
Roman Fort, Castleford	66	24	10
Roman Vicus, Castleford	58	28	14

Table 3. Summary of the animal bones from disturbed contexts

Context	Frags	Cattle	Sheep (/goat)	Pig	Rabbit	Large-sized mammal	Small-sized mammal	Unident.
101	1					1		
102	3	1	1			1		
200	3					3		
1004	9		2	1		6		
2002	2	1						1
3001	3	1			1			1
3002	20	4	2	1		9	2	2
3003	20	2	10			8		
3007	14	4				10		
3008	3		1			1		1
3009	2					1	1	
3010	5					4		1
5000	10	1	2	2		5		
6003	1					1		
6004	1	1						
6006	7			7				
Total	**104**	**15**	**18**	**11**	**1**	**50**	**3**	**6**

Table 4. Fusion data for cattle, sheep(/goat) and pig (after Silver 1969)

Cattle	Fused	Not fused	% fused
7-18 mths. (S, DH, PR, P, PH1, PH2)	8	0	100
24-36 mths. (DMC, DT, DMT)	2	1	67
36-48 mths. (PH, U, DR, PF, DF, PT, C)	2	2	50
Sheep(/goat)			
6-16 mths. (S, DH, PR, P, PH1, PH2)	1	1	50
18-28 mths. (DMC, DT, DMT)	0	1	0
30-42 mths. (PH, U, DR, PF, DF, PT, C)	0	1	0
Pig			
12 mths. (S, DH, PR, P, PH2)	0	1	0
24-30 mths. (PH1, DMC, DT, DMT, C)	0	1	0
36-42 mths. (PH, U, DR, PF, DF, PT)	0	1	0

Key: S = scapula, DH = distal humerus, PR = proximal radius, P = pelvis, PHI = first phalanx, PH2 = second phalanx, DMC = distal metacarpal, DT = distal tibia, DMT = distal metatarsal, C = calcaneum, PH = proximal humerus, U = ulna, DR = distal radius, PF = proximal femur, DF = distal femur, PT = proximal tibia

Table 5: Ceramic building materials

Context	Fabric	Form	Weight	Thickness	Comments
#103	F1	Flue	200	16	Combed; vent?; triangular spatula marks? (Fig. 14,3)
103	F1	Flue	75	19	
103	F1	Flue	125	17	Combed
103	F2	Tegula	75	0	Flange only
103	F2	Roman brick	200	28	
103	F1	Flue	50	18	
103	F1	Roman brick	25	21	
103	F0	Daub	10	0	
202	F5	Flue	100	19	Combed; Toothed comb; sooted/ burnt
202	F1	Roman brick	175	27	
202	F0	Daub	75	0	2 frags; wattle rod impressions
1001	F0	Pipe	50	14	C19th or later; similar fabric to f2
1004	F4	Imbrex	100	22	
1004	F3	Imbrex	125	19	Reduced core
1005	F5	Roman brick	250	27	
1007	F0	Brick	100	0	Possibly post medieval
3003	F1	Roman brick	20	0	
3010	F4	Roman brick	25	0	
4003	F1	Flue	50	16	Combed
4010	F6	Brick	75	0	Roman?
5000	F0	Brick	25	0	C19th or later
5005	F0	Brick	10	0	Roman?
5006	F4	Roman brick	225	31	Reduced core
6003	F0	Brick	250	0	C19th or later
6006	F0	Brick	200	0	Similar to fabric f1; probably post medieval

Table 6: Description of ceramic building material fabrics

Fabric	Form
1	Hard red fabric. Inclusions: quartz up to 1mm across, poorly sorted abundant; sparse grog; sparse limestone; silty bands
2	Hard yellow-light orange fabric. Inclusions: quartz, poorly sorted, abundant, sparse grog, common limestone
3	Dark red hard fabric, reduced core, sandy. Inclusions: quartz, abundant, well sorted; sparse limestone
4	Dark orange fabric, slightly sandy. Inclusions: quartz, common, well sorted; occasional silty bands
5	Light orange fabric, similar to fabric 2. Inclusions: quartz, poorly sorted, abundant, sparse grog, common limestone; occasional silty bands
6	May not be Roman. Fine red fabric. Inclusions: limestone up to 2mm across, abundant, poorly sorted, sparse quartz

Table 7. Roman glass

Vessel	Context	Description	Dimensions
1	201	Jug, flask or bottle; shoulder fragment. Many elongated bubbles. Shoulder curving up to edge of neck	24x23mm, wall thickness 3mm
2	3010	Base fragment. Solid pushed-in base ring. Side and base missing	Base diameter *c.* 6mm
3	1004	Bottle; handle fragment. Edge of upper part of broad ribbon handle retaining part of return trail. Small find no.15	22x16mm
4	1004	Prismatic bottle; upper body fragment. Small find no.15	
5	4009	Prismatic bottle; body fragment. Small find no.25	
6	103	Fragment, possibly from base of prismatic bottle. Melted and distorted	29x19mm
7	4011	Body fragment. Convex-curved	19x10mm, wall thickness 2mm
8*	4009	Chip	

*Artefacts recovered from environmental samples

Table 8. Post-Roman glass

Context	Description	Date
1001	1 green bottle fragment 1 moulded blue/green fragment, probably bottle	Modern
1002	1 green bottle fragment 1 moulded blue/green fragment, probably bottle	Modern
1004	1 colourless oval bottle base 1 green bottle fragment	Modern
3001	2 melted lumps appearing black; glassy slag	Modern
3001	1 colourless window 4 dark green prismatic bottle fragments 1 green bottle fragment 2 blue/green bottle fragments	Modern
3002	42 window fragments, pale greenish 1 colourless bottle neck & shoulder 3 green bottle body fragments 14 blue/green bottle body fragments	Modern
3003	1 blue/green bottle base; 2 blue/green bottle body fragments; 1 green bottle body fragment	Modern
3008	1 window fragment, green	Modern
3009	7 green bottle fragments 1 blue/green octagonal bottle base; melted dark blue trails	Modern
3010	2 green bottle fragments	Modern
6000	1 blue/green bottle rim fragment	Modern
6001	Green bottle fragment	Modern
6004	1 colourless base? Fragment	Modern

NB: In the date field modern is taken as post-dating the late 18th century

Table 9: Metalwork

Context	Notes
202	Nail; iron. Flat-headed; tip broken. Length 36mm
202	Nail; iron. Shank fragment
1002	Nail; copper alloy. Flat circular head; square-section tapering shank. Head diam. 8mm, length 40mm
#1004	Ring; lead alloy. D-section with internal casting flash; one third extant. Diam. 20mm, section 3mm x 2mm (Fig. 14,2)
#3007	Strip; copper alloy. Rectangular; both short ends broken. Two rows of punched circles forming cable patterns. SEM analysis indicates tin-plated. Length 31mm, width 22mm thickness 0.5mm. Sf 47 (Fig. 14,1)
3009	Nail; iron. Shank fragment
5003	Nail; iron. Flat-headed; tip broken. Length 47mm

Table 10 Metalworking debris

Context	Type	Weight (g)	Notes
102*	HAMMS		Small quantity of plate and spheroidal hammerscale
103*	VHL	5	Iron slagged vitrified hearth lining
103*	IRON P	1	Iron prill (not magnetic)
103*	HAMMS		Small quantity of plate and spheroidal hammerscale
205*			None of the magnetic material retained is hammerscale
3002	HB	126	Plano-convex hearth bottom: Incomplete hearth bottom generated during iron smithing using coal as the fuel (clinker inclusions). It is very dense and the fact that there are hairline cracks in places suggest that lumps of iron may be incorporated within it
3002	SC	31	Two pieces of slagged coal
3002	CLINK	1	
3012*	HAMMS		Very small quantity of plate and spheroidal hammerscale
3015*	HAMMS		Very small quantity of plate and spheroidal hammerscale
4011	HB	339	Plano-convex hearth bottom: Large hearth bottom (length 90mm; width 95mm; height 75mm), encrusted with soil and iron 'leached' from the slag. A large amount of hearth lining/tuyere is attached to the slag but there is no surviving evidence to indicate the location of the air hole. Pieces of charcoal, the fuel used for the iron smithing that produced this slag, is incorporated within it
4009*	HAMMS	2	Significant quantity of crushed plate and spheroidal hammerscale in fresh condition
4010*	HAMMS		Very small quantity of plate and spheroidal hammerscale.
4011*	HAMMS		Small quantity of plate and spheroidal hammerscale
5008*	HAMMS		Small quantity of plate and spheroidal hammerscale

* Artefacts recovered from environmental sample

Table 11. Medieval and Post-Medieval pottery

Context	SFN	Type	Number	Part	Form	Date range	Notes
101†		?Roman	1	Rim	Jar	?Roman	Rim of wheel-thrown jar in a coarse sandy fabric- unfamiliar if medieval, ?Roman
101†		Coarse Sandy ware	1	BS	U/ID	C13th - C14th	Unfamiliar Sandy ware, sooted externally
101†		Reduced Green Glazed Sandy ware	1	BS	U/ID	C14th - C15th	Late medieval reduced sandy ware, glazed int. and ext.
101†		Gritty ware	1	Rim	Jar	?C12th - C14th	Unusual (probably non-local) fine Gritty ware, reduced with dull reddish surfaces int. and ext. Abundant fine quartz grit, mainly sub-angular
102†		Cistercian / Blackware	1	BS	U/ID	C16th - C17th	
102†		Coarse Sandy ware	1	BS	U/ID	C13th - C14th	Reduced throughout, oxidised external margin with a streak of green glaze
102†		Gritty ware	1	BS	U/ID	C11th – C13th	Hard, dense reduced gritty ware with oxidised internal margin, cf. cxt 5000, but a distinct type
102†		Oxidised Gritty ware	1	BS	U/ID	C13th – C14th	Unglazed, hard, orange gritty ware, sub-angular quartz up to 0.8mm
102†		Redware type	1	BS	U/ID	C17th	Orange internally, unglazed externally
200†		Brick	1	Lump	U/ID	U/ID	
200†		Colour Glazed ware	3	BS	U/ID	C18th	Three sherds from three different vessels, glazed internally and externally
200†		Gritty ware	1	BS	U/ID	Medieval	Coarse, sub-angular quartz grit, up to 1.00mm, reduced throughout with dull red oxidised margin externally
200†		Slipware	1	Base	Open vessel	C17th – EC18th	Yellow and orange glazed internally
200†		U/ID	1	Chip	U/ID	Medieval	Small white chip
1001†		Brown Salt Glazed Stoneware	1	Handle	U/ID	C18th – C19th	Strap handle
1001†		Brown Salt Glazed Stoneware	1	Base	Jar	C18th – C19th	
1001†		Brown Salt Glazed Stoneware	1	BS	U/ID	C18th – C19th	
1001†		Green Glazed Stoneware	1	BS	U/ID	C18th – C19th	
1001†		Late Blackware type	2	BS	U/ID	C18th	Both with hard, shiny black glaze internally and externally
1001†		Late Blackware type	1	Base	U/ID	C18th	Hard, shiny black glaze internally, unglazed externally
1001†		Late Yellow ware	1	Rim	Pancheon	C18th – C19th	Yellow internally with broad red lines on and below rim, unglazed externally
1001†		Late Yellow ware	1	BS	Open vessel	C18th – C19th	Yellow internally over white slip, unglazed externally
1001†		Later Medieval Coarse Sandy ware	1	BS	U/ID	Later Medieval	Hard, reduced grey gritty fabric with patchy thin green glaze externally
1001†		Later Medieval Sandy ware	1	BS	U/ID	Later Medieval	Hard, fine oxidised sandy ware with patchy green glaze externally
1001†		Oxidised Gritty ware type	1	BS	U/ID	?Medieval	Unusual gritty ware fabric with red slip externally, unglazed internally
1001†		Pearlware/Whiteware	1	Base	Mug/Jar	C18th – C19th	Pale blue printed decoration, chinese style
1001†		Porcelain	1	Base	Bowl	C18th – C19th	Ring foot base, blue painted decoration externally
1001†		Redware	1	Rim	Bowl	C17th	Heavily abraded, flaked rim sherd
1001†		Sandy ware	1	BS	U/ID	Medieval	Reduced sandy ware with oxidised external surface and soft white (?)slip
1001†		Unglazed red earthenware	1	BS	U/ID	Modern	
1001†		Whiteware	1	BS	U/ID	C18th – C19th	Moulded decoration, hand painted to emphasise leaf decoration, perforated body
1001†		Whiteware	1	Rim	Flatware	C19th	Heavily crazed, blue printed decoration internally
1001†		Whiteware	1	BS	U/ID	C19th	Dark blue decoration -floral motif with bird
1001†		Whiteware	1	Base	Bowl	LC18th – C19th	Pale blue printed decoration, chinese style, internally

Context	SFN	Type	Number	Part	Form	Date range	Notes
1001†		Whiteware type	1	Rim	Open vessel	C18th – C19th	Printed foliate decoration (black) with hand painted detail (yellow/gold), red line on rim
1001†		Whiteware type	1	Base	U/ID	C19th	Heavily crazed, grey externally
1002†		Brown Glazed Coarseware	1	Rim	Pancheon	C17th – C18th	Coal measures clay - white streaks and a laminated fracture
1002†		Coarse Sandy ware	1	BS	U/ID	C13th – C14th	Hard, reduced ware with abundant angular quartz up to 0.4mm, thin grey external margin under green glaze
1002†		Redware type	1	Chip	U/ID	C17th	No internal surface, patchy, accidental glaze externally
1004†	14	?Roman	1	BS	U/ID	?Roman	Hard reduced ware with moderate quartz grit in a reduced matrix, burnished line externally
1004†		Brown Salt Glazed stoneware	1	BS	U/ID	C18th – C19th	
1004†		Colour Glazed ware	1	BS	U/ID	C18th	Flake with no internal surface
1004†		Early modern red earthenware	1	Rim	Jar	C18th – C19th	Unglazed fine red earthenware with stamped circles around rim, joins with sherd from 3001
1004†		Sandy ware	1	BS	U/ID	Medieval	
1004†	14	Semi-vitrified Gritty ware	1	BS	U/ID	Medieval	Buff/orange sparse gritty ware with orange margins internally and externally
1004†		Slipware	1	Rim	Bowl	LC17th - C18th	Pie-crust' rim, multi-coloured slip decoration internally
1004†		Unglazed red earthenware	2	BS	U/ID	Post-med.	
2002		Colour Glazed ware	1	BS	U/ID	C18th	Shiny brown glaze int. and ext. over pale orange fabric
2002		Fine Gritty ware	1	BS	U/ID	C11th – C14th	Hard, fine reduced gritty ware, oxidised margins int. and ext.
2002		Gritty ware	1	BS	Jar/CP	C11th – C13th	Sooted ext., unglazed, differs from established local types
2002		Yellow ware 10	1	BS	Open vessel	C17th	Yellow glaze int. over white slip, ext. surface missing
3001		Early modern red earthenware	1	Rim	Jar	C18th – C19th	Unglazed fine red earthenware with stamped circles around rim, joins with sherd from 1004
3001		Late Brown Glazed Coarseware	1	BS	Open vessel	C18th – C19th	Streaky white (?)Coal Measures clay
3001		Late Yellow ware	2	BS	Pancheon	C18th – C19th	
3001		Stoneware	1	Rim	Bottle	C19th – C20th	Greenish glazed stoneware bottle
3001		Whiteware	1	BS	Open vessel	C18th – C19th	Pale blue floral printed decoration
3001		Whiteware	1	Rim	Plate	C19th – C20th	Dark blue geometric decoration (edge of Willow pattern)
3001		Whiteware type	1	Base	Open vessel	C18th – C19th	Yellowish glazed finish with dark red printed decoration, featuring a fish
3002		Brown Salt Glazed Stoneware	1	BS	U/ID	C18th – C19th	Three sherds, joining. Shiny metallic glaze internally and externally
3002		Early modern red earthenware	1	BS	U/ID	C18th – C19th	
3002		Early modern red earthenware	1	Base	U/ID	C18th – C19th	
3002		Mottled ware type	1	Rim	Cup/mug	C18th	Brown and yellow mottling
3002		Porcelain	1	BS	U/ID	LC18th - C19th	Moulded relief decoration and handle stump
3002		Redware	1	BS	Open vessel	C17th	Clear glaze internally, red slip externally
3002		Stoneware	1	Rim	Jar	C18th – C19th	Brown metallic externally, greenish externally
3002		Stoneware	1	BS	U/ID	C18th – C19th	Yellowish salt glazed finish internally and externally
3002		Whiteware	1	BS	U/ID	LC18th - C19th	Moulded relief decoration with gold paint externally
3002		Whiteware	1	BS	U/ID	LC18th - C19th	Red-brown printed decoration externally
3002		Whiteware	2	BS	U/ID	LC18th - C19th	One flake
3002		Whiteware	1	Rim	U/ID	LC18th - C19th	Blue printed floral decoration

Context	SFN	Type	Number	Part	Form	Date range	Notes
3003†		Bone China	1	Base	Bowl	C19th – C20th	Ring foot base
3003†		Brown Glazed Coarseware	1	BS	U/ID	C18th	Hard, shiny brown glaze internally, unglazed externally
3003†		Brown Salt Glazed Stoneware	2	BS	U/ID	C18th – C20th	Brown externally, greenish internally
3003†		Developed Stamford ware	1	Base	U/ID	C12th – MC13th	No later than 1250, mottled green glaze
3003†		Gritty ware	1	Rim	Jar	C12th – LC13th	Square profiled rim, with red slip internally. Unfamiliar fabric
3003†		Late Yellow ware	1	BS	Open vessel	C18th – C19th	Yellow glaze over white slip internally
3003†		Skipton on Swale type	1	BS	U/ID	C14th – C15th	Handle stump with deep thumbing
3003†		U/ID Late Med. Sandy ware	1	BS	U/ID	Late Medieval	
3003†		Whiteware	1	Rim	Plate	C18th – C19th	Wavy edged plate with pale blue printed decoration
3004		Post-Med. White ware	1	BS	U/ID	C18th – C19th	Unusual bright white fabric, blue glazed internally, moulded floral decoration and blue wash externally
3004		Sandy ware	1	BS/Flake	U/ID	Medieval	Internal surface only, unglazed, fine sandy fabric
3007†	41	Coarse Gritty ware	1	BS	U/ID	MC11th - EC13th	Coarse, buff Gritty ware, sooted and burnt externally
3007†	39	Gritty ware	1	Base	U/ID	C12th – C13th	Sagging base, as cxt 5000, reduced core, orange int. and ext. margins
3007†	41	Gritty ware	1	Base	Jar/CP	MC11th - EC13th	Hard, oxidised, dense Gritty ware, slightly vesicular, flat base
3007†	39	Hillam ware type	1	BS	Jar/CP	C11th – C12th	Sooted externally, buff gritty fabric
3008†		Brown Glazed Coarseware	1	BS	U/ID	C17th – EC19th	Abraded body sherd
3008†		Green Glazed Gritty ware	1	BS	U/ID	C13th – C14th	Green glaze internally and externally
3008†		Manganese Mottled ware	1	BS	U/ID	C18th	
3008†		Manganese Mottled ware	1	BS	U/ID	C18th	Yellow glazed internally, brown mottled glaze externally
3008†		Object	1	Object	U/ID	U/ID	
3008†		Reduced Gritty ware	1	Base	U/ID	C12th – C13th	Very hard, dense, reduced Gritty ware, wash effect int. and ext., quartz inclusions only
3008†		Tin Glazed Earthenware	1	BS	U/ID	C17th	Small abraded sherd
3008†		White Salt Glazed Stoneware	2	BS	Flatware	C18th	One freshly broken body sherd, one decorated (barleycorn) edge sherd (plate)
3008†		Whiteware	2	BS	U/ID	C19th	
3009		Bone China	1	Base	Bowl	C19th	Ring foot base
3009		Bone China	1	Base	Bowl/cup	C19th	Ring foot base
3009		Bone China	4	Rim	Cup	C19th	Fine red or gold lines externally
3009		Bone China	6	BS	Cup/bowl	C19th	
3009		Bone China	1	Handle	Cup	C19th	
3009		Factory made slipware	1	Rim	Mug	C19th – C20th	Blue paint, brown slip line
3009		Late Yellow ware	4	BS	Open vessel	C18th – C19th	Late Yellow glazed pancheon with brown band near rim, unglazed externally
3009		Stoneware	1	Base	Bottle	C18th – EC19th	Shiny brown glaze externally, throwing cone internally
3009		Stoneware	1	Base	U/ID	C18th - EC19th	Pale buff salt glaze internally and externally
3009		Stoneware	1	BS	Bottle	C19th	Shiny greenish buff glaze internally and externally

Context	SFN	Type	Number	Part	Form	Date range	Notes
3009		Whiteware	1	BS	U/ID	C18th - C19th	Black printed decoration
3009		Whiteware	1	Base	Flatware	C19th	
3009		Whiteware	1	Profile	Bowl	C19th	Fine blue printed floral design internally
3009		Whiteware	1	Base	Flatware	C19th - C20th	
3009		Whiteware	1	Rim	Flatware	C19th - C20th	
3009		Whiteware	1	Rim	Flatware	C19th - C20th	Green decoration
3009		Whiteware	1	Rim	Cup	C19th - C20th	Decorated inside rim
3009		Whiteware	1	BS	U/ID	C19th - C20th	Blue and white bands around vessel
3010†		Creamware	2	BS	Flatware	C18th	
3010†		Creamware	1	BS	Flatware	C18th	
3010†		Redware	1	BS	U/ID	C17th	
4017		Brown Glazed Coarseware	1	BS	Open vessel	C17th - C18th	Oxidised, slightly sandy textured fabric containing quartz and non-crystalline inclusions, 3 sherds joining
4017		Late slip decorated ware	1	BS	Open vessel	C18th - C19th	White slip, yellow and red-brown decoration
5000†		Gritty ware	1	BS	U/ID	C12th - C13th	Hard, unglazed gritty ware, dense reduced fabric with abundant angular quartz grit, oxidised internal margin, dull buff externally
5000†		Gritty ware	1	BS	U/ID	C12th - C13th	Hard, unglazed gritty ware, dense reduced fabric with abundant angular quartz grit, oxidised internal margin, dull buff externally
5000†		Gritty ware	2	BS	U/ID	C12th - C13th	Very hard, reduced Gritty ware with oxidized internal margin and abundant rounded - sub-angular quartz grit. Unglazed
6000		Whiteware	1	BS	U/ID	LC18th - C19th	Words: Wharfedale Inn externally with stylised floral decoration
6000		Yellow ware 10 type	1	BS	Open vessel	C17th	Bright orange fabric, white slip internally under yellow gaze
6001		Late Yellow ware	1	Base	Pancheon	C18th - C19th	Thick yellow glaze over white slip internally, thin red slip externally
6001		Late Yellow ware	1	Rim	Pancheon	C18th - C19th	Yellow glaze int. over white slip, brown line internally below rim
6004		Mottled ware type	1	Rim	Cup/mug	C18th	
6006		Blackware type	1	Base	Jar	C17th	Internal glaze heavily striated
6006		Brown Glazed Coarseware	1	BS	U/ID	C17th	Fine orange fabric with metallic brown glaze internally and externally
6006		Colour Glazed ware	1	BS	U/ID	C18th	Very shiny glaze
6006		Purple Glazed ware	1	BS/Flake	U/ID	C15th - C16th	As cxt. 6007, purple glazed whiteware
6007		Purple Glazed ware	1	BS	U/ID	C15th - C16th	Whiteware with purple glaze ext., black ferrous inclusions and quartz
		Total	**150**				

† indicates residual Roman pottery also present

Table 12. Fabric proportions of Roman pottery by major ware class

Fabric	**% by count**
Dressel 20 amphorae	1.8%
Gallic amphorae	0.6%
BB1	8.8%
Nene Valley cc ware	2.9%
Terra Nigra?	0.6%
Oxidised mortaria	2.9%
Noyon mortaria	0.6%
Oxidised wares	14.1%
White-slipped flagon fabrics	0.6%
Greywares	31.2%
Samian	25.9%
Whitewares	4.1%

n=170 sherds

Table 13. Functional analysis of Roman pottery

Flagons	**Jars**	**Beaker/Cup**	**Bowls**	**Dishes**	**Mortaria**
3.1%	18.8%	15.6%	25.0%	31.3%	6.3%

Table 14. Spot dates of Roman pottery

Context	SFN	Notes
#101†		Samian chip, SG La Graufesenque, Flavian Dr 18/31 or 18/31R, SG La Graufesenque, late Flavian-Trajanic (Fig. 15,10)
102†		Bodysherd, CG, Hadrianic-Antonine
#103		A Dressel 20 amphora bodysherd, C1st-C3rd An oxidised bodysherd, Roman A Ver ware bodysherd, C1st-mid C2nd A Dr38? Rim, CG, later Hadrianic-early Antonine A samian bodysherd, Les Martres, Trajanic-early Hadrianic Dr18/31 or 31 rim, CG, Hadrianic-Antonine (Fig. 15,19) Four sandy greyware bodysherds A BB1 flange rimmed dish or bowl rim, Hadrianic-early C3rd (Fig. 15,30) A greyware dish/bowl base, C1st-mid C3rd A greyware flange rimmed dish rim, no basal chamfer, Hadrianic-early C3rd An oxidised bowl with everted, beaded rim, just possibly Ebor ware, C1st-C3rd (Fig. 15,28) Two bodysherds and three rimsherds from an everted rimmed jar, exterior grey, interior and body oxidised, sandy, just possibly Ebor ware, C1st-C3rd (Fig. 15,27) Two joining mortarium rimsherd from a beaded and flanged mortarium with flange rising above bead with two grooves on the flange in a sandy oxidised fabric with white-slip, later C1st-mid C2nd (Fig. 15,12)
200†		A Nene Valley colour-coated bodysherd, late Antonine or later A greyware bodysherd with acute lattice decoration, Hadrianic-Antonine Two BB1 dish/bowl base sherds, Hadrianic or later A samian bodysherd, CGS, Hadrianic-Antonine Three sherds from three different vessels, glazed internally and externally
201		A greyware bodysherd with acute lattice decoration, Hadrianic-Antonine
202		A coarse sandy oxidised mortarium spout fragment, C1st-C2nd Four greyware bodysherds and two with acute lattice decoration, Hadrianic-Antonine Samian; Dr38 rimsherd, late Hadrianic-Antonine, Dr18/31R or 31R bodysherd, CG, Hadrianic-Antonine, Dr30/37 scrap, CG, Hadrianic-Antonine
204		A greyware bodysherd, Hadrianic-mid C3rd
#1001†		A stamped base fragment, SG, La Graufesenque, Flavian (Fig. 14,5) A greyware grooved rim dish rim with basal chamfer, Hadrianic-Antonine (Fig. 15,23)
#1002†		A Dr30/37 chip, CG, probably Hadrianic A Dr37 footring fragment, joins 1002, SF1 below, CG, AD160-90 A greyware bodysherd, C1st -mid C3rd
#1002†	1	A large Dr 37 base sherd, CG, product of the workshop of Doeccus i, AD160-90 (Fig. 14,4 similar to Woodward 1925, No.9, Plate XVII, p202)
#1004†	Incl. 7 & 9	A Nene Valley colour-coated bodysherd, probably from a lid, late Antonine or later Two oxidised mortarium base sherds in an oxidised fabric, common coarse sand temper, with white quartz, rounded brown stone and sub-rounded black stone trituration grits, unslipped, later C1st-C2nd Four greyware bodysherds A greyware bodysherd with multiple burnished wavy lines. A hard gritty fabric, not obviously South Yorkshire A Curle 21 rimsherd, CGS, AD150-200 A Dr36 bodysherd, CG, Hadrianic-Antonine A Dr37 bodysherd, burnt, CGS, Hadrianic-Antonine A samian chip, C1st-C3rd A samian cup base, CGS, Hadrianic-Antonine. A Dr79 rim, CGS, AD160-200 (Fig. 15,18)

Context	SFN	Notes
#4007	22	A bodysherd and two rimsherds of an oxidised ware reeded rimmed bowl with wavy line incised on the top of the rim, Flavian-Trajanic (Fig. 15,9)
4007	23	A greyware bodysherd, Hadrianic-mid C3rd
4009		An oxidised bodysherd, C1st-C2nd A greyware bodysherd, C1st-C3rd
#4009		Tazza bodysherd with frilled cordon, in a buff white fabric with coarse sand temper (Fig. 15,25 similar to Hartley 1966, No.35, Fig. 10, p55-6)
4009	24	Dr27 rim, CG, AD120-60 (Fig. 15,20)
4009	26	Samian bodysherd, CG, Hadrianic-Antonine
#4010	28	BB1 flange rimmed bowl rim, Hadrianic-early C3rd BB1 bodysherd, Hadrianic or later BB1 bodysherd, with obtuse lattice decoration, C3rd-mid C4th
4010	29	A greyware base A greyware bodysherd with acute lattice, Hadrianic-Antonine
4011	Incl. 30 & 31	Two BB1 bodysherds, Hadrianic or later One greyware bodysherd Whiteware bodysherd, probably Ver region ware, later C1st-early C2nd A sandy greyware bodysherd A BB1 bodysherd, Hadrianic or later A soapy greyware bodysherd, finely micaceous Three oxidised ware bodysherds and a jar rimsherd with short, straight everted rim, C1st-C2nd A BB1 bodysherd from a dish/bowl, burnt, Hadrianic or later A greyware flange rimmed bowl rim, Hadrianic-early C3rd A greyware bodysherd with rustic ware decoration, Flavian-Trajanic A greyware jar base, Hadrianic-mid C3rd Two joining samian bowl bodysherds, CG, Hadrianic-Antonine A buff bodysherd Three fine whiteware bodysherds
#4011	32	BB1 flange rimmed bowl, Hadrianic-early C3rd (Fig. 15,26)
#5005		BB1 bodysherd with acute lattice, Hadrianic-Antonine An oxidised bodysherd, C1st-C2nd? A CGS bowl base fragment, Hadrianic-Antonine Three greyware bodysherds and a jar rim, form rather like a 'Honey pot' with a squared, short, everted rim, probably C1st-early C2nd (Fig. 15,15)
5006	33	A greyware bodysherd, C2nd-early C3rd
#5006	35	Two black sandy bodysherds, one with low relief rusticated decoration, Flavian-Trajanic (8, Fig. 14, similar to Hartley 1966, No.6, Fig. 9, p52-3)
5009	44	A hard greyware bodysherd, C1st-C2nd
#5009	45	A greyware jar with triangularly-sectioned necked rim, exterior sooted, C1st-early C2nd (Fig. 15,14)
#5011	42	A Noyon mortarium base, Flavian-Trajanic (Fig. 15,17)
5011	43	A flange in oxidised ware, possibly from a segmental bowl, perhaps C1st-C2nd

† Indicates medieval/post-medieval pottery also present

Table 15. Description of flots (1998)

Context	Trench	Sample	Comments
103	Test Pit 1	1	Small particles of sand with remains of non-carbonised botanical remains
204	Test Pit 2	2	Fine grit with flecks of carbonised material, plant roots, insect remains, shells, and a few fragments of coal. Carbonised cereal grain fragments (in poor condition), carbonised seed of Chenopodium and a few non-carbonised seeds of nettle and stitchwort.
205	Test Pit 2	3	Fine grit with clay particles and tiny fragments of carbonised material. A single carbonised Chenopodium seed.
206	Test Pit 2	4	Fine sand with a few fragments of carbonised material and some non-carbonised woody fragments. Nothing identifiable.
207	Test Pit 2	5	Organic material preserved by waterlogging with finely macerated plant remains and worm casts. Many non-carbonised seeds.
207	Test Pit 2	7	Organic deposit with fine grit and clay particles, insect remains and worm casts. Many non-carbonised seeds.
208	Test Pit 2	8	Silicaceous grit with some woody fragments. Some non-carbonised seeds.

Table 16. Description of flots (1999)

Context	Trench	Sample	Comments
1006	1	7	Tiny particles of sand.
1007	1	8	Tiny particles of sand with a few particles of unidentifiable carbonised material. .
3011	3	2	Fine grit with a few flecks of carbonised material, a small chip of bone.
3012	3	3	Fine grit with iron stains and tiny fragments of carbonised material. Three fragments of carbonised cereal grains.
3015	3	5	Fine grit with particles of clay and very small fragments of carbonised material, also bone. Some larger fragments of charcoal = Corylus.
3014	3	6	Fine grit with some burnt clay particles and particles of fine carbonised material.
4011	4	9	Fine grit with some finely macerated plant material, insect remains and very small flecks of carbonised material. Two carbonised cereal grain fragments and a few non-carbonised seeds.
4009	4	11	Fine grit with very small flecks of carbonised material, insect pupa case and two fragments of carbonised cereal grain.
4010	4	12	Fine grit with flecks of carbonised material. One fragment of carbonised cereal grain and two non-carbonised seeds.
4012	4	13	Fine grit with flecks of carbonised material and insect remains, also non-carbonised seeds of *Carex* spp. And *Polygonum* and a vesicle from a *Rumex* fruit.
4016	4	10	Very compacted, taken from a waterlogged deposit containing timber stakes. Breaking up was done chemically using nitric acid then washing through a fine sieve. The bulk of the material was clay leaving a residue of very finely macerated organic material, mostly fibrous, but nothing identifiable. A single beetle wing case.
5008	5	1	Fine grit with very small flecks of carbonised material and fragments of bone. No identifiable remains.
5009	5	4	A waterlogged deposit containing very compacted material similar to that in sample 4016. Also present were timber planks and stakes. The material was broken up chemically using nitric acid then sieving. Almost all the material turned out to be clay leaving a very small residue of organic material but nothing identifiable.
6006	6	14	Particles of sand and very small fragments of non-carbonised material. Some small fragments of charcoal showed the characteristics of ring porous wood and were either oak or ash.

Table 17. Botanical remains (1998)

1998	Sample number						
SPECIES	**1/103**	**2/204**	**3/205**	**5/207**	**6/102**	**7/207**	**8/208**
Alnus glutinosa (alder)						2	
Bromus spp. (brome grass)				7		8	
Carex spp. Trigonous type (sedge)	6			7	1		1
Carex spp. Biconvex type (sedge)	3						
Chenopodium album (fat hen)	1	1c	1c			2	1
Conium maculatum (hemlock)	2						
Corylus avellana (hazel)						1	
Filipendula ulmaria (meadow sweet)				1		2	
Heracleum sphondylium (hog weed)	1						
Isolepis setacea (bristle club rush)						1	
Juncus spp. (rush)	2			2		3	
Lamium album (white dead-nettle)						1	
Myosotis spp. (forget me not)						4	
Montia fontana var. Chondrosperma (blinks)						1	
Polygonum aviculare (knotgrass)				2			
Polygonum lapathifolium (persicaria)				1			
Potentilla spp. (cinquefoil)						1	
Ranunculus acris (meadow buttercup)				1		35	
Ranunculus repens (creeping buttercup)	1			20			6
Rubus fruticosus (blackberry)	2			48		55	76
Rubus idaeus (raspberry)	1				1	2	
Rumex acetosa (sorrel)	4					4	2
Rumex obtusifolius (dock)				2		4	1
Sambucus nigra (elder)					1	1	
Sonchus oleraceus (sowthistle)				1		1	
Stellaria graminea (stitchwort)	4	3					
Urtica dioica (stinging nettle)	180	2		73		40	2
Viola spp. (violet/pansy)				3		5	3
Cereal undiff.		4c		1c			
TOTALS	207	10	1	169	3	173	92

The figures denote the number of remains recovered and the suffix "c" indicates carbonised remains.

Table 18. Botanical remains (1999)

SPECIES	3/3012	9/4011	11/4009	12/4010	13/4012	14/6006
Carex spp. (sedge)		6			1	
Polygonum aviculare (knotweed)					2	
Rubus fruticosus (blackberry)				1		
Rumex acetosa (sorrel)		1				
Rumex spp. (dock)					1	
Sambucus nigra (elder)						1
Stellaria graminea (stitchwort)		4				
Urtica dioica (stinging nettle)						8
Viola spp. (violet)				1		
Cereal undiff.	2c	2c	2c	1c		
TOTALS	2	13	2	3	4	9

The figures denote the number of remains recovered and the suffix "c" indicates carbonised remains. The reasons for the differential survival of ecofactual material between the test pits and trial trenches were not immediately apparent.

Table 19. Analysis of habitats

Bromus spp. (grass)	Grassland/waste ground
Carex spp. (sedge)	Grassland/marshes
Chenopodium album (fat hen)	Waste ground/arable
Conium maculatum (hemlock)	Marshes/waste ground
Corylus avellana (hazel)	Wood margins
Filipendula ulmaria (meadowsweet)	Grassland/marshes
Heracleum sphondylium (hogweed)	Grassland/ open woods
Isolepis setacea (bristle club rush)	Marshy meadows
Juncus spp. (rushes)	Marshes
Lamium album (white deadnettle)	Waste places/ wood margins
Myosotis spp. (forget me not)	Woods/grassland
Montia fontana (blinks)	Wet ground
Polygonum aviculare (knotgrass)	Waste ground/arable
Polygonum lapathifolium (pale persicaria)	Waste ground/arable
Potentilla spp. (cinquefoil)	Grassland/waste ground
Ranunculus acris (meadow buttercup)	Grassland
Ranunculus repens (creeping buttercup)	Wet meadows/waste ground
Rubus fruticosus (blackberry)	Woodland/hedges/waste ground
Rubus idaeus (raspberry)	Woodland
Rumex acetosa (sorrel)	Grassland/open woods
Rumex obtusifolius (broad leaved dock)	Grassland/arable/waste ground
Sambucus nigra (elder)	Woods/waste ground
Sonchus oleraceus (sowthistle)	Waste ground/arable
Stellaria graminea (stitchwort)	Grassland/woods
Urtica dioica (stinging nettle)	Woods/marshes/waste ground
Viola spp. (violet)	Woods/grassland