

ARCHAEOLOGICAL
EVALUATION
AT
UNIVERSITY OF WORCESTER,
CITY CAMPUS, WORCESTER

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Archaeological evaluation at the University of Worcester, City Campus, Worcester

Simon Sworn

With contributions by Angus Crawford, Katie Head and Liz Pearson

Part 1 Project summary

An archaeological evaluation was undertaken at the new University of Worcester, City Campus (the site of the former Royal Worcester Infirmary, Castle Street; SO 8465 5525). It was undertaken on behalf of the University, who intend refurbishment of selected buildings, demolition of others, and the construction of new buildings and associated landscaping, car parking etc, for the new city centre campus. A planning application is intended to be submitted in the near future. The project aimed to determine if any significant archaeological deposits were present and if so to indicate what their location, date and nature were.

The evaluation consisted of twenty-seven trenches across the site and seven boreholes, located to investigate three topographical zones, the terrace, terrace slope and the River Severn floodplain to the south-west of the site.

Prehistoric

The earliest evidence came from the south-western part of the site where alluvial deposits dipped sharply to the west and south. This suggests that former channels of the River Severn once flowed over the western part of the site and created deep channels. Beyond this, however, no evidence of human prehistoric activity was identified during the evaluation. The available data suggests that the floodplain had an uneven topography in the pre-Roman period, and that former channels were used to dump waste material from the Roman period onwards.

Roman

A number of features, including pits, postholes and ditches, all of which are dated to the Roman period, were observed across the evaluated area. The deposits generally overlay the alluvium or were cut into the underlying natural mudstone and gravels.

Two areas of the site in particular revealed significant deposits of a Roman date. On the higher ground, to the south-east of the site, the area around Walnut House, a number of features indicated activity from the mid 1st – 2nd century. Though the evidence is drawn from a sample, there is a notable lack of material and features dated to the later Roman period. A high density of Roman pottery and features was also noted on the flood plain to the south-west of the site. Roman activity here is represented by the presence of pits, ditches and an extensive area of made ground. Finds analysis from this area indicates activity throughout the entire Roman period (1st – 4th centuries).

Evidence from the site indicates areas of concentrated Roman activity throughout the Roman period. Presence of iron slag within the features is common in this area of Worcester, though no direct evidence of iron manufacture was observed. It would appear that the edge of the flood plain had been a focus of activity throughout the Roman period; for which the proximity of the river must have been of some importance.

Post-Roman and medieval

Above the Roman deposits noted across the site was a substantial layer of post-Roman soil containing residual Roman pottery, identified as a 'dark earth' deposit in origin. The dark earth at Worcester originated as midden material mixed with large quantities of manure deposited by grazing animals that were penned during the later Roman period. In this location, however, outside of the medieval city, agricultural land-use continued until the city expanded again in the 19th century, and the dark earths were continually reworked and deepened over a very long period, which has limited their potential significance.

Medieval evidence was limited to two ditches, one on the higher ground and another on the floodplain. Also a single pit to the south of the site contained medieval material. The lack of extensive medieval occupation or usage of the site was to be expected as this area was outside the northern limits of the city.

Post-medieval

Post-medieval activity was limited to a number of walls, some of which could be related to maps. In addition a substantial early Victorian brick structure was recorded to the south of the site. The structure includes a grate and flues, though its function remains indeterminate.

The construction of the infirmary building from the 1770s onwards involved, in some areas of the site, the removal and re-deposition of large quantities of soil to form building terraces on this sloping site. Substantial areas of the site have undergone considerable truncation, potentially leading to the destruction of much of the earlier buried archaeological evidence.

Modern

Across the site evidence for modern activity was prevalent, these included modern walls and services, all associated with the existing infirmary. None of these features are of archaeological significance.

In summary, the evaluation indicates that extensive areas of well-preserved Roman and post-medieval structural remains are present within the site, representing sequences of occupation from at least the mid 1st – 2nd century AD. The Roman activity has been demonstrated to survive well in the south-east and south-west quadrants. The date, preservation and concentration of the Roman features indicate a site of both significance and importance for Roman Worcester. There also appear, however, to be areas of the site where considerable late 18th – early 20th century ground reduction has removed the potential for extensive, well-preserved archaeological deposit to survive.

Part 2 Detailed report

1. Background

1.1 Reasons for the project

An archaeological evaluation was undertaken at the University of Worcester, City Campus, Worcester, (the site of the former Worcester Royal Infirmary, Castle Street: SO 8465 5525: Fig 1), on behalf the University of Worcester. The client proposes the refurbishment of selected buildings, demolition of others, and the construction of new buildings and associated landscaping, car parking etc, for a new city centre campus for the University of Worcester. The University intends submission of a planning application to Worcester City Council, who consider that sites of archaeological interest might be affected (WCM 96077, 98175).

1.2 Project parameters

The project conforms to the *Standard and guidance for archaeological field evaluation* (IFA 1999).

The project also conforms to a brief (WCC 2006a included with tender documentation) and a project proposal (including detailed specification; HEAS 2006), which has been approved by Worcester City Council.

1.3 Aims

The aims of the archaeological evaluation were to locate archaeological deposits and determine, if present, their extent, state of preservation, date, type, vulnerability and documentation. The purpose of this was to establish their significance, since this would make it possible to recommend an appropriate treatment, which may then be integrated with the proposed development programme.

The brief (WCC 2006a) for the evaluation identified a number of research questions, including the following:

- Roman road network (RP 3.7)
- Roman iron industry (RP3.19-3.23)
- Other Roman industries (RP 3.24)
- Sampling and analysis of dark earth (RP 3.26)
- The medieval non-Christian population (RP 5.22)

2. Methods

2.1 Documentary search

Prior to fieldwork commencing a comprehensive desk-based assessment was carried out by Mercian Archaeology (2005), which provided an historic and archaeological background for future archaeological investigations. An assessment of the present standing buildings on the site was also conducted as part of the desk-based report (though buildings lie outside of the scope of this field evaluation).

2.2 Fieldwork methodology

2.2.1 Fieldwork strategy

A detailed specification for the evaluation fieldwork was prepared by the Service (HEAS 2006) and agreed with Worcester City Council. As a result of the location of services, existing usage, present structures on the site, and access requirements (the site was being used for car parking), trench positions were slightly altered. Restrictions on access meant that there is an absence of sample trenches in the centre of the site and lower density of sampling to the north.

Fieldwork was undertaken between the 4th and 30th January 2006. The site reference number and site code is WCM 101483.

A total of twenty-seven trenches, amounting to just over 450m² in area, were excavated over the site, an area of approximately 20,150m² (2.15ha), representing a sample of over 2%. The locations of the trenches are indicated in Figure 2. Eight areas of the site were identified as accessible for trenching, and these were located to access three different topographical zones, the top of the Second (Worcester) Terrace, the terrace slope and the floodplain.

Trenches 1–14 and were located on the higher ground on the top of the terrace, to the east of the site. Trenches 15, 17–19, 27, and 29 were located to assess the nature of the terrace slope and its relationship with the floodplain and were largely determined by the presence of existing buildings, services and access requirements. Trenches 20–26 and 27, located in the far west and south-west corner of the present car park, and were sited to assess the nature of the floodplain. Trench 13 was moved slightly to the south due to the presence of services and its close proximity to the western wall of Walnut House. Trench 14 was relocated northwards, away from the railway viaduct. Three trenches (15, 16, 17), originally planned for the terrace to the west of the nurse's home, were abandoned due to difficulty of access and the depths indicated in a previous borehole survey. Trench 17 was, however, relocated to the western edge of the terrace to establish the depth of made ground, and reference is made to the results of the earlier borehole survey (Stats 2004, boreholes WS 8–10). Trench 15 was relocated to the north, where further investigation of the terrace slope towards the centre of the site could be undertaken. Trench 26 was reduced in size due to the considerable depth of deposits and the presence of asbestos within modern deposits to the southern end of the trench. The locations of a number of other trenches were slightly altered due to the proximity of existing buildings and/or services (Trenches 2, 3, 10, 20, 21, 22, 27 and 28). All alterations were agreed with Worcester City Council.

Deposits considered not to be significant were removed using a wheeled excavator, employing a toothless bucket and under archaeological supervision. Subsequent excavation was undertaken by hand. Clean surfaces were inspected and selected deposits were excavated to retrieve artefactual material and environmental samples, as well as to determine their nature. Deposits were recorded according to standard Service practice (CAS 1995). Significant archaeological deposits were sampled, and extensive structural remains were left *in situ*. On completion of excavation, trenches were backfilled by the replacing of excavated material and finished with roadstone.

In addition to the evaluation trenches seven boreholes were undertaken across the lower, western end of the site to assess the nature of more deeply buried deposits within the floodplain (Fig 2). On the completion of this survey, the cores were examined by Dr Keith Wilkinson (University of Winchester). The samples revealed a straightforward sequence of deposits that could readily be related to those obtained from the adjacent site for the new Library and History Centre (though the latter were more complex), and a detailed analysis was not considered to be able to add materially to the results. A lithological diagram has been compiled and can be seen in Figure 26.

2.2.2 Structural analysis

All fieldwork records were checked and cross-referenced. Analysis was effected through a combination of structural, artefactual and ecofactual evidence, allied to the information derived from other sources.

2.3 Artefact methodology, by Angus Crawford

2.3.1 Introduction

For the scope of this report the assemblage was initially ‘rapid scanned’ to identify secure Roman contexts. This report covers the assessment of the Roman pottery with non-Roman contexts being spot-dated only.

2.3.2 Artefact recovery policy

All artefacts from the evaluated area were retrieved by hand and retained in accordance with the service manual (CAS 1995 as amended).

2.3.3 Method of analysis

All hand-retrieved finds were examined and a primary record was made on a Microsoft Access 2000 database. Artefacts were identified, quantified and dated and a *terminus post quem* date produced for each stratified context.

The pottery and ceramic building material was examined under x20 magnification and recorded by fabric type and form according to the fabric reference series maintained by the service (Hurst and Rees 1992; Hurst 1994).

2.4 Environmental archaeology methodology, by Elizabeth Pearson

2.4.1 Sampling policy

The environmental sampling strategy conformed to standard Service practice (CAS 1995, appendix 4). Large animal bone was hand-collected during excavation (Table 3). Samples of 10 to 40 litres (Table 4) were taken from 11 contexts from pits, ditches and layers that were of Roman date respectively.

2.4.2 Method of analysis

The samples were processed by flotation followed by wet-sieving using a Siraf tank. The flot was collected on a 300µm sieve and the residue retained on a 1mm mesh. This allows for the recovery of items such as small animal bones, molluscs and seeds.

The residues were fully sorted by eye and the abundance of each category of environmental remains estimated. The flots were scanned using a low power EMT stereo light microscope and plant remains identified using modern reference collections maintained by the Service, and seed identification manual (Beijerinck 1947). Nomenclature for the plant remains follows *The Flora of the British Isles*, 3rd edition (Stace 2001).

2.5 **Pollen analysis, by Katie Head**

2.5.1 **Fieldwork and sampling policy**

The environmental sampling policy was as defined in the County Archaeological Service Recording System (1995 as amended). Three sub-samples were taken from Borehole 6, from three separate narrow organic laminae.

2.5.2 **Processing and analysis**

Three pollen samples were selected from Borehole 6, from deposits, which represented three organic laminae: two located within the alluvium (depths 2.44m and 2.54m) and one from the Second (Worcester) Terrace (depth 2.90m). Sediment samples of 2cm³ were measured volumetrically. The samples were soaked for 24 hours and then heated in tetra-Sodium pyrophosphate for 30mins, sieved through a 120µm mesh, washed onto a 10µm mesh, and the residue collected. 10% Hydrochloric acid was then added in order to remove any calcium carbonate within the samples. Due to the siliceous nature of the sediments, the samples were soaked overnight and then digested using Hydrofluoric acid in a hot water bath for 30mins. As the samples also contained organic matter, they were acetolysed for 2.5mins to break down the cellulose material. Finally the pollen pellet was stained with safranin, washed in alcohol to dehydrate the sample, and preserved in silicon oil.

The slides were rapidly scanned for pollen grains for assessment purposes, on a GS binocular polarising microscope at 400x magnification, and identification was aided by using the pollen reference manual by Moore *et al* (1991). Nomenclature for pollen follows Stace (1997) and Bennett (1994).

2.6 **The methods in retrospect**

The dimensions and locations of trenches across the site were constrained by the presence of existing buildings, above and below ground services and access requirements. Nevertheless the results of the evaluation provided a representative profile of deposit depths and date across the site, and the methods adopted allow a high degree of confidence that the aims of the project have been achieved.

3. **Topographical and archaeological context**

A comprehensive desk-based assessment was prepared (Mercian Archaeology 2005) prior to the commencement of fieldwork, which provided a background for the topographical and archaeological context of the site.

4. **Results**

4.1 **Structural analysis**

The results of the structural analysis are presented in Appendix 1. Tables 1–2 summarise the artefacts recovered and Tables 3–7 summarise the results of environmental analysis. The trenches and features recorded are shown in Figures 3–23, and Plates 2–34.

Within the twenty-seven trenches, Roman deposits were identified in Trenches 6, 7, 10, 12, and 21–27. Secure medieval soil horizons and deposits were identified in Trenches 3, 12 and 22. A number of structural remains in Trenches 3, 7, 9, 11–15, 17, 18 and 21–29 have been assigned to the post-medieval period on the basis of fabric and stratigraphic relationships, allied with artefactual evidence.

The results have been presented in three separate sections, top of terrace (the higher, eastern side of the site), terrace slope (central part of the site) and the floodplain (the lower, western side of the site).

4.1.1 **Phase 1 Natural deposits**

Natural deposits were noted in all the trenches across the site, natural deposits varied according to topographical location. The higher ground to the top of the terrace consists of Triassic Mercia Mudstone overlain by Second (Worcester) Terrace sands and gravels, comprising matrix-supported gravels (mudstone/sandstone/quartzite) of Upper Pleistocene date (Keith Wilkinson pers comm). The terrace slope running across the middle of the site exposed the Mercia Mudstone, and this geomorphological feature represents the eastern edge of the channel of the River Severn, which was deeply cut in the Flandrian (Morris 1974). On the lower western part of the site on the floodplain, yellow fine-grained alluvial clays were noted. The alluvial deposits in the floodplain are up to 5m thick, and developing through overbank deposition from the Flandrian (Morris 1974, fig 8). The interface between the top of alluvial clays of the floodplain and the Mercian Mudstone terrace edge was observed in Trenches 20 and 28.

The fine-grained alluvium did not contain any archaeological material, is laminated (ie undisturbed), while there were organic laminae from Borehole 6.

4.1.2 **Phase 2 Roman deposits**

Top of terrace

Directly overlying the natural deposits a layer of silty sand was observed in most trenches (208, 310, 605, 802, 1004, 1103, 1215, 1226, 1304, 1317, 1403). This layer contained considerable material of Roman date; although not all contexts produced material, the similarity of the deposit inferred a continuous horizon across this area of the site. The pottery was unabraded, and the majority dated from the 1st–3rd century AD. A number of features were observed that were overlain by this layer, all of which also appeared to be of Roman origin.

Two small, partially exposed pits (607, 610: Plate 5), observed to each end of Trench 6, were sealed by a buried soil horizon (605) dated to the mid 1st–4th century AD. Although neither of the two pits yielded any datable material, stratigraphic relationships suggest either a Roman or earlier date.

Two features within Trench 7 appeared to be of Roman date (708, 715). Towards the centre of the trench, a smaller, east/west aligned gully (708: Plate 8) with steep sides and a V-shaped base did not contain any datable artefacts, though the sharp profile of the gully may infer a Roman date.

A large ditch aligned north-east to south-west (714: Plate 7), with steep concave sides and a gentle concave base, contained two fills. These fills contained residual Roman pottery and roof tile fragments, though the upper fill (705) also contained a single fragment of 18th century pottery indicating that the ditch may be of a post-medieval date, however the single sherd of pottery may be intrusive and that the date of the ditch may in fact be late Roman, as the majority of the pottery dated to the 3rd–4th century.

No features were observed within Trench 8, however a considerable quantity of mid 1st–mid 2nd century unabraded Roman pottery was recovered from the higher soil horizon (801), especially to the southern end of the trench.

A number of clearly defined features in Trench 10 (Plate 11) could be inferred a Roman date. Three features, all only partially exposed within the trench. A possible ditch terminus or large pit (1014) with steep convex sides and a U-shaped base contained two fills; the upper fill

(1012) contained a single fragment of Roman Severn Valley Ware. Close to this feature was a smaller circular pit (1011) with steep straight sides and a V-shaped base. Also to the southern end of the trench a small, circular cut (1008) with steep vertical sides and a V-shaped base was also noted. Of the three features, only one (1014) could be securely dated to the Roman period, however, the three features appeared to be contemporary, ie the fills appeared similar and the features were cut from the same level. These features were all sealed by the same overlying deposit (1004), that appeared to be part of the extensive Roman buried soil horizon that extended across this part of the site.

Trench 12 contained a clearly defined dark soil layer (1207/1208/1225: Plate 13), visible throughout the extent of the trench. This layer contained a large quantity of Roman ceramic material dating to the mid 1st–early 3rd century AD. This layer sealed the buried Roman soil horizon (1215/1226) that had been observed across the extent of the site, dated in this trench to the mid 1st–2nd century AD. Also, to the north of the trench a pit/posthole was recorded. This pit/posthole (1218: Plate 14), circular in plan, though not fully exposed, did not contain Roman pottery and a single, very small fragment of intrusive post-medieval creamware, however the presence metal working slag and its stratigraphic location would also suggest a Roman date.

Terrace slope

The buried Roman soil horizon noted across the higher area of the site was observed in the lower half of Trench 20 (2005).

A linear cut aligned north to south was recorded towards the western extent of Trench 27. The ditch (2703: Plate 32) consisted of shallow concave sides and base. Pottery recovered from the single fill of this feature consisted indicated an early–mid 2nd century AD date.

Floodplain

Throughout this area an extensive buried soil horizon (2004, 2013, 2305, 2308, 2404, 2405, 2503, 2603) was observed. Material recovered from this layer indicated Roman activity from the later Roman period, though some material from Trench 21 (2103) was dated to the 19th century, though this is likely to be intrusive. This layer in turn sealed a thinner layer (2206, 2309, 2406, 2505, 2604) that contained Roman pottery primarily from the late 1st to late 3rd century. This earlier layer sealed a number of well-defined Roman features.

Trench 21 contained a number of Roman features including a large, circular pit (2112: Plate 24) with concave sides and a shallow concave base, which was partially exposed towards the western end of the trench. The single fill of the pit contained iron slag and 3rd–4th century pottery. Two other shallow, features (2104, 2109) towards the centre of the trench also contained Roman material. Feature 2104 contained iron slag, fired clay and pottery from the late 3rd–4th century, and feature 2109 contained iron slag and 2nd century pottery. To the eastern half of the trench an extensive, though shallow spread (2113: Plate 25) of mixed alluvial clay and fine sandy silt contained high quantities of mid–late 3rd century material.

To the western end of Trench 22 a continuation of the mixed alluvial deposit, noted in Trench 21 was observed (2206). This deposit consisted of mixed bands of yellow alluvial and darker silty soils (2211). To the western end of the trench a large circular deposit appeared in plan as a later feature, though on excavation this was also revealed as a mixed darker deposit (2212) within the alluvial clays, pottery from these mixed deposits also indicated a date of 2nd–mid 3rd century. Cut into this deposit were a number of other features that also appeared to have been of Roman origin. Two ditches were observed towards the centre of the trench. A ditch aligned north to south (2208) and an earlier ditch aligned north-east to south-west (2210) were noted (Plate 26), though both of these ditches were only recorded in plan, and not fully excavated, material recovered from the upper fill of each ditch suggested a mid 3rd century date for the earlier ditch (2210) and late 3rd century date for the later ditch (2208).

A number of features of Roman date were revealed during the excavation of Trench 23. Below a probable Roman soil horizon (2309) a substantial ditch aligned north to south (2311: Plate 27) with steep concave sides and a shallow concave base was observed, cut into the underlying undisturbed alluvial clay (2309). This ditch could be dated to the 2nd century. Towards the northern end of the trench this ditch was truncated/overlain by what appeared to be a square feature or deposit (2315). Within this deposit was iron slag, fired clay and 3rd century pottery, and also recovered from this context was a well-preserved 1st century Polden Hill brooch. Though only partially exposed in plan, this feature appeared to terminate within the extent of the trench. To the east of ditch 2311 a small circular pit (2213) with steep sides and a concave base contained 2nd–3rd century pottery. The underlying alluvial clay contained no finds and appeared to be a natural deposit.

Trench 24 (Plate 28) was not fully excavated due to both logistical and safety reasons. No features of Roman date were recorded, however, a layer of mixed alluvial clay and sandy silt (2406), similar to that recorded in Trenches 21, 22 and 23, was observed towards the base of the deposit sequence containing 1st–3rd century pottery and iron slag.

A mixed alluvial layer (2505) contained artefacts from mid–late 2nd century. This layer sealed a number of small, partially exposed features. Feature 2515, located towards the centre of the trench, and partially exposed under the eastern section, appeared to be a circular pit or posthole with steep concave sides and base. Feature 2517 (Plate 30) also appeared to be circular in plan, though here again it was only partially exposed under the western section. To the northern end of the trench two small features were partly exposed under the western and northern sections. Feature 2513 consisted of a possible circular pit cut with steep concave sides and rounded base. Under the northern section a small circular(?) feature (2519) with steep, stepped sides and concave base was observed. This feature contained a high proportion of small stones. Pottery was recovered from three of these features (2511, 2513, 2519) and dated to the 2nd century. Features 2515 and 2517 were undated though their stratigraphic relationship suggests an early Roman date.

A number of linear and circular features were recorded in Trench 26, however, difficult ground condition meant that excavation and recording was limited. A number of linear features were noted. A shallow ditch feature (2612) with shallow concave sides and base, containing fired clay, iron slag and 1st–4th century pottery, appeared to completely overlie a steep sided, flat-bottomed circular pit cut (2615: Plate 31). This pit could be dated to the 3rd century, based on the recovered finds.

To the west of Trench 26 a ditch with one arm aligned north to south and the other east to west (2616/2619) with steep irregular sides was also observed. This area was not fully excavated, though in plan it appeared that this feature may have formed part of an enclosure. No dating evidence was recovered, though the feature appeared to be overlain by deposit 2604, dated to the 2nd century.

To the east of this trench a partially exposed circular feature (2607) was not excavated for safety reasons, due to its proximity to the edge of the section that contained asbestos fragments. Though its stratigraphic location and similarity to the fills of the other Roman features would infer that it is contemporary.

4.1.3 Phase 3 Medieval deposits

Top of terrace

A ditch aligned east to west (311: Plate 4), with steep sides and shallow, irregular concave base was recorded to the southern end of Trench 3. The single fill of this ditch contained residual Roman pottery and iron slag, though the presence of later roof tile fragments suggest a medieval or later date.

In Trench 12 a partially exposed, possibly circular pit (1212: Plate 13) with steep concave sides, contained a single fill. Material from this pit consisted mainly of residual Roman pottery, however, a fragment of glazed roof finial indicates a medieval date, though a single small fragment of clay pipe stem suggests a later date (however this may be intrusive). Also within Trench 12 a thin layer (1219) was dated to the 14th–16th century.

Floodplain

Although most of the observed features on the edge of the flood plain appeared to be of Roman date, a single ditch aligned north-east to south-west (2108: Plate 23) containing medieval roof tile fragments was noted within Trench 21. This ditch, with concave sides and base, clearly cut the underlying mixed Roman alluvial deposits (2113), and also contained residual late 3rd–4th century pottery.

4.1.4 Phase 4 Post-medieval deposits

Top of terrace

A mixed dark deposit (203, 204, 304, 502, 503, 603, 700, 702, 703, 800, 801, 904, 1100, 1204, 1303) was noted in a number of the trenches and contained residual earlier material, but also datable artefacts from the 17th and 18th centuries.

Thin rubble layers, consisting of brick fragments and crushed mortar were observed within Trenches 1 (103, 104), 2 (204, 205, 206), 3 (305), 6 (602), 7 (701), 9 (902), 11 (1101) and 12 (1203). This thin but extensive deposit was spread across the higher ground, and yielded material dating to the late 18th century.

A partially exposed ditch aligned north to south was noted to the east of Trench 1 (114), though undated, its stratigraphic relationship suggests a post-medieval date. This ditch cut through the post-medieval deposit (105/109), though overlain by the construction debris layers (103, 104) that probably dates to the late 18th century.

Two irregular, partially exposed pits (210, 213) at the southern end of Trench 2 were both truncated by a later cast-iron water pipe. Excavation of the fills of these features revealed material that indicated a 17th–18th century date.

A brick wall aligned east to west (308: Plate 3) clearly cut the underlying earlier deposits in Trench 3. The wall consisted of well-mortared bricks, ten courses deep, bonded with a hard yellow lime mortar. The wall sat within a shallow, vertical sided and flat-based construction cut (313). The bricks were 2.5 inches thick, handmade and dated to the mid–late 18th century. Overlying the construction cut of the brick wall a thin layer of construction debris, consisting of brick and mortar rubble, was observed (305). The brick wall was abutted on both sides by a thick deposit (304) that also contained material dating to the 18th century.

A partially exposed, brick wall aligned east to west was noted towards the northern end of Trench 7. This consisted of four courses of brick and appeared to be of late 18th–19th century date.

Towards the far south-east corner of Trench 9, a partially exposed brick structure, dating to the 19th century was observed (905: Plate 10). The structure appeared to consist of a wall aligned north to south, three bricks thick and twelve courses deep. There appeared to be two further walls at each end, tied in and extending eastwards under the section. The fill of this square (?) structure was not observed.

Within Trench 11, located in the garden of Wall House, to the far south-east of the site, two features could be assigned a post-medieval date. To the centre of the trench, a brick wall aligned north-east to south-west (1105) was noted. The wall, consisting of well-mortared bricks, five courses deep, and bonded with a hard yellow lime mortar could be dated to the late 18th–19th century, based on brick dimensions. Immediately butting this wall, to the north,

was a small brick extension (1108), three courses deep, and a single brick thick. The bricks here appeared contemporary with the main wall. To the far south of the trench a partially exposed cut was recorded. The cut was not fully excavated as it extended under the southern extent of the trench, however material recovered suggested a late 18th century date.

A thin spread of material (1204) in Trench 12 clearly overlay earlier deposits and material recovered from this layer indicated a date of 17th–18th century. Truncating this layer, to the east of the trench was a small posthole (1206) dated to the 18th century.

Trench 13 contained a number of features that could be securely given a late 18th–19th century date. To the north of the trench two features, a linear (1308) and a circular cut (1306) truncated the underlying natural sands. The linear (aligned east to west) contained a single row of bricks, dated to the 19th century. The circular pit, with steep, vertical sides and a flat base, contained residual Roman pottery, though the inclusions of post-medieval roof tile fragments suggested a late 16th–18th century date.

To the southern extent of Trench 13 a large, substantial brick feature was recorded (1320: Plates 15, 16). This feature consisted of a number of different components, laid on a thin, level mortar surface. Though only partially exposed, this structure consisted of two channels, supported on upright brick tiers. These led to a large brick structure containing a cast-iron grate. To the west a larger, open brick floor extended under the edge of the trench. Brick dimensions suggest an early–mid 19th century date, and the mortar bonding indicated a date prior to 1850 (A Crawford pers comm). Surrounding the central elevated channels a brick wall on the northern side (1324) was also observed, similar brick dimensions suggested that it was contemporary with the main structure. This feature did not appear to completely extend into the near-by Trench 14, although a small fragment of wall (1409) may have been part of the central structure. This structure was in-filled with brick and tile rubble, also a large quantity of flowerpot fragments were recovered, dating to the 19th century.

Terrace slope

Within Trenches 15, 18, 19, 27 and 29, excavated along the terrace slope a sequence of deposits were observed, similar throughout the trenches. These consisted of layers of made ground containing material dating to the late 18th century lying directly on the underlying unweathered natural deposits.

Flood plain

Across the lower south-eastern corner of the site a large spread of 18th and 19th century material, consisting mainly of building rubble was noted under the present car park surface.

4.1.5 Phase 5 Modern deposits (20th century)

Modern services were noted across the site, consisting of redundant water and gas pipes and electric cables. The pipes consisted of both ceramic waste pipes and cast iron water pipes. Services were observed in Trenches 1, 2, 3, 6, 7, 15, 20, 22, 23, 27, 28 and 29 (Figs 28 and 29).

Top of terrace

Tarmac and foundation for the present car park and other surfaces was observed in most trenches. In Trenches 7, 8, 9 and 11 the topsoil and associated subsoil for the present grassed areas contained 20th century material.

Terrace slope

Aside from the surface of the present car park Trench 117 also exposed the topsoil and recent make-up layers for the grass terrace to the west of the nurse's home.

Floodplain

In Trench 23 the partial remains of a brick structure was observed, the footings for this demolished building was made from bricks by the London Brick Company. These bricks were not commonly used in the Midlands till the 1930s.

To the far south-west of the site, Trenches 24 and 26, a large deposit, consisting of 20th century waste material was recorded. The deposit consisted of loose material, including glass, metal, building rubble, asbestos etc. For safety reasons this material was only partially excavated by machine and only its location was recorded.

4.1.6 Undated deposits

Top of terrace

A small circular cut, with steep sides and a flat base, probably a posthole, was noted within Trench 2 (215), though no datable material was recovered. A small circular pit (506), with concave sides and base, noted in the far northern extent of Trench 5, contained two fills though both of these were devoid of and finds. In Trench 7 an ovoid pit cut (713) was observed. The pit did not contain any date able material. A small circular pit (908) towards the centre of Trench 9 again contained no recoverable artefacts.

Terrace slope

A heavily truncated, very shallow, circular cut with a flat base (1904: Plate 21), observed towards the centre of Trench 19, contained a single fill though no finds were recovered.

Floodplain

A small irregular, undated feature (2007), cut into the underlying alluvial clays was noted in Trench 20.

4.2 Artefact analysis, by Angus Crawford

The artefactual assemblage recovered is summarised in Tables 1 and 2 (Appendix 1).

4.2.1 Artefactual analysis

The pottery assemblage retrieved from the excavated area consisted of 1402 sherds of pottery weighing 24.839kg. In addition fragments of fired-clay, ceramic building material, slag and clay pipe stems were recovered. The group came from 27 trenches and could be dated from the Roman period onwards (Table 1). The preservation of the Roman material was extremely good with the majority of sherds displaying limited levels of abrasion.

4.2.2 Discussion of the Roman pottery

The majority of pottery recovered from the site was of Roman date and was exceptionally well preserved. All sherds have been grouped and quantified according to fabric type (see Table 2) and form where possible. The dominant fabric types were those of the Severn Valley ware industry, comprising 82% of the assemblage (954 sherds) from secure Roman contexts. The discussion below is a summary of the finds and associated location or contexts by period. Where possible, *terminus post quem* dates have been allocated and the importance of individual finds commented upon as necessary.

The Roman pottery assemblage spanned a period from the 1st–early 2nd century AD through to the early 4th century. The high quality of preservation and quantity recovered indicates significant and well-preserved deposits in the evaluated area. The range of fabrics was substantial and, while Severn Valley ware dominated, other local wares, non-local Romano-British wares and imported fine wares were also recovered in quantity.

Local wares included oxidized and reduced Severn Valley wares (fabric 12 and 12.1) as well as oxidised and reduced organically tempered wares (fabric 12.2 and 12.3), spanning the mid 1st–4th century. The quantification of this material confirmed the existing understanding that the organically tempered wares are more dominant in Severn valley ware production during the 1st–2nd century, although they do occur throughout the Roman period. An unusual Severn Valley ware variant was also identified within the assemblage and requires further research. The fabric is similar to standard oxidised Severn Valley wares but is of a darker reddish colour and with a softer laminar fabric in comparison. Initial observation indicated that the surface finish is burnished, and that form types are of bowls with flanged rims in a range of types (eg contexts 1403, 2110 and 2206). Ceramic *termini post quem* indicate that this fabric has a production span of 2nd–3rd century. It may originate from a specific production site.

The forms present in the Severn Valley ware fabrics represented a diverse range of types from the entire Roman period. These included storage jars, wide-mouthed jars (including those with beaded or everted rims), tankards and bowls. Decoration also included a range of types with burnishing, incised bands and burnished lattice patterns. The high level of preservation of the assemblage also included some Severn Valley ware sherds with exceptionally rare ‘pencil’ decoration (context 2305). This included burnishing as well as applied lattice patterns to the sides and shoulders of vessels (Plate 35).

Further local wares included a range of Malvernian wares both of hand-made (fabric 3 dated 1st–2nd century) and wheel-made types (fabric 19 dated 2nd–4th century). The hand-made material within the assemblage proved to be surprisingly scant in comparison to other close sites such as Kardonia (Crawford 2007) where a range of 1st–2nd century ‘tubby cooking pots’ were present. This may be an anomaly within the assemblage and further fieldwork on the site may clarify this. Hand-made vessels imitating Black Burnished ware form type 22 were present, dating from the mid to late 2nd century. While the external appearance of these imitation wares are poorly finished, it is interesting that extra time was taken to burnish the exteriors as well as applying lattice pattern decorations. The market focus of this product is unclear as they are a poor imitation of the original hand-made, though finely wheel-finished, product that was contemporarily available.

Another product of the Malvernian industry present was that of handmade slab-built vessels (fabric 3.1). This fabric, dating from the 3rd - 4th century has an indeterminable purpose. The material included two large rim fragments with part profile exhibiting a thick body of rough finish. Initial observations of the sherds indicate a substantial everted rim with a flat shoulder at right angles to the rim base (context 2305). The vessel has rounded corners with straight sides and indicates a square or rectangular shape. A further sherd (context 2614) terminates abruptly with what appears to be a knife-cut finish, suggesting that one side may have been rimless possibly to allow for the pouring of any contents, and further research is required to identify the exact form and purpose of this vessel type (Bryant 2004). A second unusual Malvernian type identified was a well-made lid with a piecrust rim (context 2505). Further decoration of this vessel has involved the potter impressing a near full finger, in a radiating pattern, around the upper surface (Plate 37); a comparable example was recorded from the Newland Hopfield kiln site (Evans *et al* 2000).

The dominant non-local Romano-British pottery was of Black Burnished ware, type 1 (fabric 22). Forms in this fabric were limited to two identifiable types. These were the type-22 flanged bowls and a rim sherd of a type 3 jar (Seager-Smith and Davies 1993). The decoration present on the type 22 bowls included variations of lattice patterns to the side and consistent with 2nd century types. A complete bowl profile from context 2505 (dating also to

the 2nd century) displayed lattice patterning on the exterior base. This would indicate that the vessel was also intended as a lid and so served a dual purpose.

Further non-local wares included a single sherd of Nene Valley ware (fabric 28), sherds of Mancetter/Hartshill mortaria (fabric 32) and Oxfordshire red and brown colour coated wares (fabric 29). The Mancetter/Hartshill mortaria fabric consisted of a single rim sherd, however, sherds of similar fabric were identified that did not originate from mortaria forms. This would indicate the possibility that this pottery industry may have been also producing a range of other vessels on a limited scale. The Oxfordshire colour coat sherds also contained a rare early type from the 1st to 2nd century with white painted circles with pellets to the exterior surface (context 1208: Plate 36). Similar sherds of this fabric have also been recorded in Worcestershire, at the Childswickham villa site and at the rural settlement site at George Lane, Wyre Piddle (L Griffin pers comm).

Imported Samian ware was present as bowls and dishes and included Dragendorff forms 18/31, 37 and a Curle form type 11 for a total of 25 sherds within the assemblage. Specific fabric analysis identified pottery from all three Samian production areas with six sherds from eastern Gaul, and two each from southern and central Gaul. The majority of sherds were undecorated, however the Curle 11 rim has a vegetal pattern and the form 37 has panel decorations. A second imported fabric was identified as a sherd of Rhenish ware from central Gaul (fabric 44).

Other poorly represented fabrics range from locally produced fabrics through to imported material and included two sherds of early micaceous ware (fabric 21.3) and a sherd of unprovenanced white ware. The remaining fabrics consisted of a single sherd of Dressel type 20 amphorae (fabric 42.1), and a sherd of South-west oxidised ware (fabric 151).

A single intact Roman brooch of Polden Hill type was recovered from context 2314. While this brooch could be dated to the 1st century, context 2314 has a *terminus post quem* of 3rd century indicating that the brooch is either residual or a possible 'heirloom' deposited at a latter date.

4.2.3 **Medieval artefacts**

Only three context groups were identified as medieval in date with medieval items being negligible throughout the pottery assemblage. Context 312 was dated by a single sherd of Worcester-type sandy glaze ware (fabric 64.1) while context 1219 was dated to the late 13th–14th century due to the presence of a decorative roof finial. Context 2108 could only be broadly dated to the medieval period by fragments of 13th–15th century roof tile.

4.3 **Environmental analysis, by Liz Pearson**

The environmental evidence recovered is summarised in Tables 3–7 (Appendix 2).

4.3.1 **Hand-retrieved material**

A total of 2.04 kg (248 fragments) of animal bone from 40 contexts was hand-collected during the evaluation (Table 3). This material was generally well preserved, with bone in some contexts showing signs of previous waterlogging. The size of the assemblage and condition of the material suggests that sufficient bone may be recovered from full excavation to merit analysis.

A total of 202g (9 fragments) of oyster shell was also hand-collected from seven contexts (Table 7).

4.3.2 Wet-sieved samples

Environmental remains were poorly preserved. Occasional fragments of large mammal bone were recovered from most samples while occasional charred plant remains were recovered from contexts 2004, 2406, 2513 and 2516. The latter included seeds of vetch/vetchling (*Vicia/Lathyrus* sp), garden pea (*Pisum sativum*) and barley grain (*Hordeum vulgare*). The presence of fine organic plant material in several samples, and occasional seeds of blackberry or bramble (*Rubus* sect *Glandulosus*) suggests that there has been some seasonal waterlogging in the past.

These assemblages were too small to draw any interpretation of the surrounding environment or human activity on the site in the past, and this is consistent with low levels of environmental remains previously been found in Roman deposits in this area of the city, for example at the site of the Police Station site on Castle Street (Pearson 2002) and at Condor Buildings nearby (Pearson 2000).

4.4 Pollen analysis, by Katie Head

Pollen grains were in very low concentrations at depths of 2.44m and 2.54m, and preservation was not particularly good. Taxa were dominated by Poaceae undiff. (grasses) with other herbs occasionally present. These included *Plantago lanceolata* (ribwort plantain) and Lactuceae *cichorium intybus*-type (eg *Taraxacum officinale* (dandelion)). No trees or shrubs were present. No pollen was detected in the basal sediment at a depth of 2.90m, which comprised of just siliceous material.

5. Synthesis

5.1 Pre-Roman topography

The underlying topography, as indicated by both trenches and boreholes, indicated that the western part of the site consisted of earlier deposits that dip sharply to the west and south. This part of the site lies in the Flandrian and later floodplain of the Severn. The underlying geomorphology of the river channel is complex (Morris 1974, 33), and the sequence of deposition in the floodplain is not yet understood.

No evidence of prehistoric activity was found during the evaluation. The available data suggests that the floodplain had an uneven topography in the pre-Roman period, and that lower-lying areas, probably originating as pools and water channels, were used to dump waste material from the Roman period onwards, as noted in Trenches 21–24 (Fig 25). Fieldwork at the nearby Butts Council Depot (Sworn 2006) and at the Newport Street excavation suggests that a complex deposit sequence is a feature of the floodplain at Worcester, obliterated by channel infilling and dumping from the Roman period onwards (R Jackson pers comm).

Substantial depths of alluvium have been identified beneath the western part of the site through the borehole survey. The fine-grained alluvial deposits on the floodplain contain organic material, which appear to have a limited potential for providing further evidence for natural environments and culturally-altered environments. The deposits are deeply buried; between 1.85–3m (BH 5) and 2.75–3.35m (BH 2) below current ground surface (13.98m–12.83m AOD and 12.76–12.16m AOD respectively; Fig 26).

The fieldwork was undertaken during January 2007 at a time of very high river levels. Ground water was logged in the boreholes at depths of between 2–3.5m (12.16–13.60m AOD; Fig 26). This contrasts markedly with the Stats boreholes undertaken in early September 2004. Here no groundwater was logged in any of the boreholes in the floodplain (two of which extended to 14–15m; water was logged at depth in some of the higher boreholes). This

suggests that the floodplain deposits in this area are only periodically below the water table and may explain the relative lack of well preserved organic environmental material.

5.2 Roman occupation

The indication from previous archaeological investigations in the area, especially the fieldwork immediately to the south at the Worcester City Council Depot (Sworn 2006) and at 14–20 The Butts (Burrows and Cutler 2004), indicated that deposits dating to the Roman period were likely to be found during the evaluation. Archaeological fieldwork has demonstrated that the area occupied by the Roman small town is very extensive, covering an area of over 50ha (Dalwood 2004a, 16, fig 11). However, within this broad area there was changing density and organisation of occupation between the mid-1st century and the 4th century, with some areas of open space. Importantly, it is now clear from this evaluation that Roman occupation extended onto the eastern edge of the floodplain.

Although this evaluation provided only a very limited insight into the below-ground archaeology, significant Roman artefacts were recovered from both residual and sealed contexts across the site. Concentrations were noted to the southern end of the higher ground, and on the floodplain to the south-west corner of the site. There were other areas which were not intensively utilised throughout the Roman period.

Early Roman occupation on the terrace. On the higher ground, to the south-east of the site, a number of features indicated activity from the earlier Roman period. A number of features contained material dating from the mid 1st–2nd century. There was a noticeable lack of any later Roman material, and even the overlying disturbed ground contained mainly early material, suggesting an absence of later Roman activity in the later period, rather than the truncation of evidence during the medieval and post-medieval periods. All the pottery from this area is dated to before the 3rd century.

Roman occupation on the edge of the floodplain. The large quantities of Roman pottery and features noted on the floodplain to the south-west of the site, indicated that Roman activity was not solely confined to the higher levels of the gravel terrace, but that it extended down the terrace and onto the floodplain (Trenches 21–28). However, the broad date span of the Roman material from the lower slopes and on the edge of the flood plain indicated prolonged activity in this area. This area also exhibits a clear sequence of activity. The sequence starts with a number of early Roman features, including both pits and ditches cut into the alluvium. These were overlain by dumped deposits and later Roman features were cut into the top.

Clearly cut into the undisturbed alluvial clays of the floodplain were early Roman features, observed in Trenches 23, 25 and 26. These features, consisting of two ditches (2311 and 2619) and five pits (2511, 2513, 2515, 2517 and 2519) were securely dated to the mid 1st–2nd century. This is important evidence for usage of the floodplain at an early period of the Roman settlement. A number of pits in Trench 25 contained artefacts dating to the 1st–2nd century, and the other pits in the trench appeared to be contemporary, indicating a concentration of early activity in this area. In Trench 26 a right-angled ditch, also dating to 2nd century may form part of an enclosure, although the limited extent of the exposed feature renders full interpretation difficult. Also in this trench, a ditch (2613) contained pottery that could only be broadly dated to the Roman period, but it overlay a circular pit (2615) that was securely of 3rd century date, thereby indicating that this ditch was of a late Roman date.

A clearly defined ditch aligned north to south in Trench 23, also of 2nd century date, was overlain by later Roman activity. The presence of these early features attests to the extensive usage of this part of the floodplain in the early Roman period.

These early features cut into the alluvial clays, were then overlain by a later extensive deposit, recorded in Trenches 21, 22 and 23 (2113, 2206, 2315). This extensive deposit consisted of mixed alluvium clay and silts, containing pottery dating to the 3rd century. The extent of this deposit, along with a similar one in Trench 24 (2406), may represent a deliberate importation of material onto the floodplain with the purpose of either infilling

water channels or the general raising of the ground level to allow for occupation of this area. It appears that this levelling/raising of the ground as a form of deliberate land reclamation allowed for continued activity on the floodplain; indicated by the digging of later features, such as ditch 2208. This ditch is cut into the earlier deposits and is dated to the late 3rd century. These close date ranges is not to be unexpected, the reclaimed land being utilised almost immediately.

The evidence in the context of existing knowledge of the Roman Worcester. The evidence from the site indicates areas of concentrated occupation throughout the Roman period. Due to the limited nature of the investigations it has not been possible to provide detailed interpretations of the evidence. The presence of iron slag within the features is common in Worcester (Jackson 2004), but no direct evidence of ironworking was observed within the limits of the evaluated site. Understanding the economic basis of the settlement through the Roman period is an important research goal. Ironworking was not an important element of the settlement in the 1st to early 2nd century, and the scattered but extensive occupied areas were predominantly agricultural in character (Dalwood 2004b, 39-43). Ironworking was certainly an important part of the settlement economy from the 2nd century to the end of the 3rd century, but there is also evidence for a more intensive agricultural element (Dalwood 2004b, 43-52).

The evidence of early Roman activity to the southern end of the terrace indicates occupation and/or land usage, though the absence of any later Roman material suggests that this area was not used for any intensive activity from the late 2nd–early 3rd century. This is clearly demonstrated by the extensive quantity of Roman pottery recovered from the various features in Trench 12, which was all dated to before the early 3rd century. This period of the settlement's development is poorly understood (Dalwood 2004b, 41-3). The evidence from this site is an important addition to existing knowledge.

It would appear that the edge of the floodplain was a focus of activity throughout the Roman period. The proximity of this local environment must have been important, and activity on the floodplain edge may relate to other archaeological evidence for the economic basis of the settlement. Specifically, it has been argued that the dark earth recorded in Worcester partly originated from the intensive penning of livestock that were being grazed on the Severn floodplains (Macphail 2004). The volume of livestock (probably cattle) that were being brought into the settlement suggests specialised agricultural activity, rather than subsistence farming (Dalwood 2004b, 47). The evidence from this site is potentially significant in developing understanding of the economic basis of the settlement through the Roman period.

All the deposits were associated with a sizeable assemblage of artefacts, including pottery, roof tiles, and iron slag, also a large amount of Roman material came from later reworked soils. The evidence for Roman occupation from this site extends knowledge of the extent of the Roman settlement at Worcester. An earlier attempt to map the extent of Roman occupation indicated that Roman occupation was very extensive although varying in intensity, comprising an area stretching from Britannia Square to south of the cathedral: an area of c 50ha (Dalwood 2004a, 16, fig 11).

The environmental remains from the secure Roman features were poorly preserved and present in low levels across the site, and are therefore of low significance. Although only a small number of samples were tested, the absence of hammerscale, which would indicate smithing activity, may be of interest.

Below the dark earth material discussed below was, a thinner, lighter band of material, mainly from the eastern area, though it was also recorded in Trench 20 on the edge of the floodplain. This continuous layer may be interpreted as a buried later Roman soil horizon, though the presence of some later material may be indicative of later disturbance.

Post-Roman

Above the Roman deposits noted across the site was a substantial layer of post-Roman plough soil containing residual Roman pottery, identified as a 'dark earth' deposit in origin. A model for the development of dark earth deposits in Worcester has been developed, based on detailed study at the Deansway site (Macphail 2004). The dark earth at Worcester originated as midden material mixed with large quantities of silty soil and manure brought in by grazing animals that were penned during the later Roman period. In this location, outside of the medieval city, agricultural land-use continued until the city expanded again in the 19th century, and the dark earths were continually reworked and deepened which has limited their potential significance, as at the Farrier Street site (Macphail 1994, 84).

Aside from this there was little evidence for post-Roman or early medieval activity on the site. Detailed study of dark earth deposits at the Deansway excavation indicated that following severe contraction of the settlement area in the 4th century; the area became grazed pasture, and remained so until the 10th century (Macphail 2004). This inference was that much of the area of the former Roman settlement became farmland in the post-Roman period, and that there was no regeneration of scrub and woodland over the town (Dalwood 2004b, 54). A similar sequence of deposits has also been noted at the site of the The Butts Council Depot (Sworn 2006) immediately to the south of the railway viaduct, only 30m beyond the southern boundary of the site. It is possible that the land-use of this site was pasture for a considerable period.

It is of interest that artefacts were recovered from these soils, and although the current evaluation was a small sample an argument can be made that later Roman and post-Roman activity may only be visible through the artefacts contained in the dark earth.

Medieval

Although not closely dated, the layers of friable dark plough soil noted across the site can be interpreted as remains of post-Roman and medieval agriculture. The absence of medieval pottery and low-level of earlier post-medieval pottery from the site indicates that these soils did not receive large quantities of refuse to fertilise the soil during the medieval and early post-medieval periods. There was no evidence for dumping substantial quantities of material off the edge of the terrace during the medieval period.

The ditch aligned east to west noted within Trench 3 (Fig 5) may date to the medieval period due to the presence of contemporary roof tile fragments, and to its stratigraphic position within the sequence of deposits in the trench. A field boundary is shown on this position on Broad's Map of Worcester of 1768 (Mercian Archaeology 2005, fig 5), though not on earlier maps. The build-up of material above (306) prior to the construction of the later brick wall (308), built between 1779 and 1781, would, however, clearly indicate that this ditch is a much earlier feature.

A short section of a ditch aligned north-east to south-west was visible in Trench 21 (Fig 17). This ditch clearly truncated the earlier, underlying late 3rd–4th century mixed alluvial deposits, and contained residual Roman pottery, however the presence of medieval roof tile fragments indicate a later date. Also, the fill of the ditch appeared to consist of a finer mixed soil deposit, consistent with agricultural material. This ditch, aligned along the edge of the flood plain may have marked the lower, western limits of the agricultural activity associated with the post-Roman horticulture to the north of the medieval city wall.

Post-medieval

Cartographic evidence indicates that up until the 18th century the site remained semi-rural, with orchards, pasture fields and small arable areas (Mercian Archaeology 2005).

An extensive mixed deposit was noted across the higher ground that contained both residual earlier material and artefacts from the 17th–19th centuries. These mixed deposits are likely to have derived from the continued turning to the earlier dark earth soils through to the construction of the early phases of the Infirmary in the late 18th and 19th centuries. These soils originated as sub-Roman dark earths, as discussed above, however the presence of post-medieval material within these indicates that the soils were continued to be turned well into the post-medieval period. Though the frequency of high quantities of un-abraded large sherds of Roman pottery suggests that the soil were not being continuously reworked on a frequent basis. The soils are likely to have been dug infrequently over a long period of time, the type of activity that may be associated with orchards, the soil being dug but not ploughed on an annual basis.

The wall aligned east to west within Trench 3 (308; Fig 5) appears to be the boundary visible on Nash's 1781 map. The boundary is not on the earlier George Young map of 1779, indicating a construction date of 1779 – 1781 (though the boundary appears again on Broad's 1768 map). The brick dimensions suggest dates of late 17th – late 18th century and the cartographic evidence confirms this. The wall itself appears to have functioned as the southern boundary wall of the early phase of the infirmary. This eastern section of the wall has been removed by the time of the Ordnance Survey Map of 1904. By this time the Royal Worcester Infirmary had extended southwards into the adjacent plot, defined by the construction of the southern wing, Mulberry House, in 1898. A thin layer of construction debris butts this wall and overlies its construction cut; this debris was undated, though it would likely have originated during the late 19th century works for the new infirmary.

Trenches 15, 17, 18, 27 and 29 all contained post-medieval deposits immediately overlying unweathered natural (Mercian Mudstone), with no dark earth, and this results of landscaping during the construction of Worcester Royal Infirmary in the 18th century and later enlargement of the hospital. This will have removed significant archaeological deposits over large areas and these are indicated on Figure 25. This landscaping is best exemplified on the frontage of the original infirmary building dating to the 1770s.

Alongside these large-scale soil movements, surfaces were also raised in some areas. The central part of the site saw considerable deposition of material from the late 18th century onwards. This level of post-medieval made-ground directly overlying the underlying natural deposits and can be clearly seen within Trenches 15, 27 and 29. Dating for these made-ground deposits suggest a late 18th century date, this ties in with the construction phases of the infirmary. Residual Roman material recovered from these later deposits clearly testifies to at least some element of truncation of earlier features.

Of particular interest is the raised lawn to the west of the former nurse's home, whereas terracing is obvious in Trenches 18–19, how far this extended eastwards is uncertain. The western end of Trench 17 also had unweathered mudstone but the natural sands of the Second (Worcester) Terrace were encountered at its eastern end (Fig 14). The depth of this sand is similar (<3m) to the depths identified in WS 8 and 10 Stats 2004 (though WS 9 was somewhat higher at a depth of 1.7m). Notes towards the base of the "made ground in the Stats boreholes ("@ 2.5m becoming very sandy" and "@2.5m becoming clayey with occasional clinker fragments" for WS8 and 10 respectively) suggests that these lower levels are not necessarily late in date. The presence of the terrace deposits and the absence of any clear reason for ground reduction suggests that undisturbed early deposits are likely to survive in this area and that ground levels have been raised to provide a lawn approximately at ground floor level of the nurse's home.

A small square brick structure to the south-east of Trench 9 (Fig 8) appeared to form a small cellar or underground storage structure. The bricks from this feature suggest a late 18th century date, though this does not appear on any of the contemporary maps for that period. Also a late 18th – 19th century brick wall from Trench 11 (1105) did not appear on any of the cartographic sources, suggesting that these two features were either not substantial and/or were only in use for a limited period.

The east to west aligned wall observed in the northern half of Trench 7 (709; Fig 7) was only partially exposed. The bricks from this structure suggested a mid - late 19th century date. At this time the infirmary building had not extended this far south and it is likely that this features relates to the time when this area was still being utilised as gardens to the north of Walnut House. Cartographic sources (Mercian Archaeology 2005) indicate a land division in the location of the wall in Trench 7 from 1790 onwards, though the construction of a permanent wall does not seem to have taken place until between 1825 (Worcester Corporation Plan) and 1886 (1st Edition Ordnance Survey).

To the south of Trench 13, the large brick structure 1320 (Fig 12; Plates 15 and 16) does not appear to be recorded on any of the maps. The structure could be securely dated to the early Victorian period through the bricks. The structure had been deliberately backfilled with brick, tile and ceramic material (mostly flower pots) dated to the 19th century. The structure itself appeared to have been hastily built and was of poor construction. The function of the structure remains elusive. The grate and voids for air circulation suggest heating was important to it function and the flower pot sherds suggest a horticultural function, and it is suggested this may be a greenhouse. The wall to the north of the structure (1324) is likely to have formed part of a surrounding wall, possibly with an arched roof, now missing.

5.6 Modern (20th century)

Twentieth century truncation and land re-profiling has taken place to the west of the 1930s nurse's home, indicated by the extensive grass terrace, comprised of re-deposited material, and the truncation/terracing to the west for the present lower car park (areas covered by Trenches 17–19). The car park area seems to have destroyed the potential for extensive archaeological remains to be preserved, though the grass terrace may be sealing earlier deposits.

The desk-based assessment (Mercian Archaeology 2005, 19) points to the potential for human remains relating to the hospital, as similar deposits have been found to be of interest elsewhere (research into 18th century and later surgery). No human remains were found during the field evaluation but any disposal area is likely to lie within the northern original infirmary property, for which a relatively low sample was obtained.

The south-west corner of the site is within the river floodplain and a large quantity of modern material had been dumped to raise this area. The car park surface is now roughly 1m above the adjacent Croft Road, directly to the west. This material consisted of general early 20th century rubble, including building material, glass and small concentrations of asbestos and was observed within Trench 26 and to the south of Trench 24.

Modern services associated with the infirmary, were noted across the whole extent of the site.

6. Significance, by Simon Woodiwiss

In considering significance, the Secretary of State's criteria for the scheduling of ancient monuments (DoE 1990, annex 4), have been used as a guide. This section will also review relevant results of the earlier desk-based assessment (Mercian Archaeology 2005) and suggest revised research questions to those posed in the brief (WCC 2006a).

These nationally accepted criteria are used to assess the importance of an ancient monument and considering whether scheduling is appropriate. Though scheduling is not being considered in this case they form an appropriate and consistent framework for the assessment of any archaeological site. The criteria should not, however, be regarded as definitive; rather they are indicators which contribute to a wider judgement based on the individual circumstances of a case.

Period and rarity

Roman deposits are the most significant identified through this evaluation, and their nature conforms to that suggested as likely (based on sites in the vicinity) in the desk-based assessment (Mercian Archaeology 2005, 14-16). The extent of the remains are however more widespread than the easterly focus suggested earlier (Mercian Archaeology 2005, 21). All three topographic zones exhibit contrasting deposits in terms of date, the higher ground appearing to be exclusively of early Roman date (contrasting to the later date for sites to the north – The Condor Building and Chamber of Commerce cf Mercian Archaeology 2005, 15), whilst those on the lower ground ranging throughout the Roman period. This variation in intensity has already been suggested (Dalwood 2004a, 16). Few areas have, however, been excavated, aside from the Police Station and Magistrates Court sites, and the existence of large areas of relatively well preserved deposits, which have the potential to provide detailed information is considered to be rare in this area. No evidence of the Roman road, suggested in Miller *et al* (2006, fig 9) to cross the extreme south-western corner of the site, was located in Trenches 25 and 26. Also the tantalising evidence for a substantial Roman building identified in the desk-based assessment (Mercian Archaeology 2005, 21; just to the south-west of Trench 1) was not further confirmed.

No prehistoric or Anglo-Saxon remains were located, though the relatively small sample size militates against this demonstrating absence. Should any exist they are considered more likely to be limited in quantity. Medieval deposits (aside from agricultural soils) were located but again these are more likely to be limited in quantity. Although the dark earth/agricultural soils have low significance due to the long period of its reworking, the relatively large quantity and unabraded nature of the pottery it contained does require explanation. It has been suggested above that this may result from the nature of later land-use (eg low levels of tillage such as for orchards) and soil micromorphology may contribute to this investigation. The survival of a possible Roman buried soil is also of interest, as this does at least indicate good preservation.

No deposits, which can be related to the non-Christian population identified as a research aim in the brief (WCC 2006a, RP 5.22) were located in the sample trenches. It is understood that this item refers to a plot labelled “jews patch” on early maps (just to the north-west of the site in the area of the present racecourse carpark) which is suggested to indicate a medieval Jewish burial ground (Mercian Archaeology 2005, 8; WCM 96387). This plot lies outside of the proposed development site and there is no substantive evidence that the development site may contain a Jewish burial ground.

The main focus of interest for the post-medieval period is on the Infirmary buildings, though much of this is contained within the standing buildings and fall outside of the scope of this field evaluation. Two items of interest may, however, be highlighted. The brick wall aligned east to west identified in Trench 3 and the earlier ditch form the southern boundary of the initial infirmary development. The heated structure to the south of Walnut House (identified in Trench 13) is likely to be the remains of a building for which few standing examples survive.

Survival

Figures 25 and 27 indicate the main areas of survival and absence of significant deposits. On the northern side of the site where heavy post-medieval truncation has taken place, deeply buried features may still remain, though these are likely to be heavily disturbed. The northern half of the site was not sampled to the same extent as the south but the posthole in Trench 19 and the base of a heavily truncated early Roman ditch in Trench 27, does indicate that some features will exist.

The majority of the less substantial buildings to the west of the site are unlikely to have footings that would have had any negative impact on significant buried deposits.

The finds assemblage from the site is of considerable significance. The Roman assemblage is substantial with an unusually excellent state of preservation with a broad range of local, regional and imported material. The condition of the material indicates the presence of well-preserved archaeological deposits across the site and representing, at least, the late 1st to early 4th century.

Conditions for the widespread preservation of organic materials do not exist, though localised conditions for good preservation may.

Vulnerability

The design of the proposed development is in progress, but the following has used the outline proposals (BDP 2006) as a basis for comment. The zones and block names used in the BDP report have been used here to aid comparison (Fig 25). Review of any changes or additional details to the design will have to be considered against the information contained in this report. Of particular importance will be details of groundworks for landscaping and foundations, especially so as generally the site slopes down to the west. For the purposes of this exercise significant deposits have been taken to be those consisting of Roman features and layers, though other deposits of interest have also been highlighted. All depths and ordnance datum heights have been estimated from available information and variation should be anticipated.

Zone	Sub-division	Likelihood of presence of significant deposits	Approximate depth (below existing surfaces and to OD) of significant archaeological deposits	Estimated nature of impact
Zone 1	Exterior	Known to be mostly significant	1-2m 13.13-14.31m AOD Dark earth and possible Roman buried soil present	Minimal except adverse where deeper landscaping is proposed Adverse from deeper services
	Blocks 5-6, Atrium 1	Significant Except extreme north-east end of Block 6, (significant deposits are unlikely to survive)	1-2m 13.13-14.31m AOD Dark earth and possible Roman buried soil present	Adverse from deeper groundworks (piles, pads lift pits, basements), shallow groundworks impact dependant on detailed design
	Block 7 and Atrium 2	Significant deposits are unlikely to survive to east Significant deposits possibly do not survive to west	Uncertain	Adverse impact is less likely
Zone 2	Exterior	Mostly significant to east Significant deposits unlikely to survive in western third	0.90-1.11m 22.20-20.20m AOD NB brick feature to south-west of Walnut House (0.35, 20.92m AOD) Dark earth and possible Roman buried soil present	Eastern - minimal except adverse where deeper landscaping is proposed Adverse from deeper services Western third – adverse impact is less likely
	Blocks 1-3	Mostly significant	0.35-1.11m 22.20-20.20m AOD Dark earth and possible Roman buried soil	Adverse from deeper groundworks (piles, pads, lift pits, basements), shallow groundworks impact dependant on detailed

Zone	Sub-division	Likelihood of presence of significant deposits	Approximate depth (below existing surfaces and to OD) of significant archaeological deposits	Estimated nature of impact
			present	design
	Block 4	Variable, from known survival of significant to unlikely to survive	West end - 2.00m 13.80-14.67m AOD Dark earth and possible Roman buried soil present	Eastern end - adverse from deeper groundworks (piles, pads, lift pits, basements), shallow groundworks impact dependant on detailed design
Zone 3	Exterior	Mostly significant deposits possibly survive	Where significant 0.90m 21.81m AOD Dark earth and possible Roman buried soil present	Minimal except adverse where deeper landscaping is proposed Adverse from deeper services
	Block 8	Mostly significant deposits possibly survive with smaller area of known survival	Where significant 0.90m 21.81m AOD Dark earth and possible Roman buried soil present	Adverse from deeper groundworks (piles, pads, lift pits, basements)
Zone 4	Exterior	To east of Infirmary and Mulberry mostly significant deposits possibly survive with smaller area of known survival To west of Infirmary and Mulberry significant deposits are unlikely to survive	0.97-1.8m 21.70-22.30m AOD Dark earth and possible Roman buried soil present but with fewer artefacts and greater number of later artefacts	Adverse from deeper services
	Infirmary/ Mulberry	Significant deposits are unlikely to survive	N/a	No adverse impact
	Block 9	Mostly significant deposits are unlikely to survive	N/a	Unlikely adverse impact

Zone	Sub-division	Likelihood of presence of significant deposits	Approximate depth (below existing surfaces and to OD) of significant archaeological deposits	Estimated nature of impact
Zone 5	Outbuilding 1	Significant deposits possibly survive	1.21m 22.50m AOD Dark earth and possible Roman buried soil present but with fewer artefacts and greater number of later artefacts	Adverse from deeper groundworks (piles, pads, lift pits, basements), shallow groundworks impact dependant on detailed design
	Outbuilding 2	Significant	0.35m 20.95m AOD Dark earth and possible Roman buried soil present	Adverse from deeper groundworks (piles, pads, lift pits, basements), shallow groundworks impact dependant on detailed design

Potential

The following research priorities revise those presented in the brief (WCC 2006a) and have also been drawn from the Worcester City Council's strategy document 2006b). The themes are drawn from current knowledge and opinion as presented in this report and are intended to be augmented and developed as further works progress (the absence of any theme cannot preclude the absence of related deposits from the site, though they may be regarded as less likely to be significant).

- The surface morphology of the gravel terrace (RP1.1) – The present field evaluation and any further works are likely to add detail.
- The dating, character and origins of Severn alluviation (RP1.3) – The potential here is perhaps less than for other sites (due to the evidence for poor organic preservation) but this is drawn from a very small sample and potentially important information may be recovered. The site does however have evidence for Roman use of the floodplain and use of ground raised and reclaimed from the floodplain.
- The distribution of 1st century AD settlement (RP3.1) – The site contains two areas occupied in the earliest period of the Roman settlement, and the site contains evidence that could advance understanding of the character of the settlement in this period.
- Comparison of the material culture of Roman Worcester and other sites (RP3.3) – The site contains an abundant quantity of material culture which would facilitate detailed comparison with other sites in Worcester and with other Roman settlements.
- Roman road network (RP3.7) – The westwards extension of the road identified at Trajan Place may not extend into the site.
- Roman iron and other industries (RP3.19-24) – The evaluation site does not contain extensive evidence for ironworking or other industrial activity. It is possible that evidence for craft production does exist on the site in localised areas. However it is possible that the occupation evidence on the floodplain can be interpreted in the context of the hypothesis that cattle were an important part of the settlement economy. This single site contains a number of spatial and chronological variations with considerable potential to add to a growing understanding and model for Worcester.
- Sampling and analysis of dark earth (RP3.26) – The site has considerable potential for investigating changing land-use, and the reasons behind the relatively large quantity and unabraded nature of the pottery assemblage and the possible buried Roman soil at its base.

7. Publication summary

The Service has a professional obligation to publish the results of archaeological projects within a reasonable period of time. To this end, the Service intends to use this summary as the basis for publication through local or regional journals. The client is requested to consider the content of this section as being acceptable for such publication.

An archaeological evaluation was undertaken at the new University of Worcester, City Campus (the site of the former Royal Worcester Infirmary, Castle Street; SO 8465 5525). It was undertaken on behalf of the University, who intend refurbishment of selected buildings, demolition of others, and the construction of new buildings and associated landscaping, car parking etc, for the new city centre campus. A planning application is intended to be submitted in the near future. The project aimed to determine if any significant archaeological deposits were present and if so to indicate what their location, date and nature were.

The evaluation consisted of twenty-seven trenches across the site and seven boreholes, located to investigate three topographical zones, the terrace, terrace slope and the River Severn floodplain to the south-west of the site.

Prehistoric

The earliest evidence came from the south-western part of the site where alluvial deposits dipped sharply to the west and south. This suggests that former channels of the River Severn once flowed over the western part of the site and created deep channels. Beyond this, however, no evidence of human prehistoric activity was identified during the evaluation. The available data suggests that the floodplain had an uneven topography in the pre-Roman period, and that former channels were used to dump waste material from the Roman period onwards.

Roman

A number of features, including pits, postholes and ditches, all of which are dated to the Roman period, were observed across the evaluated area. The deposits generally overlay the alluvium or were cut into the underlying natural mudstone and gravels.

Two areas of the site in particular revealed significant deposits of a Roman date. On the higher ground, to the south-east of the site, the area around Walnut House, a number of features indicated activity from the mid 1st – 2nd century. Though the evidence is drawn from a sample, there is a notable lack of material and features dated to the later Roman period. A high density of Roman pottery and features was also noted on the flood plain to the south-west of the site. Roman activity here is represented by the presence of pits, ditches and an extensive area of made ground. Finds analysis from this area indicates activity throughout the entire Roman period (1st – 4th centuries).

Evidence from the site indicates areas of concentrated Roman activity throughout the Roman period. Presence of iron slag within the features is common in this area of Worcester, though no direct evidence of iron manufacture was observed. It would appear that the edge of the flood plain had been a focus of activity throughout the Roman period; for which the proximity of the river must have been of some importance.

Post-Roman and medieval

Above the Roman deposits noted across the site was a substantial layer of post-Roman soil containing residual Roman pottery, identified as a 'dark earth' deposit. The dark earth at Worcester originated as midden material mixed with large quantities of manure deposited by grazing animals that were penned during the later Roman period. In this location, however, outside of the medieval city, agricultural land-use continued until the city expanded again in the 19th century, and the dark earths were continually reworked and deepened over a very long period, which has limited their potential significance.

Medieval evidence was limited to two ditches, one on the higher ground and another on the floodplain. Also a single pit to the south of the site contained medieval material. The lack of extensive medieval occupation or usage of the site was to be expected as this area was outside the northern limits of the city.

Post-medieval

Post-medieval activity was limited to a number of walls, some of which could be related to maps. In addition a substantial early Victorian brick structure was recorded to the south of the site. The structure includes a grate and flues, though its function remains inconclusive.

The construction of the infirmary building from the 1770s onwards involved, in some areas of the site, the removal and re-deposition of large quantities of soil to form building terraces on

this sloping site. Substantial areas of the site have undergone considerable truncation, potentially leading to the destruction of much of the earlier buried archaeological evidence.

Modern

Across the site evidence for modern activity was prevalent, these included modern walls and services, all associated with the existing infirmary. None of these features are of archaeological significance.

In summary, the evaluation indicates that extensive areas of well preserved Roman and post-medieval structural remains, are present within the site, representing sequences of occupation from at least the mid 1st – 2nd century AD. The Roman activity has been demonstrated to survive well in the south-east and south-west quadrants. The date, preservation and concentration of the Roman features indicate a site of both significance and importance for Roman Worcester. There also appear, however, to be areas of the site where considerable late 18th – early 20th century ground reduction has removed the potential for extensive, well-preserved archaeological deposit to survive.

8. **Acknowledgements**

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9. **Personnel**

The fieldwork and report preparation was led by Simon Sworn. The project manager responsible for the quality of the project was Simon Woodiwiss. Fieldwork was undertaken by Simon Sworn, Tegan Cole, Christine Elgy, Stephen Potten, Georgina MacHugh and Dennis Williams, finds analysis by Angus Crawford, environmental analysis by Liz Pearson, pollen analysis by Katie Head and illustration by Carolyn Hunt. Keith Wilkinson (University of Winchester) contributed comment on geoarchaeological assessment and Hal Dalwood commented on a draft, making use of his detailed knowledge on the archaeology of Worcester.

10. **Bibliography**

BDP 2006 *University of Worcester, City Campus, RIBA stage C progress report*, Building Design Partnership

Beijerinck, W, 1947 *Zadenatlas der Nederlandsche Flora*, Wageningen

Bennett, K D, 1994 *Annotated catalogue of pollen and pteridophyte spore types of the British Isles*, unpublished report, Department of Plant Sciences, University of Cambridge

Bryant, V, 2004 Fired clay artefacts, in Dalwood and Edwards, 366-8

Burrows, B, and Cutler, R, 2004 *14-20 The Butts, Worcester. Post-excavation Assessment and research design*, Birmingham Archaeology, project number 1097, November 2004

CAS, 1995 (as amended) *Manual of Service practice: fieldwork recording manual*, County Archaeological Service, Hereford and Worcester County Council, report, **399**

-
- Crawford, A, 2007 *Revised Post-excavation Assessment and Update Project Design for Kardonia, Farrier Street, Worcester*, Historic Environment and Archaeology Service, Worcestershire County Council, report **1521**
- Dalwood, H, 2004a Archaeological and historical context, in Dalwood and Edwards, 9-25
- Dalwood, H, 2004b Chronological synthesis, in Dalwood and Edwards, 36-76
- Dalwood, H, and Edwards, R, 2004 *Excavations at Deansway, Worcester, 1988-89. Romano-British small town to late medieval city. CBA Research Rep 139*
- Evans, C J, Jones, L, and Ellis, P, 2000 *Severn Valley ware production at Newland Hopfields: excavation of a Romano-British kiln site at North End Farm, Malvern, Worcestershire in 1992 and 1994*. BUFAU Monograph Ser, **2**/British Archaeological Reports
- HEAS, 2006 *Proposal for an archaeological evaluation at the former Worcester Royal Infirmary, Worcester*, Historic Environment and Archaeology Service, Worcestershire County Council, unpublished document dated 30th October 2006, **P2990**
- Hurst, J D, 1994 (as amended) *Pottery fabrics. A multi-period series for the County of Hereford and Worcester*, County Archaeological Service, Hereford and Worcester County Council, report, **445**
- Hurst, J D, and Rees, H, 1992 Pottery fabrics; a multi-period series for the county of Hereford and Worcester, in S Woodiwiss (ed), *Iron Age and Roman salt production and the medieval town of Droitwich. CBA Res Rep 81*, 200-209
- IFA, 1999 *Standard and guidance for archaeological field evaluation*, Institute of Field Archaeologists
- Jackson, R, 2004 Production: Roman ironworking, in Dalwood and Edwards, 100-105
- Macphail, R, 2004 Soils and land-use history: results and potential of soil micromorphology, in Dalwood and Edwards, 77-9
- Mercian Archaeology 2005 *Desk-based assessment and buildings assessment of the former site of the Worcester Royal Infirmary, Castle Street, Worcester*, Mercian Archaeology and Historic Buildings, project **PJ 04/126**
- Moore, P D, Webb, J A, and Collinson, M E, 1991 *Pollen analysis*, 2nd edn, Oxford: Blackwell Scientific Publications
- Morris, L, 1974 The site of Worcester: its geology and geomorphology, in B H Adlam (ed), *Worcester and its Region: Field Studies in the Former County of Worcestershire*, Worcester: Geographical Association, 24-34
- Pearson, E, 2000 *Environmental remains from an evaluation at Condor Buildings, Worcester*, unpublished typescript
- Pearson, E, 2002 Botanical remains, in R Edwards, L Griffin and H Dalwood, Excavations on the site of the New Police Station, Castle Street, Worcester, *Trans Worcestershire Archaeol Soc*, 3rd Ser, **18**, 113-114
- Seager Smith, R, and Davies, S M, 1993 *Black Burnished ware type series. The Roman pottery from excavations at Greyhound Yard, Dorchester, Dorset*, in P J Woodward, S M Davies and A H Graham, *Excavations at the Old Methodist Chapel and Greyhound Yard, Dorchester 1981-1984. Dorset Natural History and Archaeological. Soc. Monograph Series 12*, 229-289
-

Stace, C, 2001 *New flora of the British Isles*, 2nd edn, Cambridge University Press

Stats 2004 *Geotechnical and geoenvironmental report, Worcester Royal Infirmary site*, report no **34351/02**

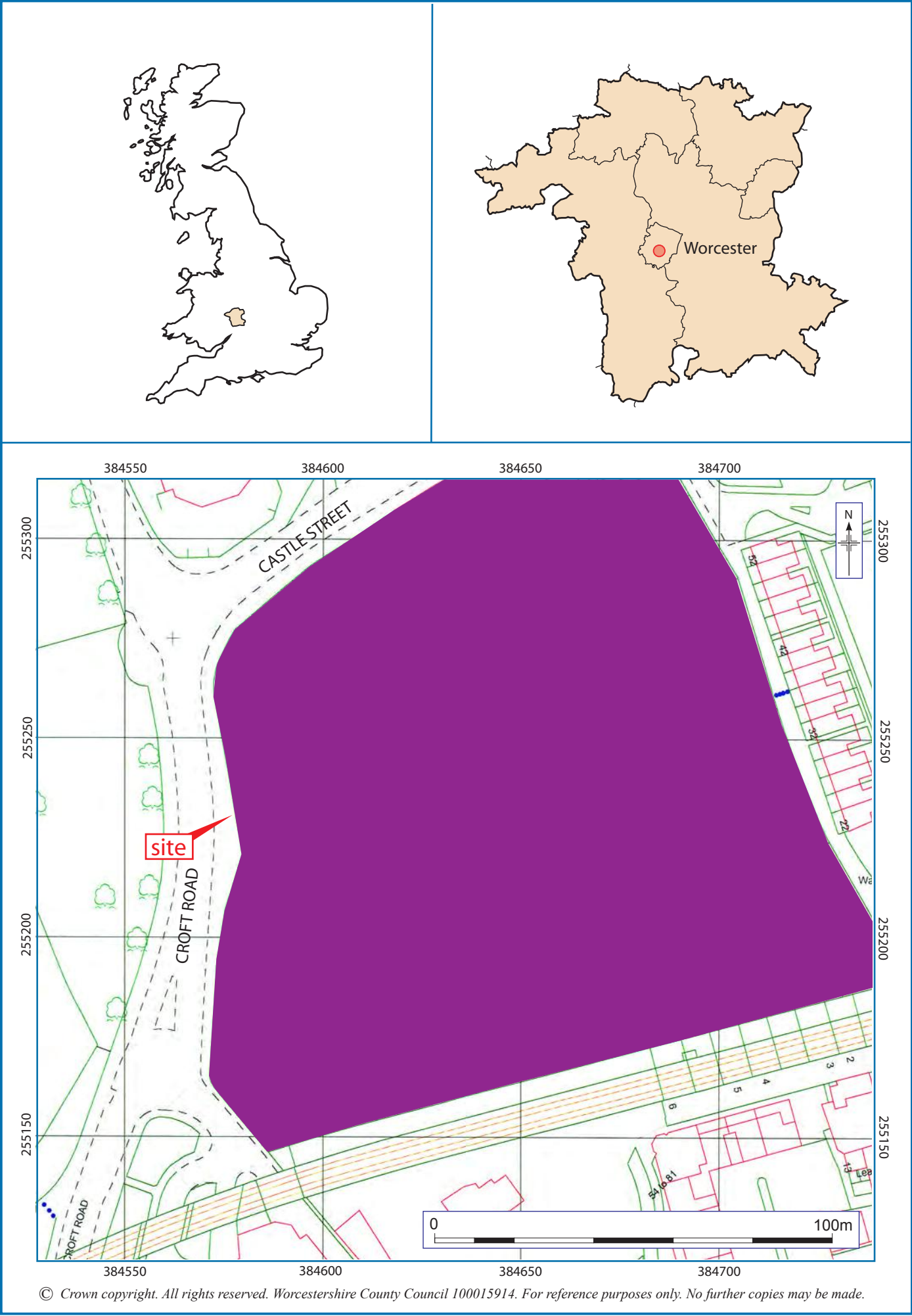
Sworn, S J, 2006 *Archaeological evaluation at the site of the new library and heritage centre, The Butts, Worcester*, Historic Environment and Archaeology Service, Worcestershire County Council, report **1408**

Webster, P V, 1976 Severn Valley ware: a preliminary study, *Trans Bristol Gloucestershire Archaeol Soc*, **94**, 18–46

WCC 2006a *Brief for an archaeological evaluation at the former Worcester Royal Infirmary, Worcester*, Worcester City Museum, Archaeology Section, unpublished document, October 2006

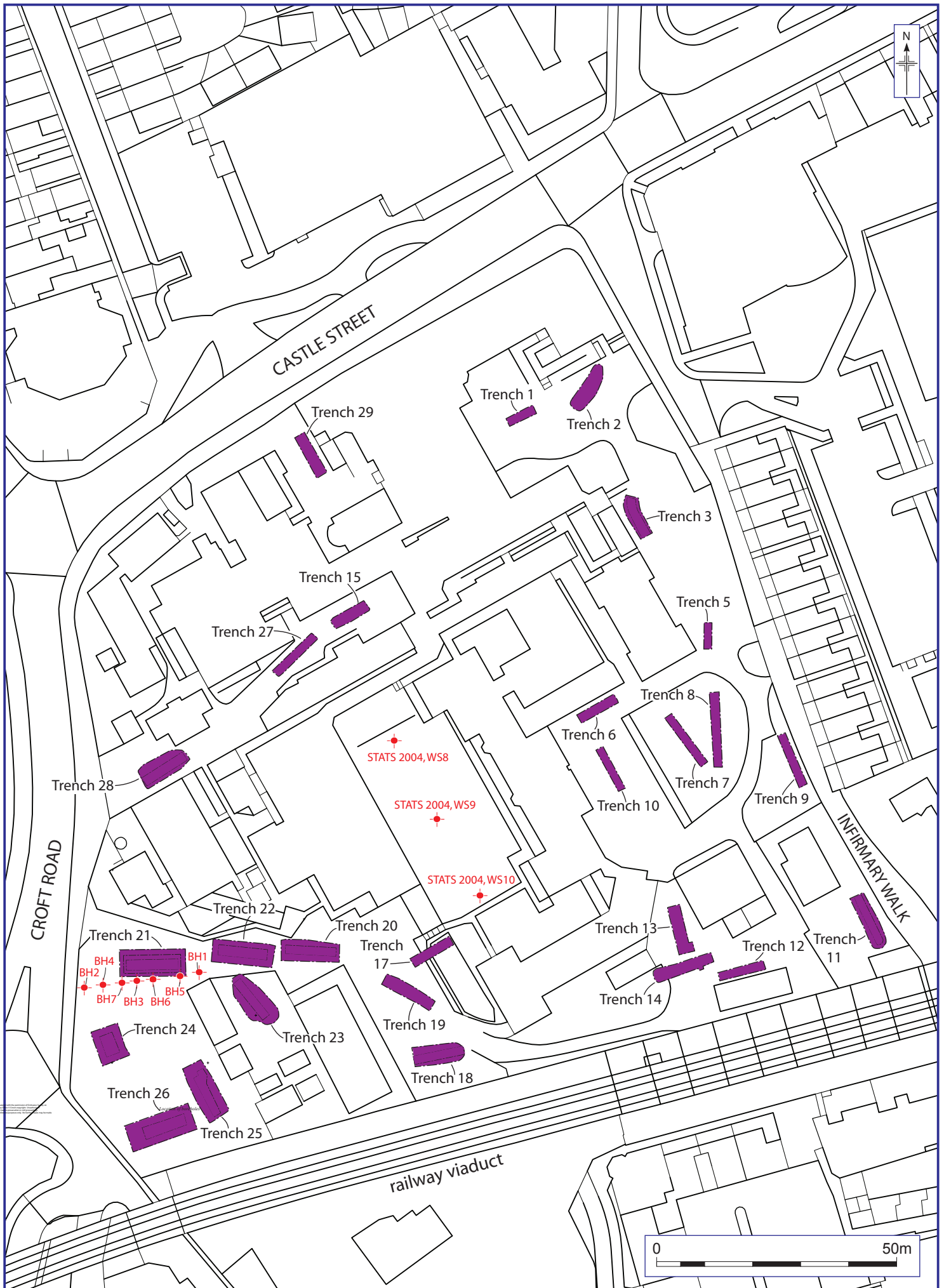
WCC 2006b *An Outline Research Framework for the Archaeology of Worcester*, Worcester Urban Archaeological Strategy, Worcester City Council

Figures

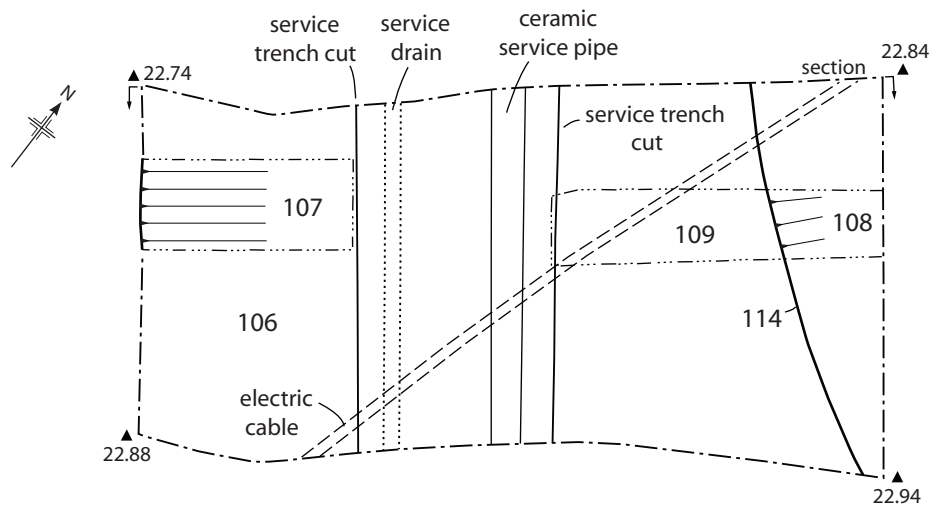


Location of the site.

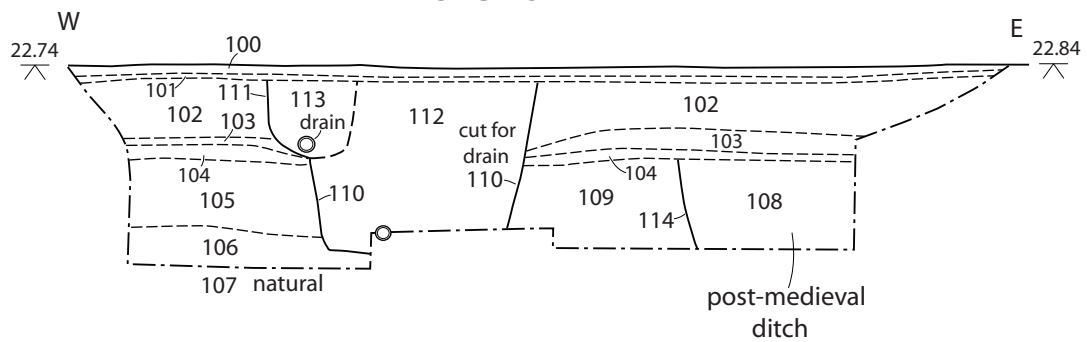
Figure 1



TRENCH 1: PLAN



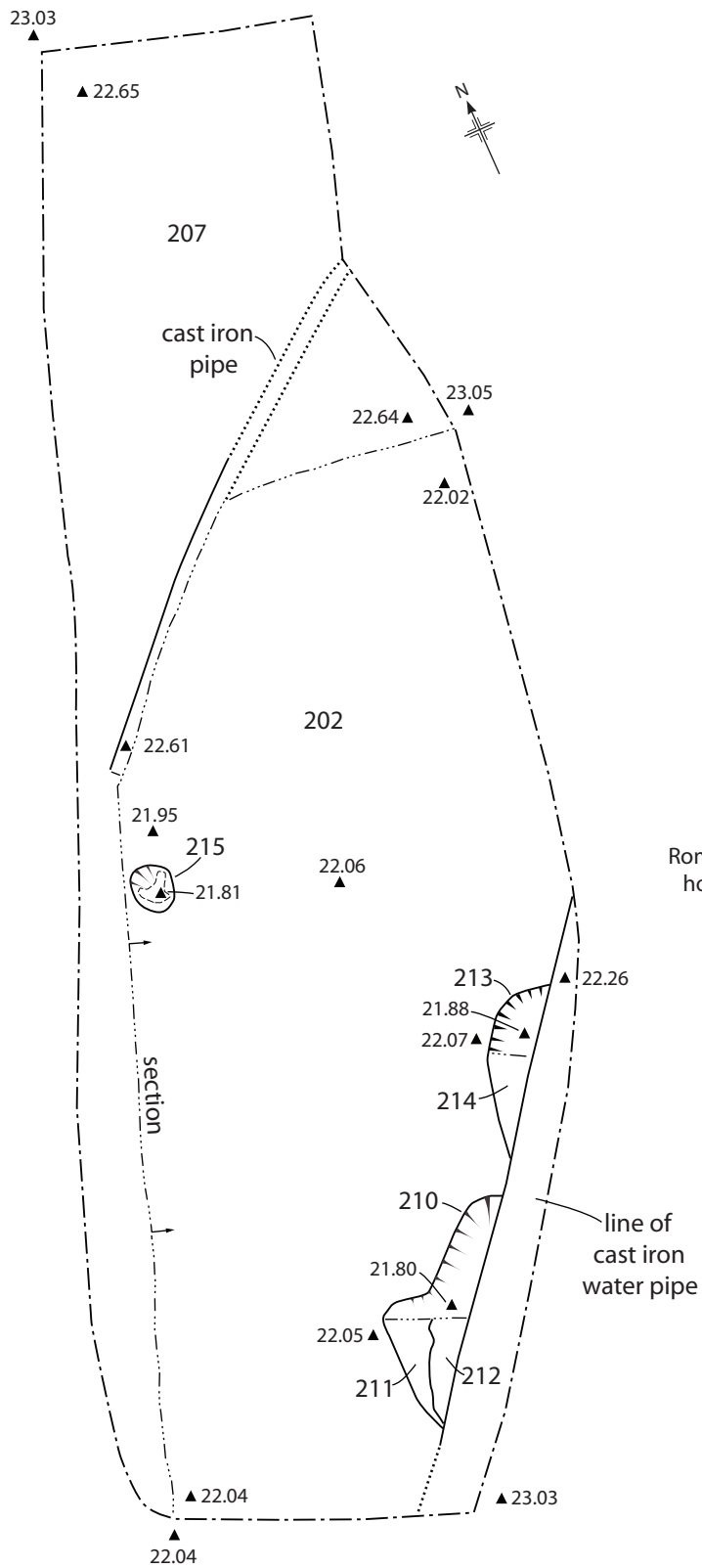
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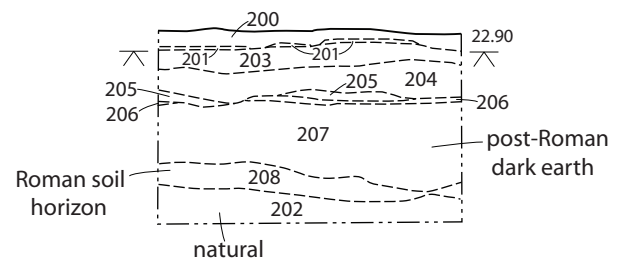
Trench 1: plan and section

Figure 3

TRENCH 2: PLAN



EAST-FACING SECTION

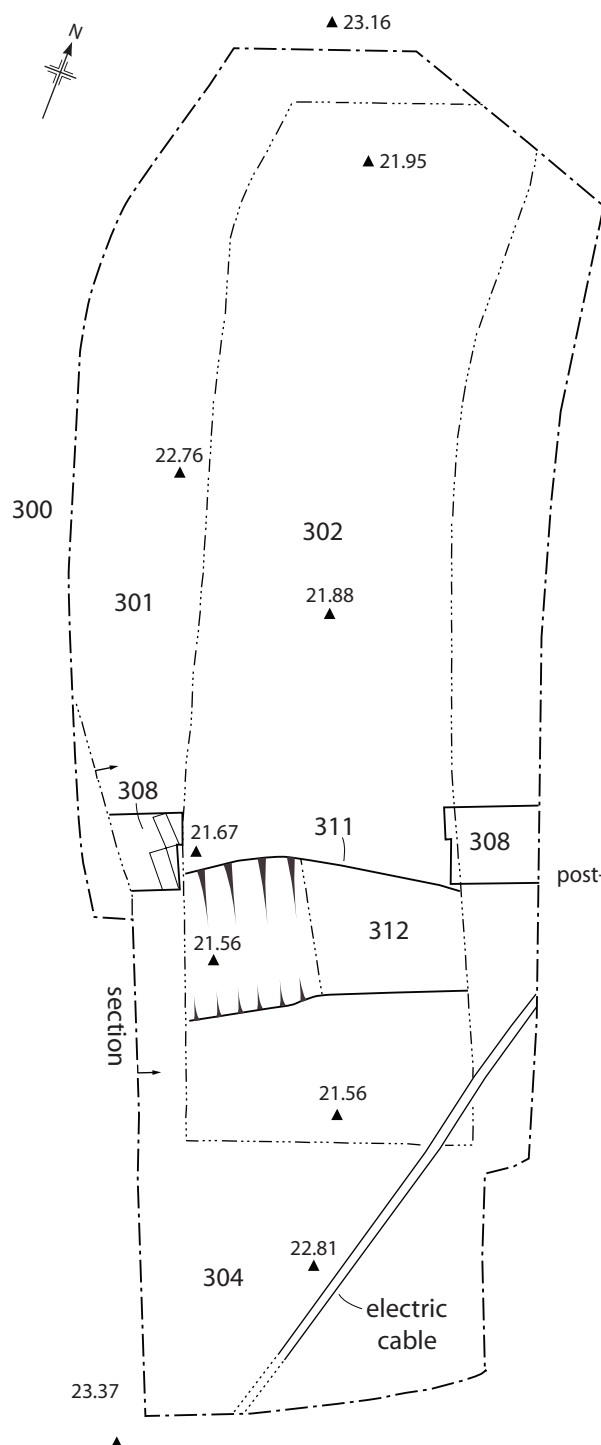


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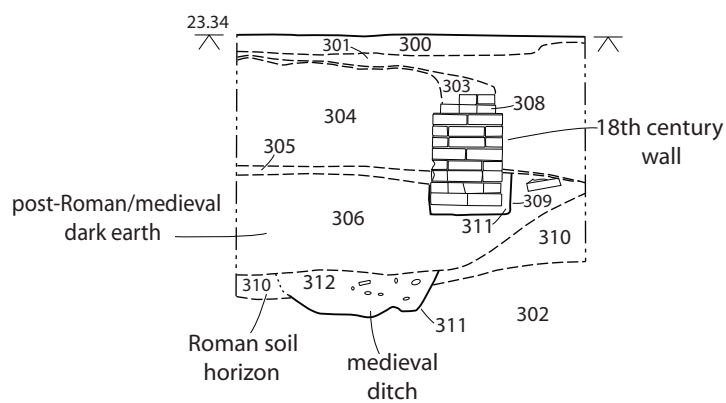
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Figure 4

TRENCH 3: PLAN



SECTION

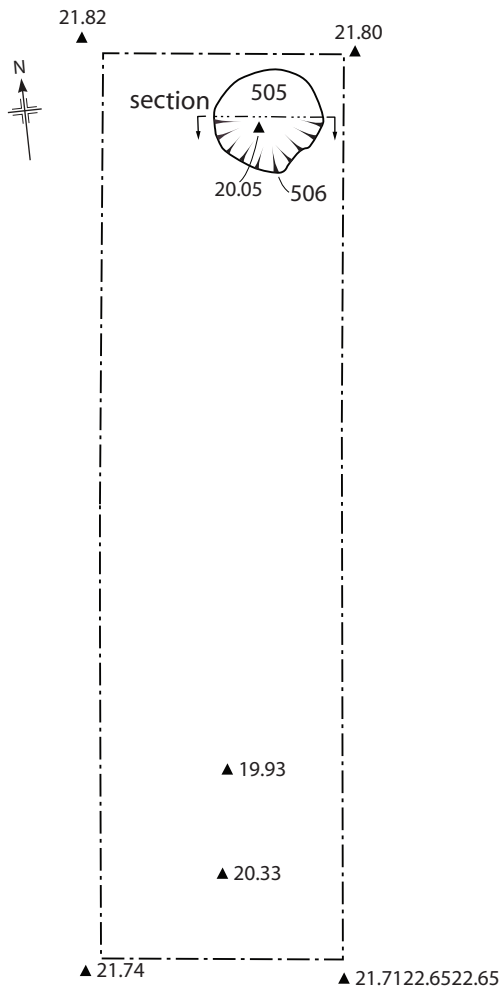


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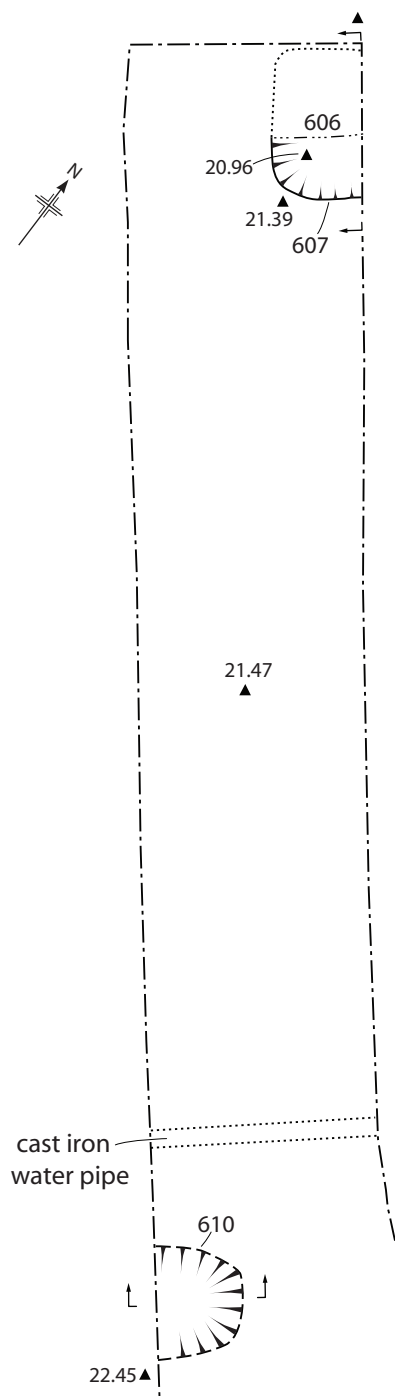
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Figure 5

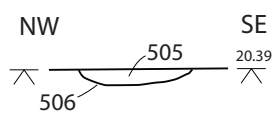
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TRENCH 6: PLAN

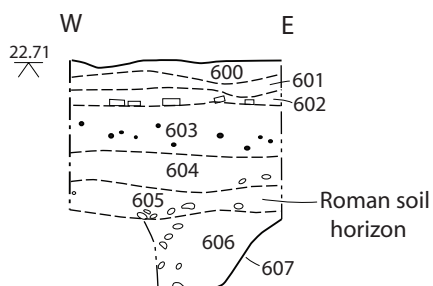


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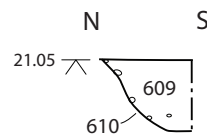


cast iron
water pipe

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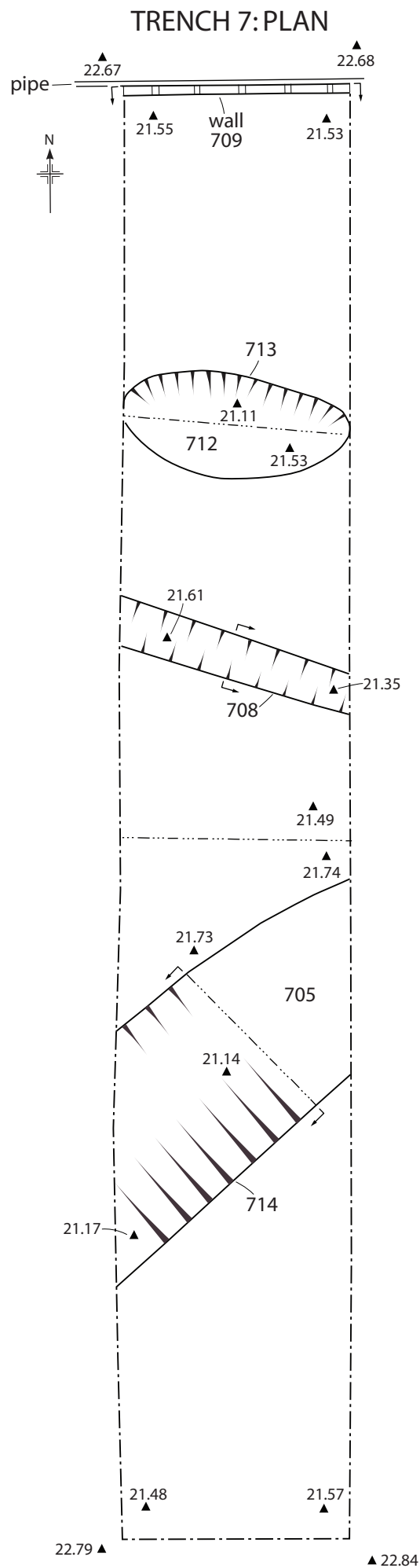


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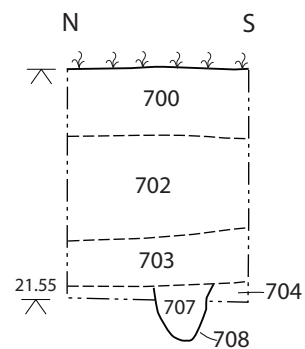


Trenches 5 and 6: plans and sections

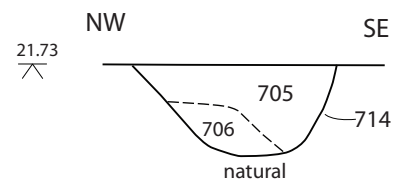
Figure 6



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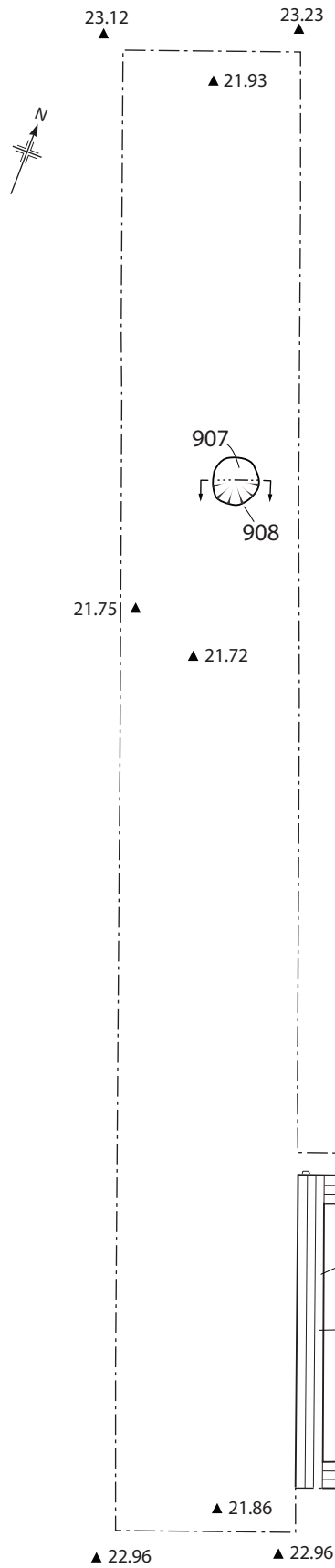
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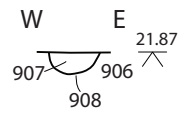
Trench 7: plan and sections

Figure 7

TRENCH 9: PLAN



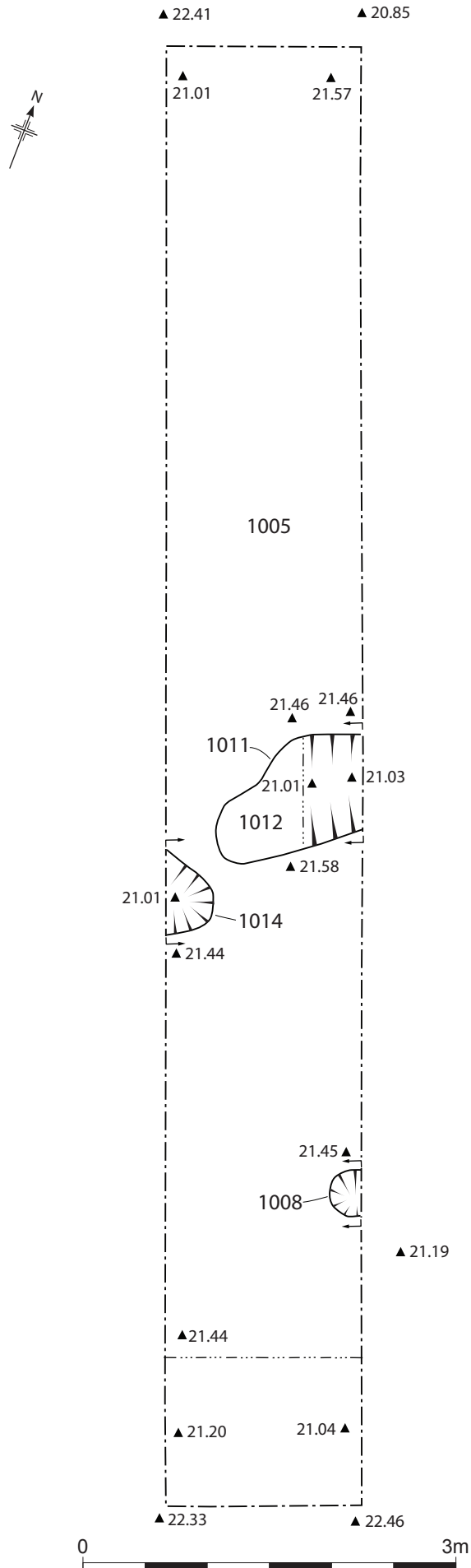
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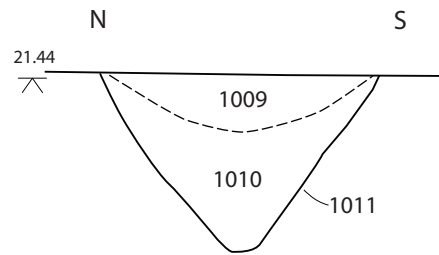
Trench 9: plan and section

Figure 8

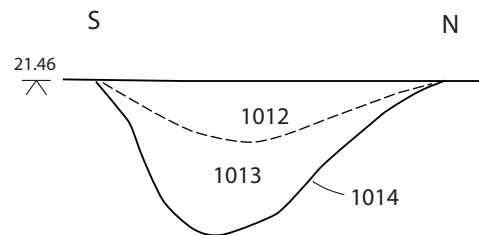
TRENCH 10: PLAN



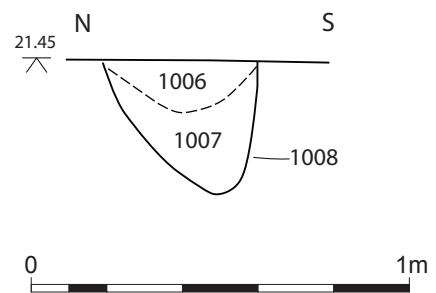
SECTION OF 1011



SECTION OF 1014

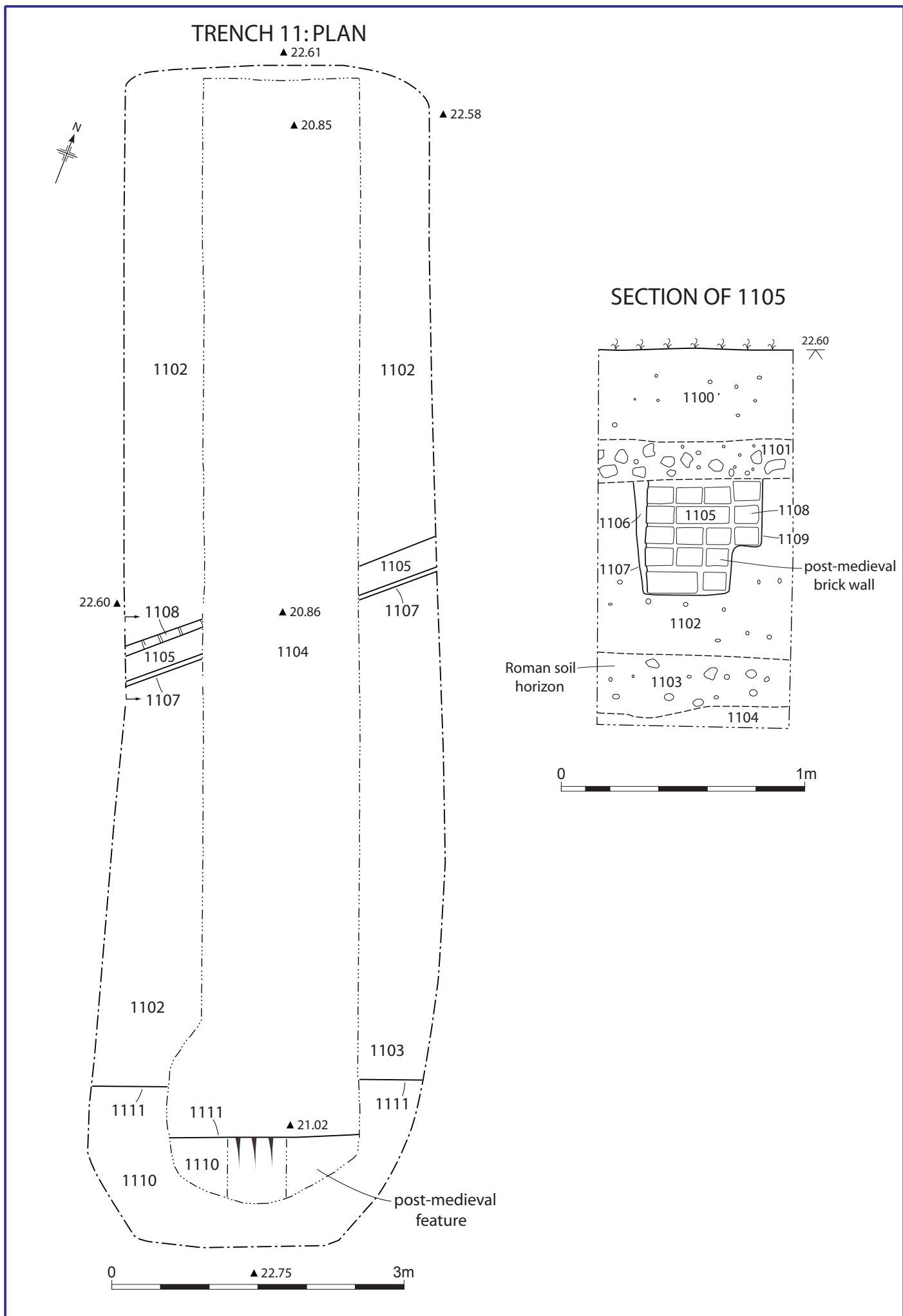


SECTION OF 1008



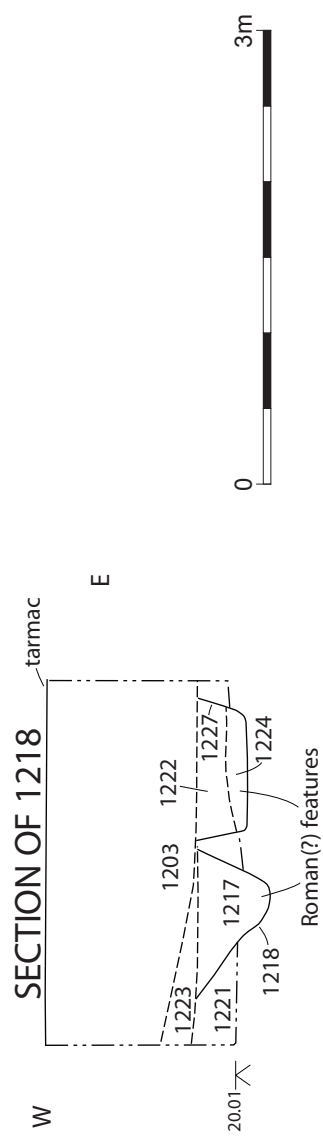
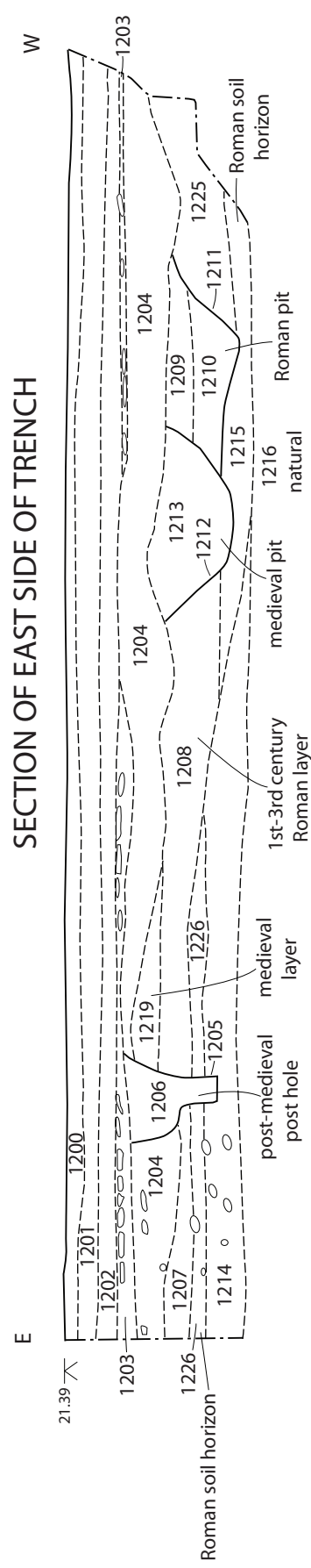
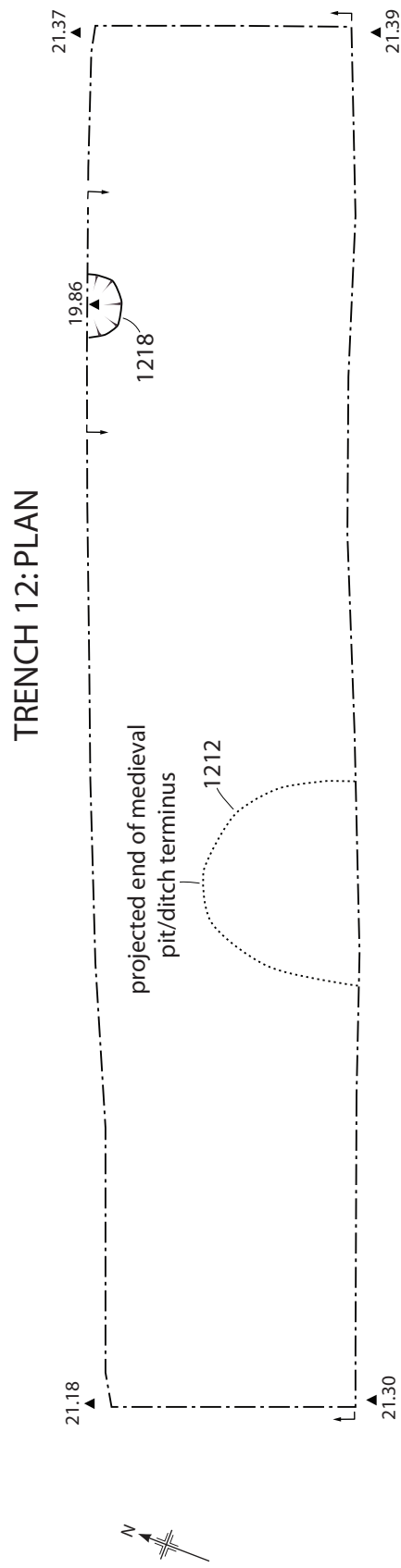
Trench 10: plan and sections

Figure 9



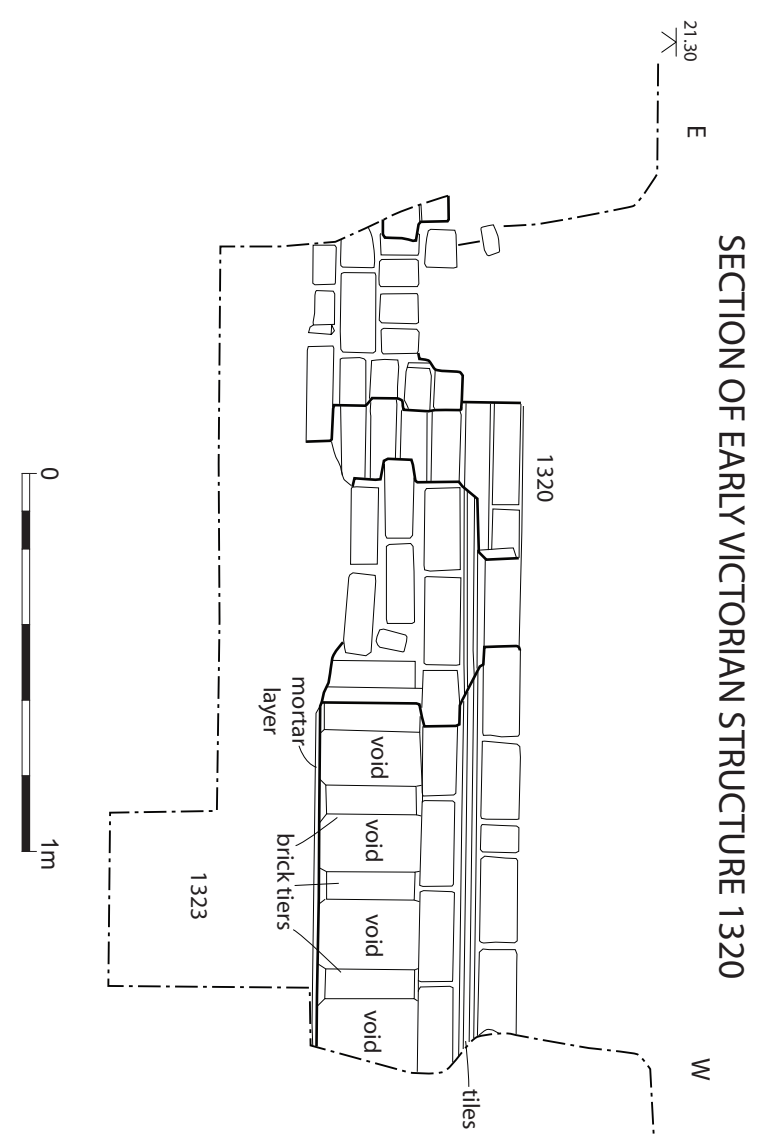
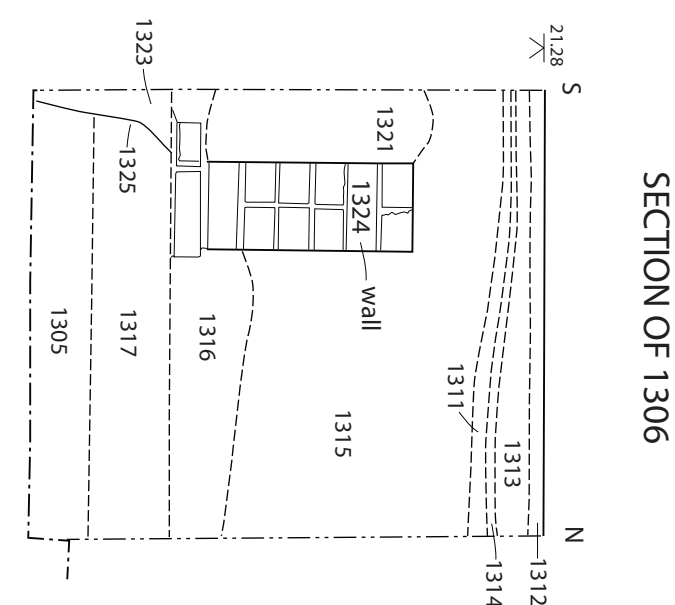
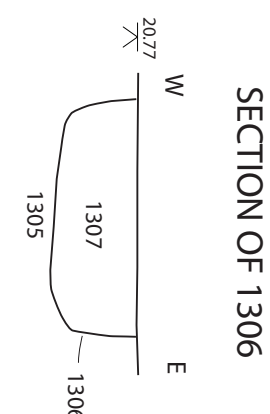
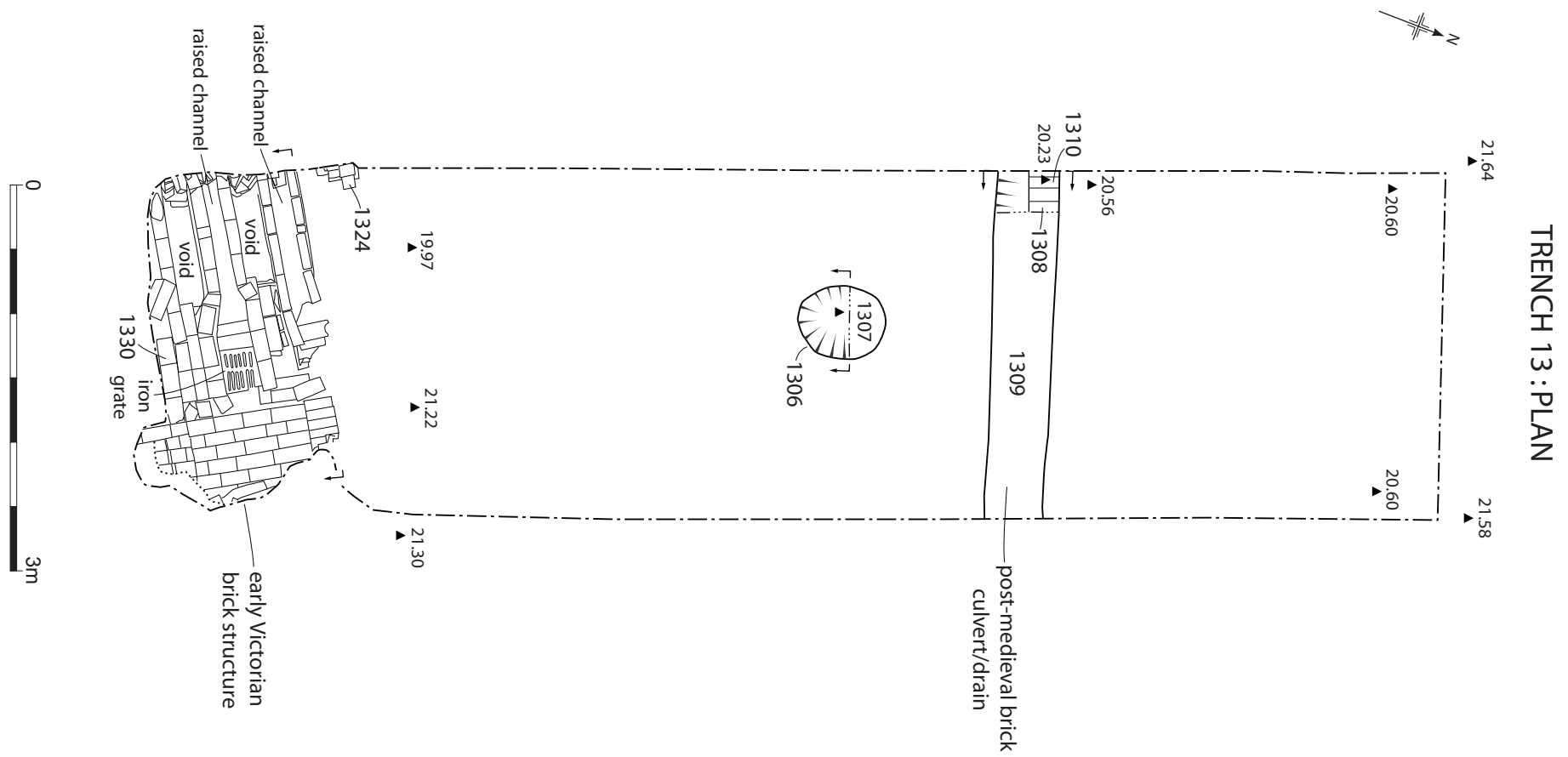
Trench 11: plan and section

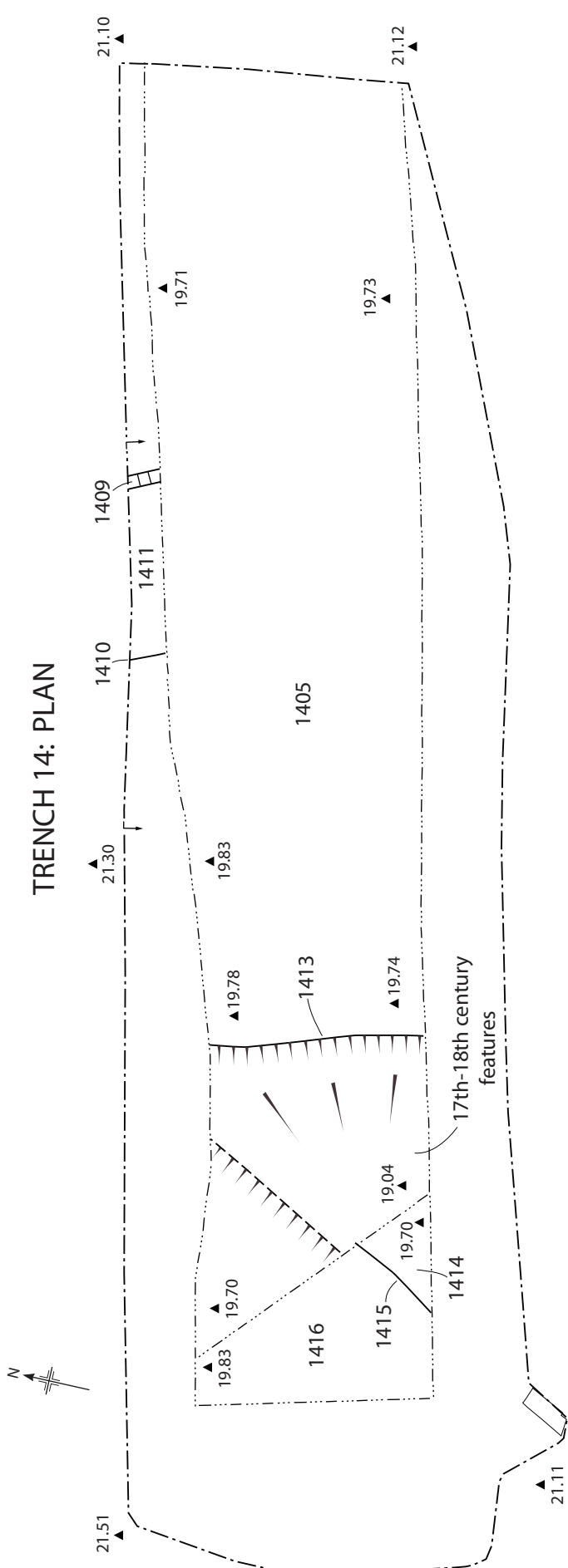
Figure 10



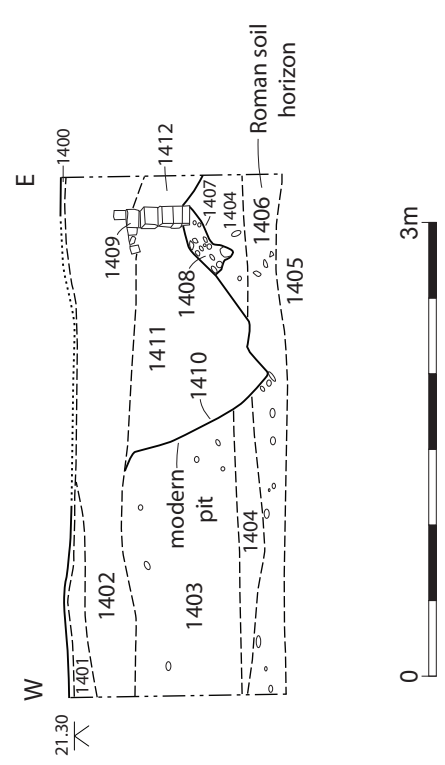
Trench 12: plan and sections

Figure 11





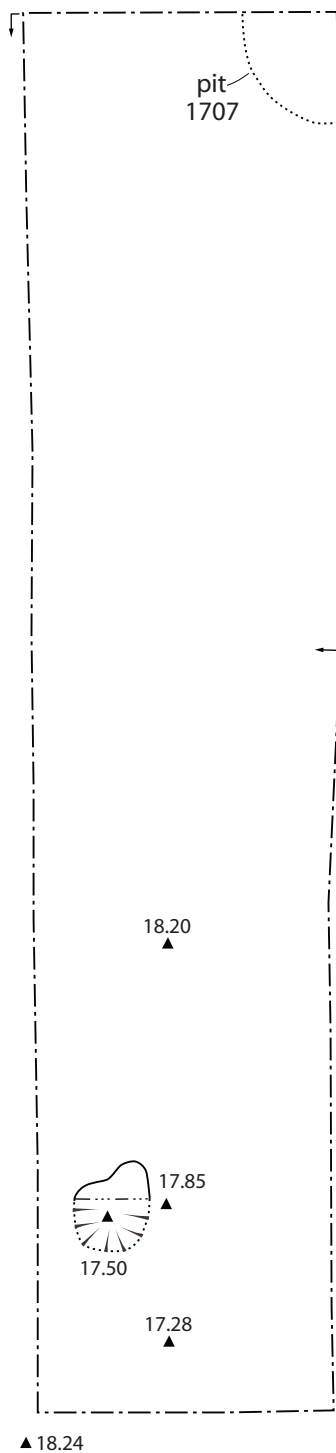
SECTION OF 1410



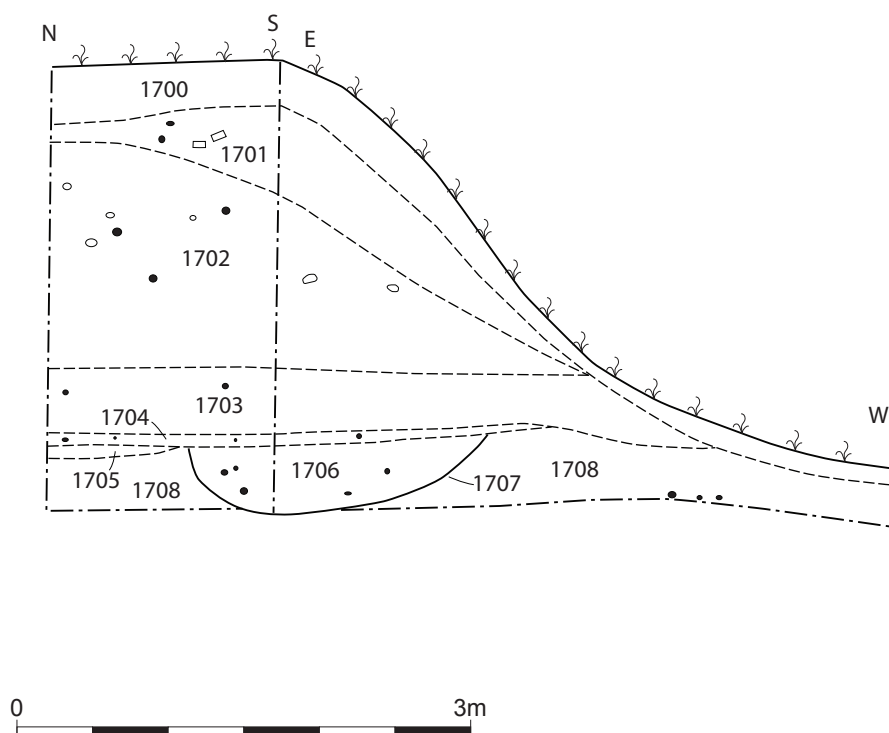
Trench 13: plan and sections

Figure 13

TRENCH 17: PLAN



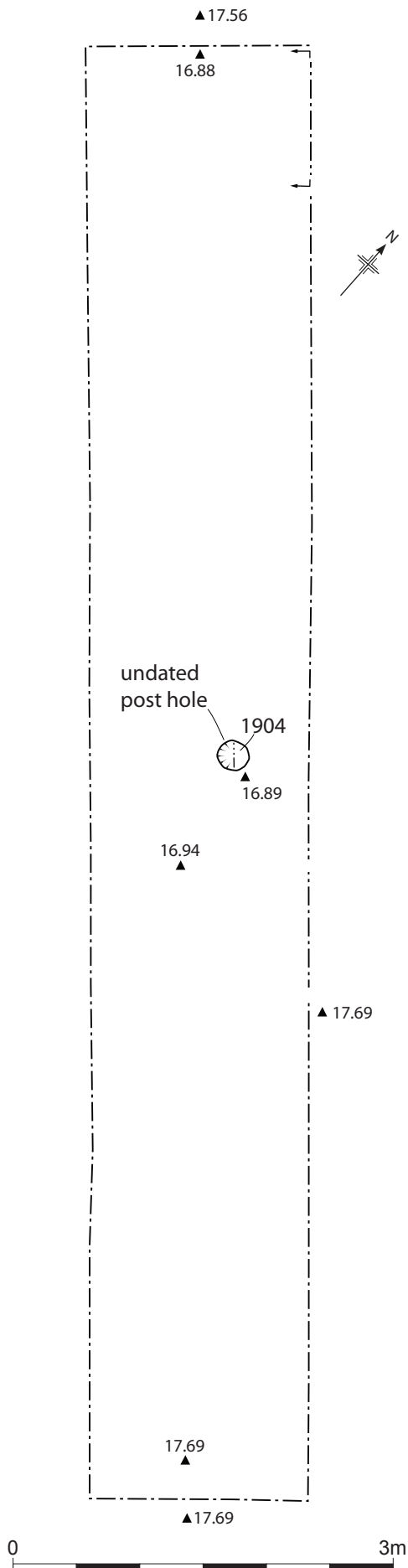
SECTION



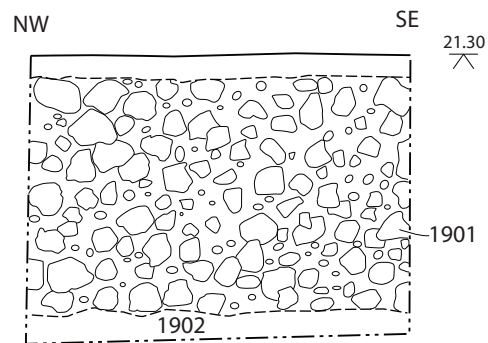
Trench 17: plan and sections

Figure 14

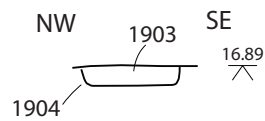
TRENCH 19: PLAN



SECTION THROUGH 1901

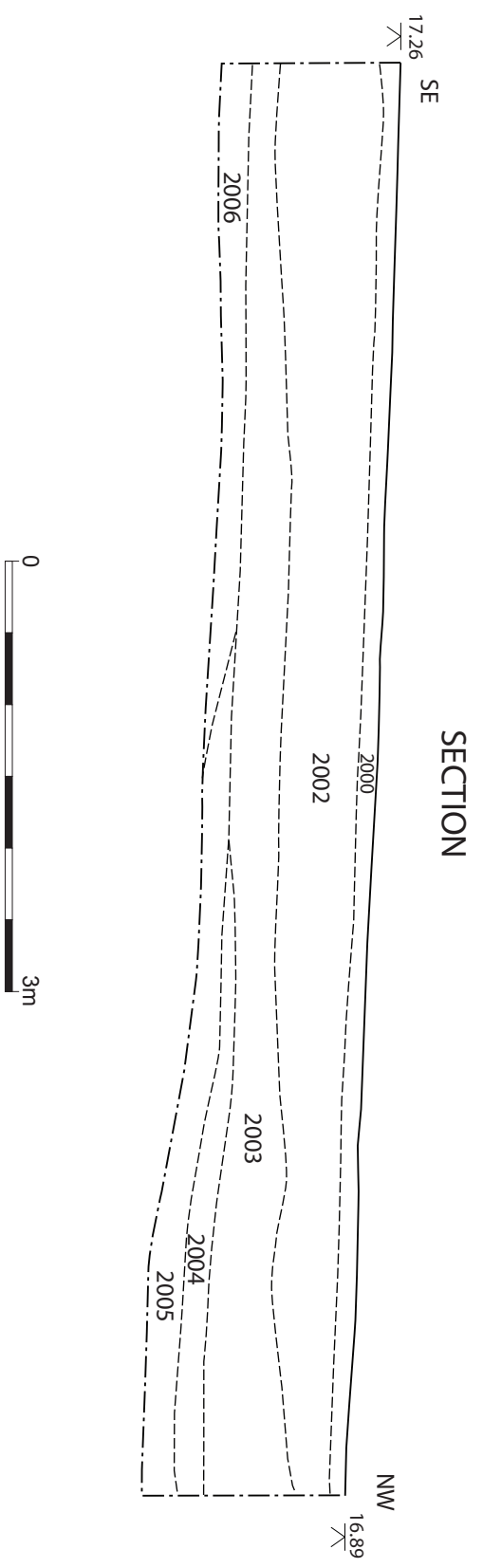
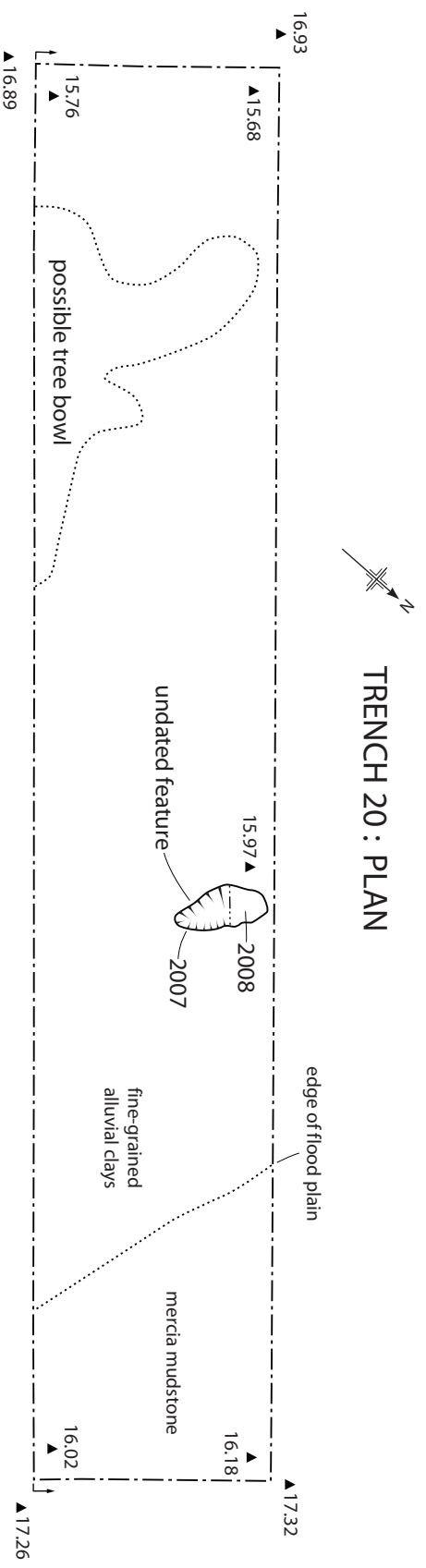


SECTION OF 1904



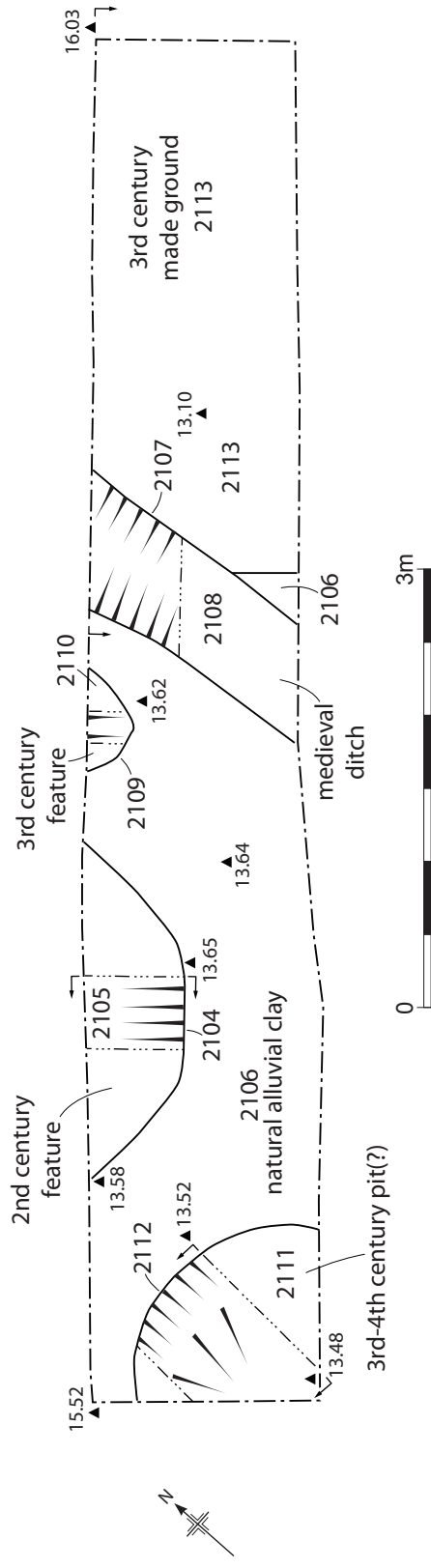
Trench 19: plan and sections

Figure 15

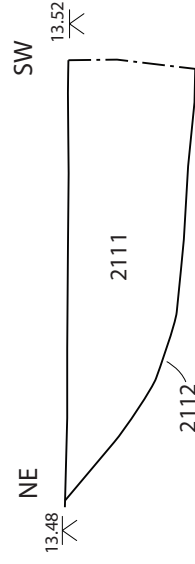


Trench 20: plan and section

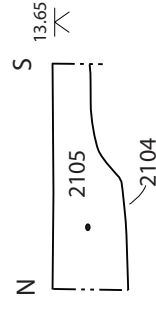
TRENCH 21 : PLAN



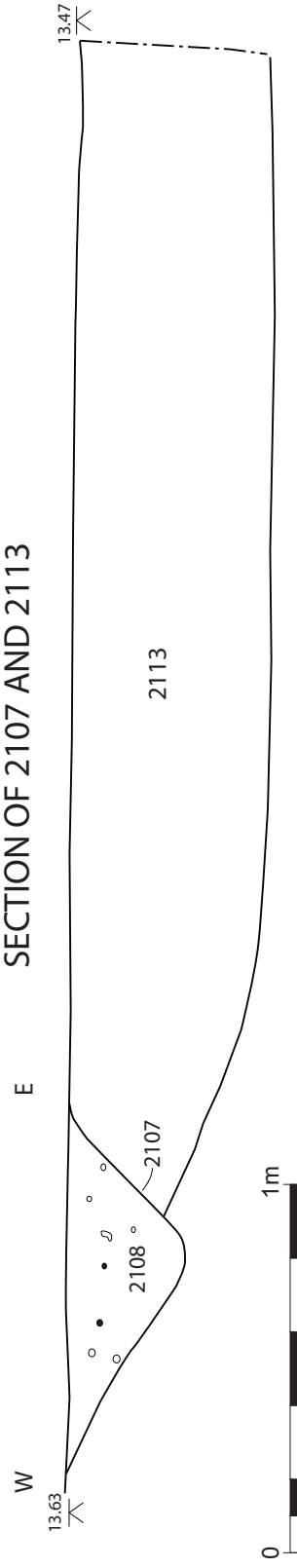
SECTION OF 2112



SECTION OF 2104



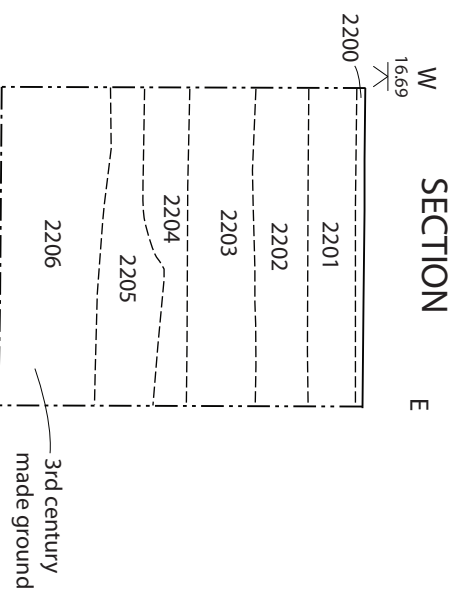
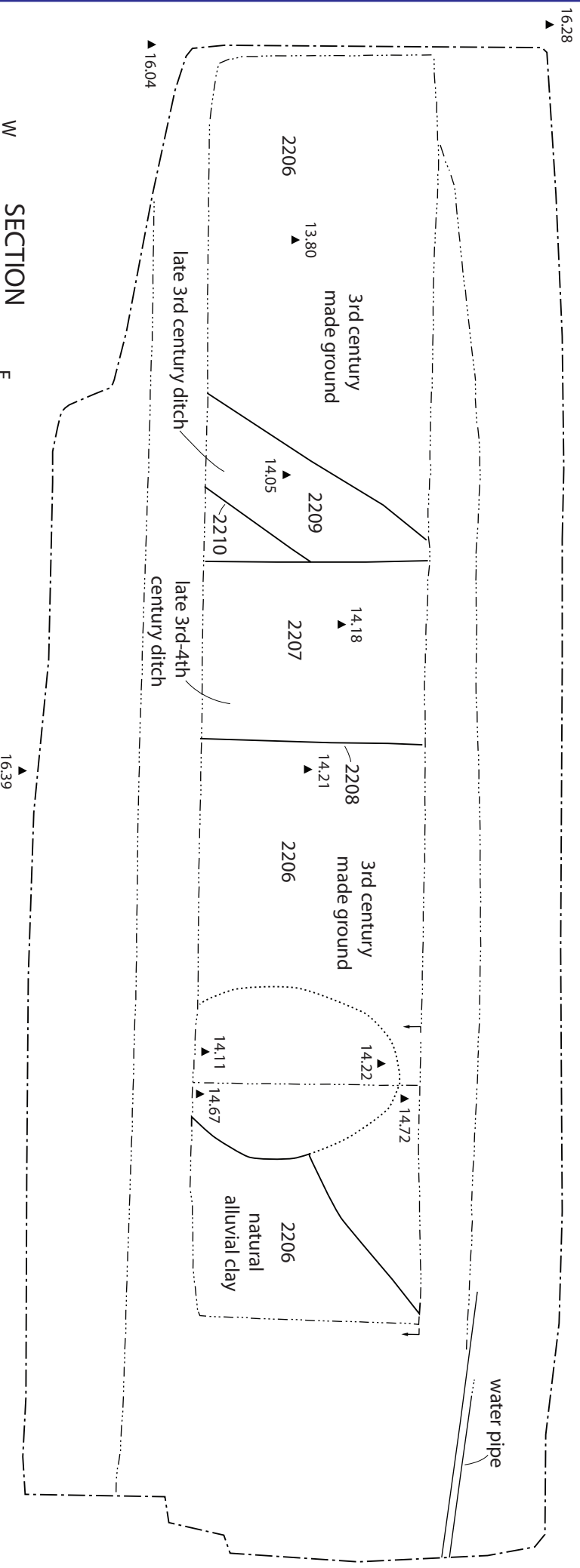
SECTION OF 2107 AND 2113



Trench 21: plan and sections

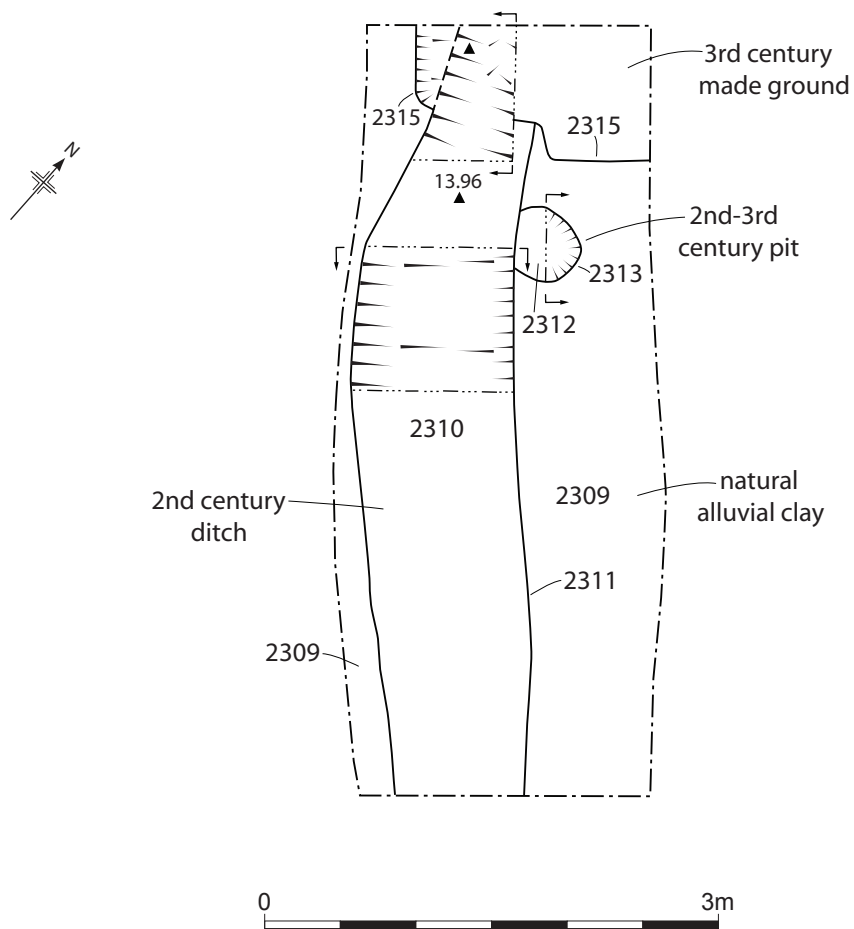


TRENCH 22 : PLAN

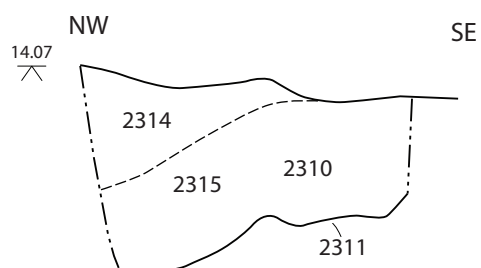


Trench 22: plan and sections

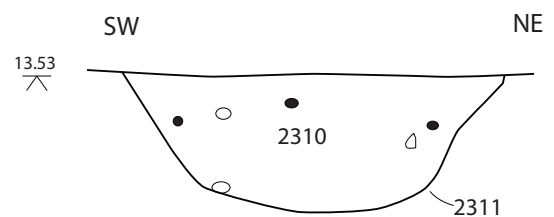
TRENCH 23 : PLAN



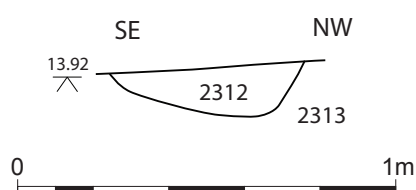
SECTION OF 2311/2315



SECTION OF 2311

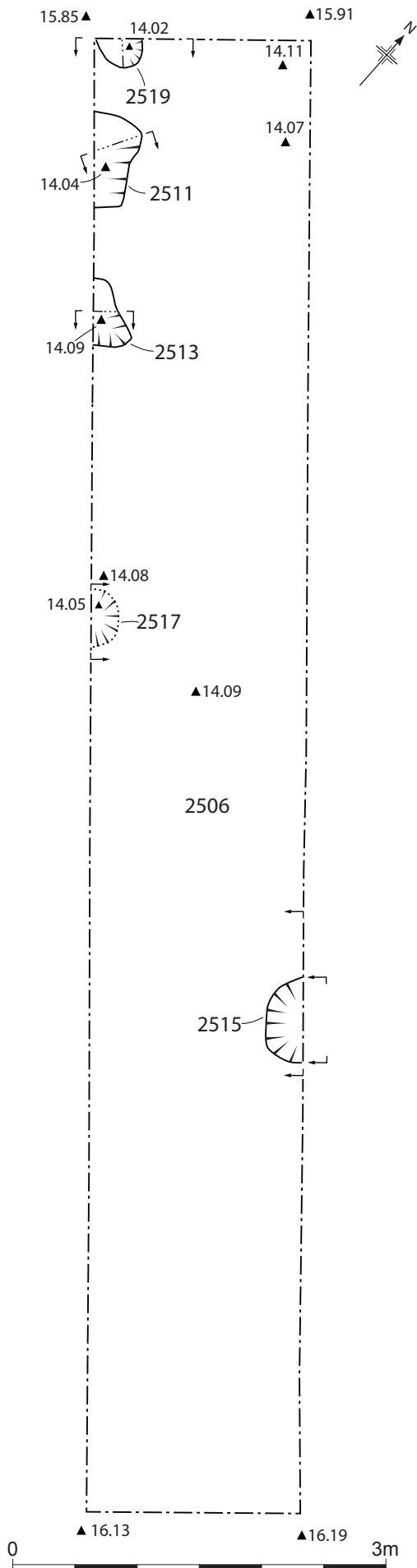


SECTION OF 2313

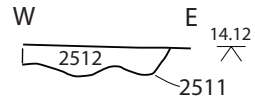


Trench 23: plan and sections

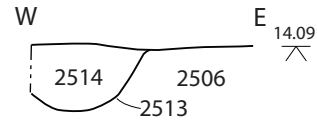
TRENCH 25 : PLAN



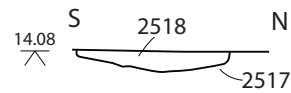
SECTION OF 2511



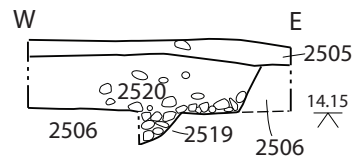
SECTION OF 2513



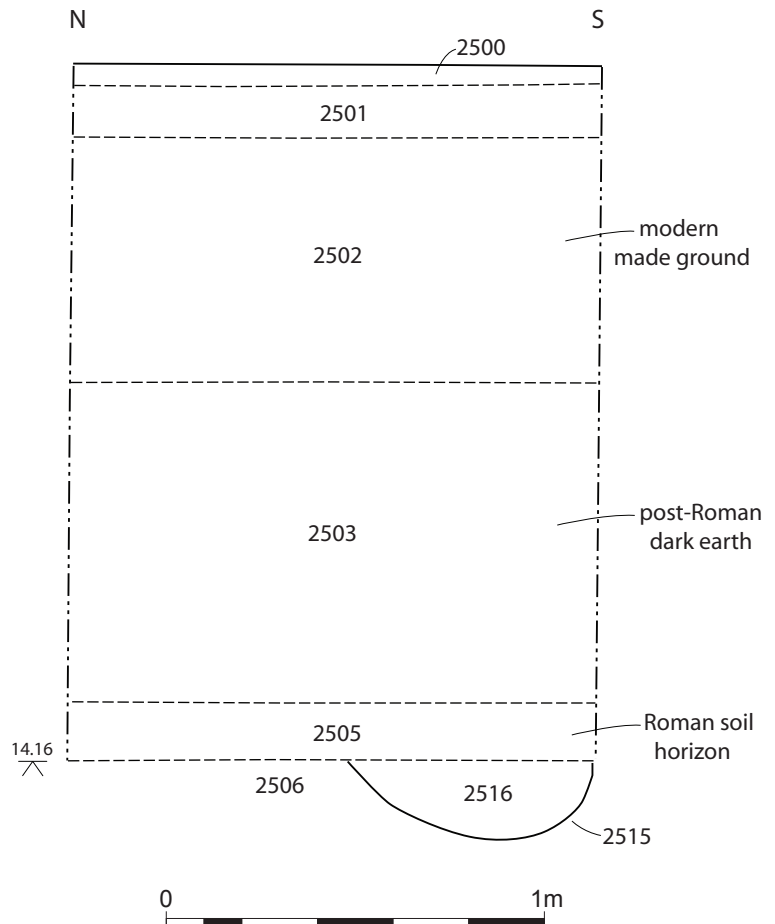
SECTION OF 2517



SECTION OF 2519



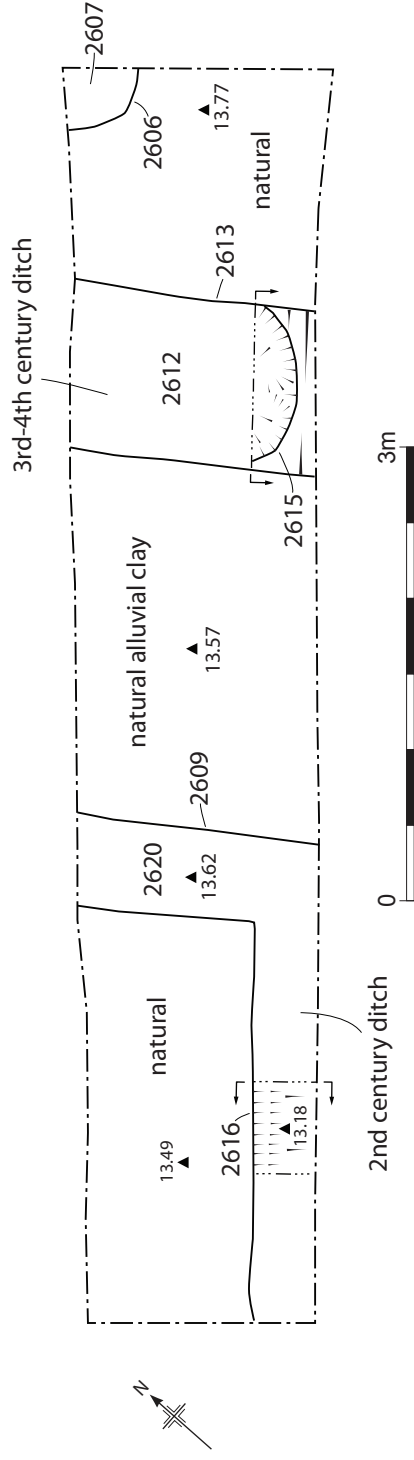
SECTION OF 2515



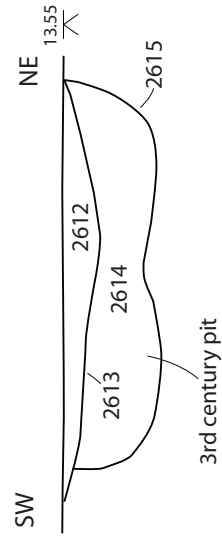
Trench 25: plan and sections

Figure 20

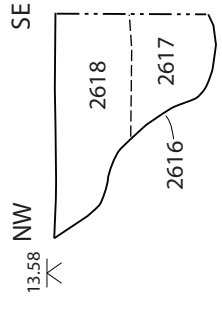
TRENCH 26 : PLAN



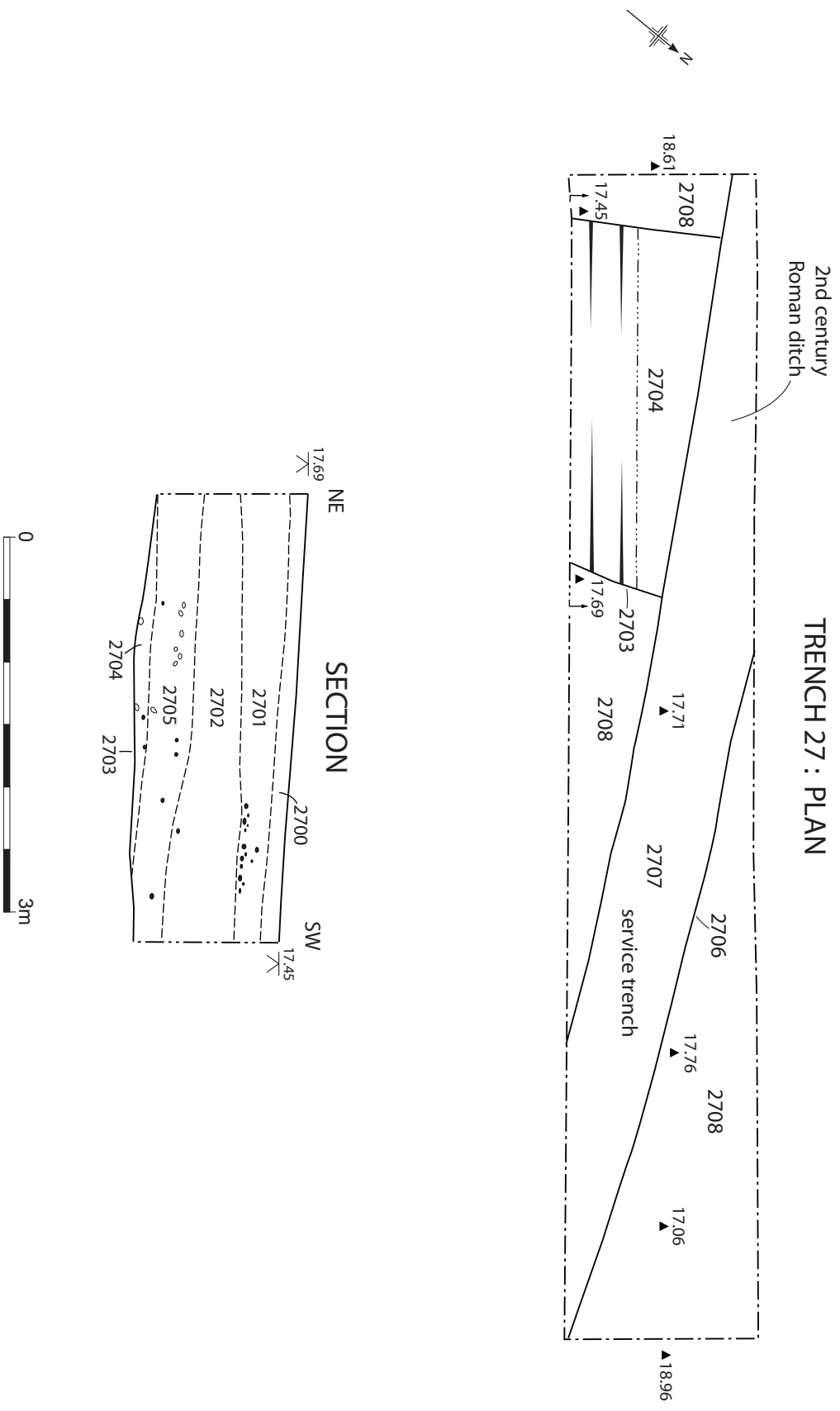
SECTION OF 2615



SECTION OF 2616

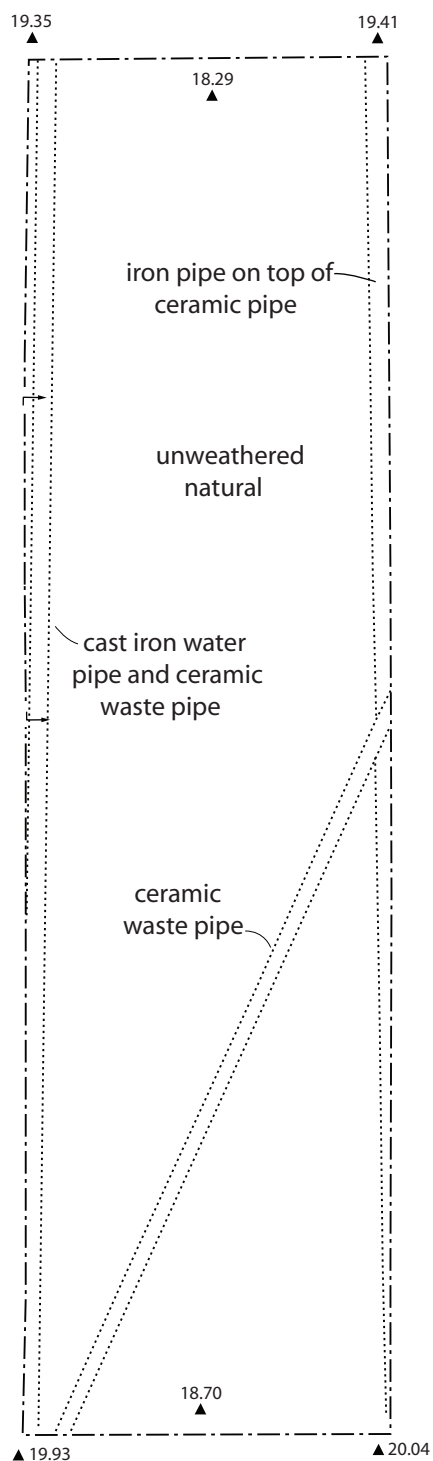


Trench 26: plan and sections

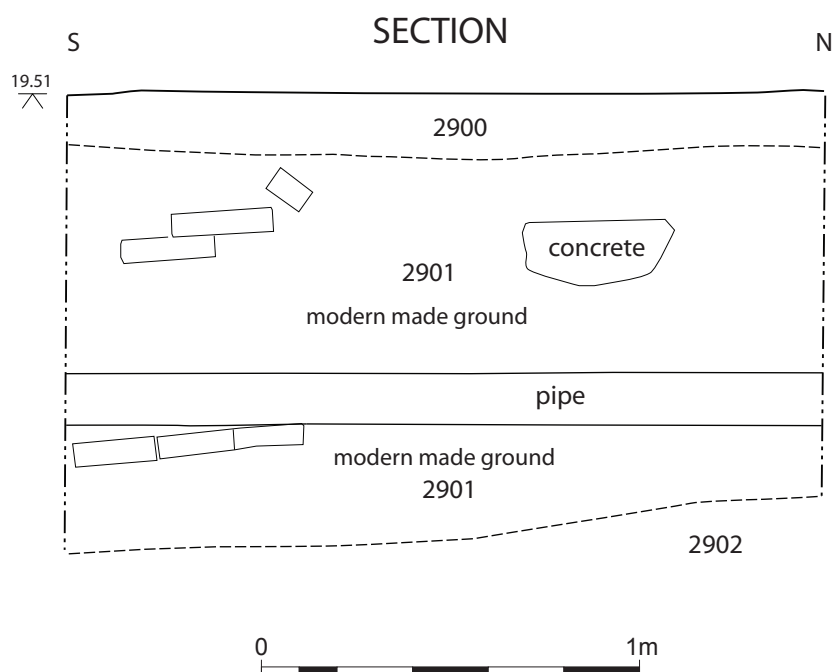


Trench 27 : plan and sections

TRENCH 29 : PLAN



TRENCH 21 : PLAN



Trench 29: plan and sections

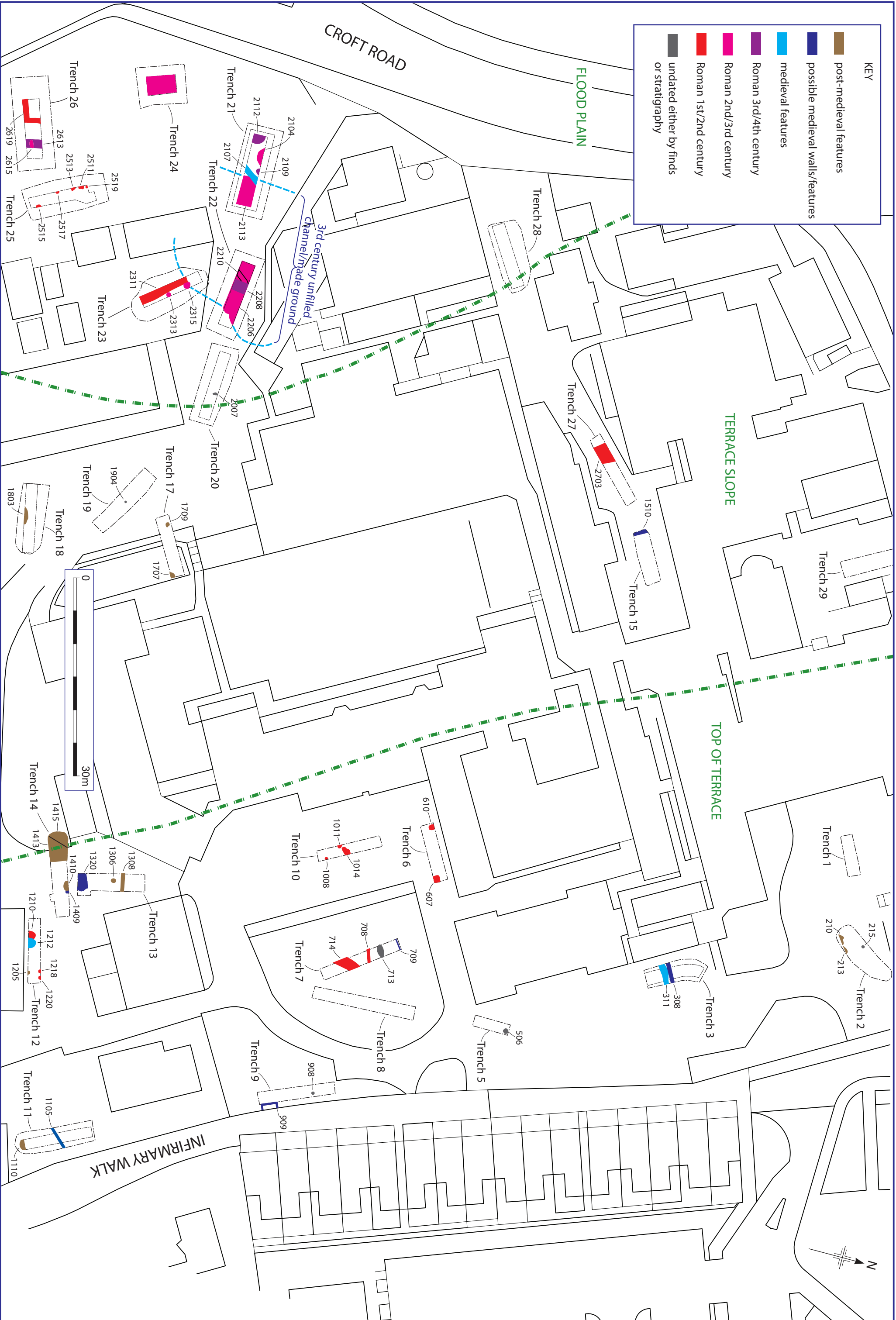
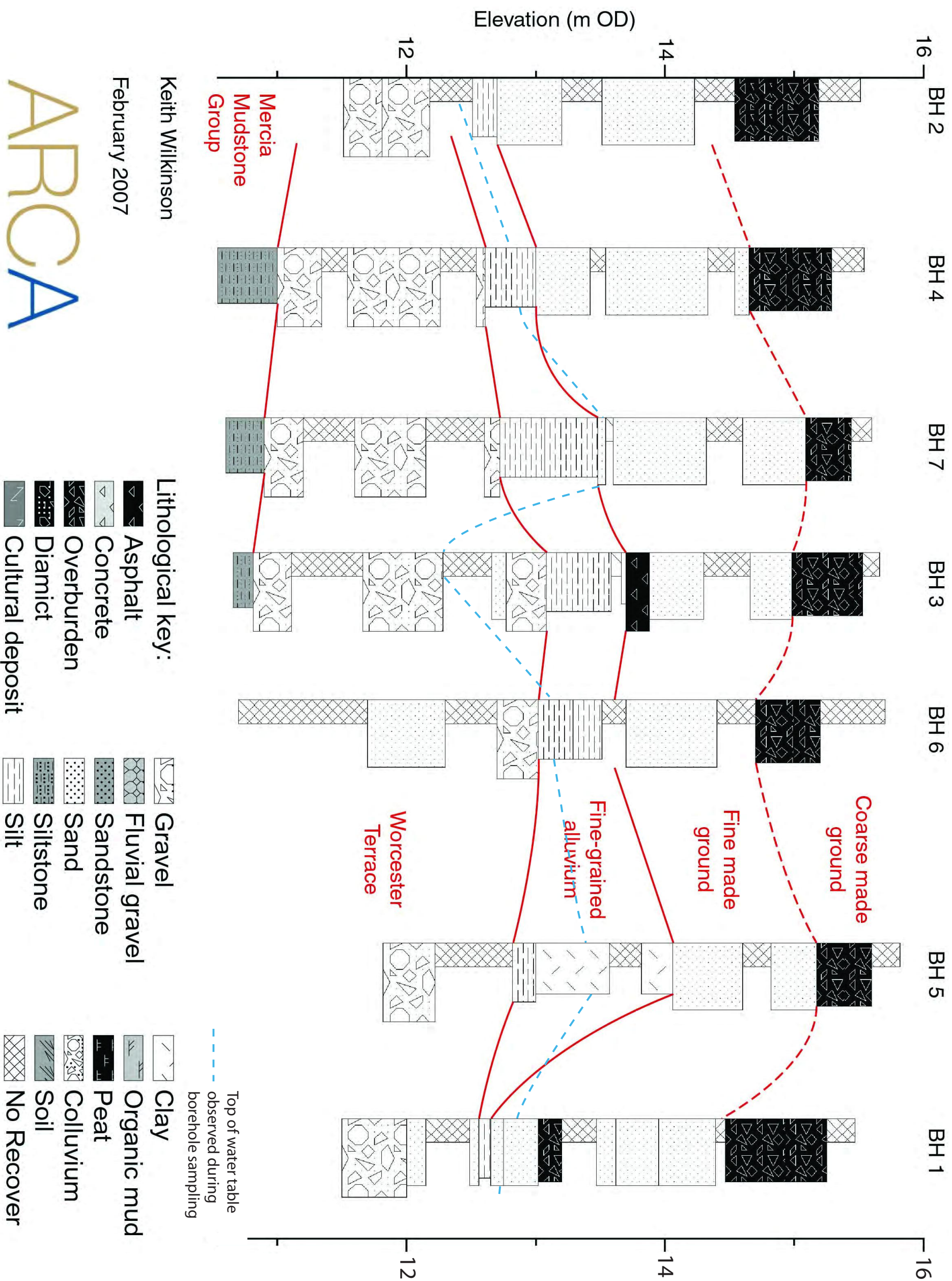


Figure 24



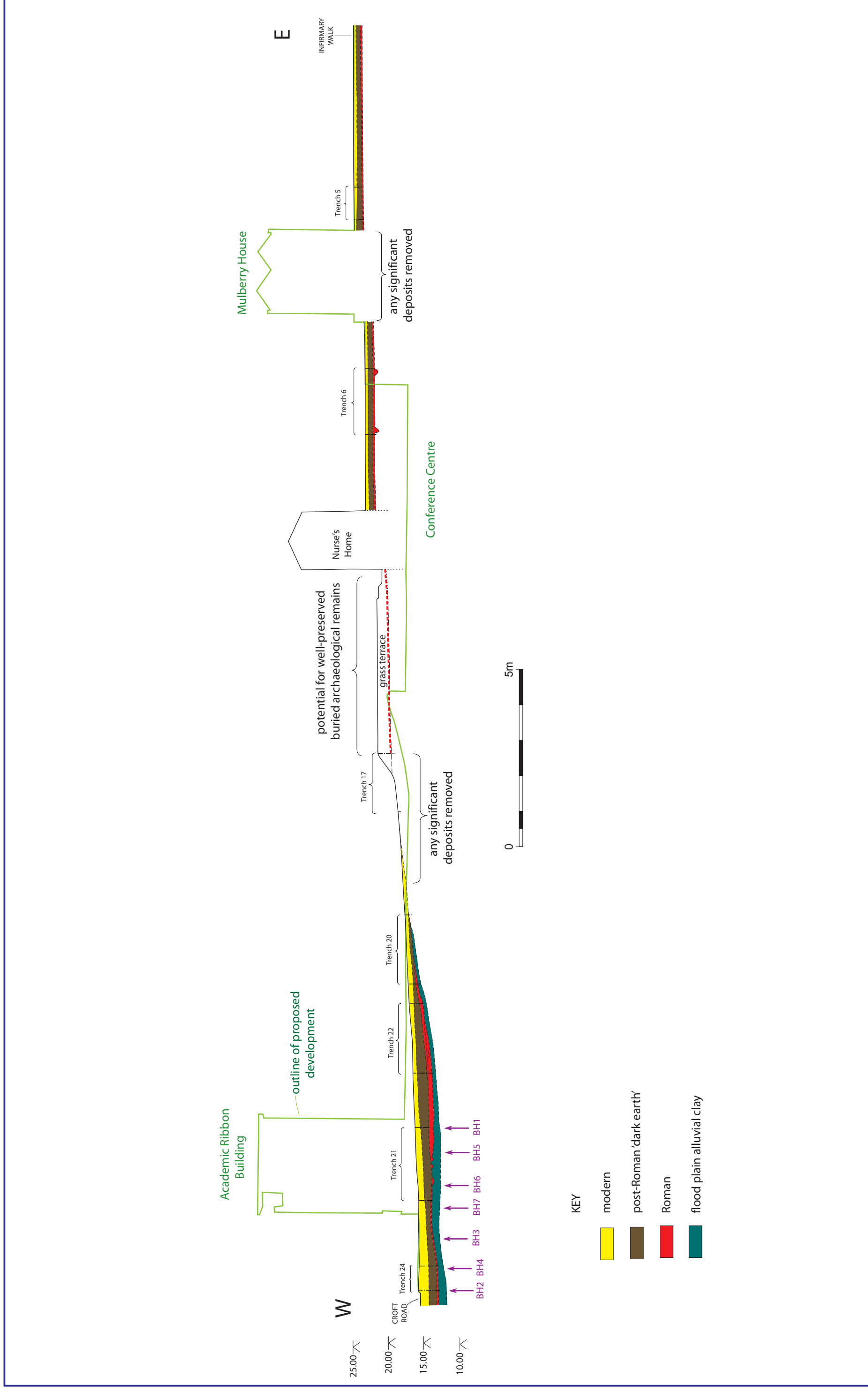
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Areas of potential well preserved archaeological remains



Lithological table (Keith Wilkinson, ARCA February 2007)

Figure 26



Cross section across site showing level of proposed development





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Location of services: eastern area

Figure 29

Plates



Plate 1: General view of the site, the former Royal Worcester Infirmary is to the top of the photograph, beyond the railway viaduct. Facing north. (Photo: M. Glyde 2005)



Plate 2: General view of Trench 2, scale at 1m. Facing north-east.



Plate 3: Trench 3, 18th century wall 308, medieval ditch 311, seen as dark stain in lower foreground prior to excavation, scale at 1m. Facing west.



Plate 4: Trench 3, excavated medieval ditch 311, scale at 1m. Facing west.



Plate 5: Trench 6, possible Roman pit 607, scale at 1m. Facing north.



Plate 6: Trench 6, general view, scale at 1m. Facing west.

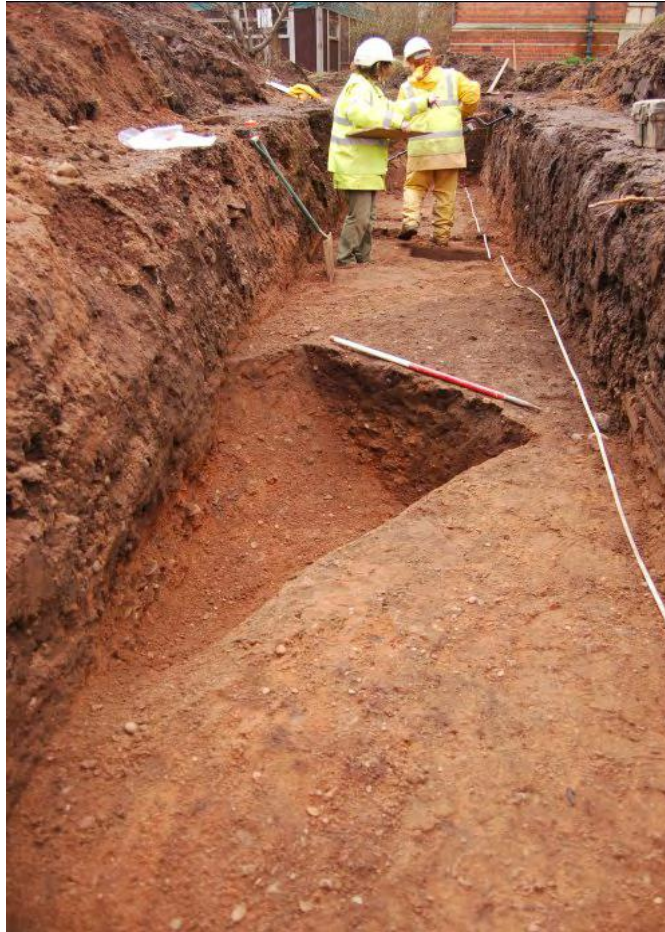


Plate 7: Trench 7, southwest/northeast aligned Roman (?) ditch (714), scale at 1m. Facing north.



Plate 8: Trench 7, gully 708, scale at 1m. Facing east.



Plate 9: Trench 9, pit cut (908), scale at 0.3m. Facing north.



Plate 10: Brick structure (909) to the southeast end of Trench 9, scale at 1m. Facing east.



Plate 11: Trench 10, general view of features (1011, 1014) scale at 1m. Facing north.



Plate 12: Trench 11, east/west aligned brick wall (1105), scale at 0.3m. Facing west.



Plate 13: Trench 12, dark brown/black Roman deposit (1204/1208) visible in centre of section, to the right this deposit has been truncated by the later, medieval pit cut (1312), scale at 2m. Facing south.



Plate 14: Trench 12, circular pit/post hole (1218), with secondary pit (1227) partially visible to left, scale at 0.3m. Facing north.



Plate 15: Trench 12, early Victorian brick structure (1320), northern elevation showing brick channels raised on brick tiers, scale at 0.5m. Facing south.



Plate 16: Trench 12, brick structure (1320), showing iron crate, stokehole and stoke pit in foreground, the external brick wall (1324) can be seen to the right of the main structure, scale at 1m. Facing west.



Plate 17: Trench 14, 18th century linear ditch (1415) with dark fill to right, truncating earlier 17th feature (1413) to the left, scale at 1m. Facing south-west.



Plate 18: Eastern end of Trench 15, showing extensive modern made ground, directly overlying natural deposits, scale at 2m. Facing east.



Plate 19: Trench 17, natural sandy deposit in foreground with section showing extensive modern made ground forming the grass terrace to the west of the nurse's home, scale at 2m. Facing east.



Plate 20: General view of Trench 18 showing present tarmac surface lying directly on natural deposits, indicating extensive truncation of the central terrace area of the site, scale at 2m. Facing west.

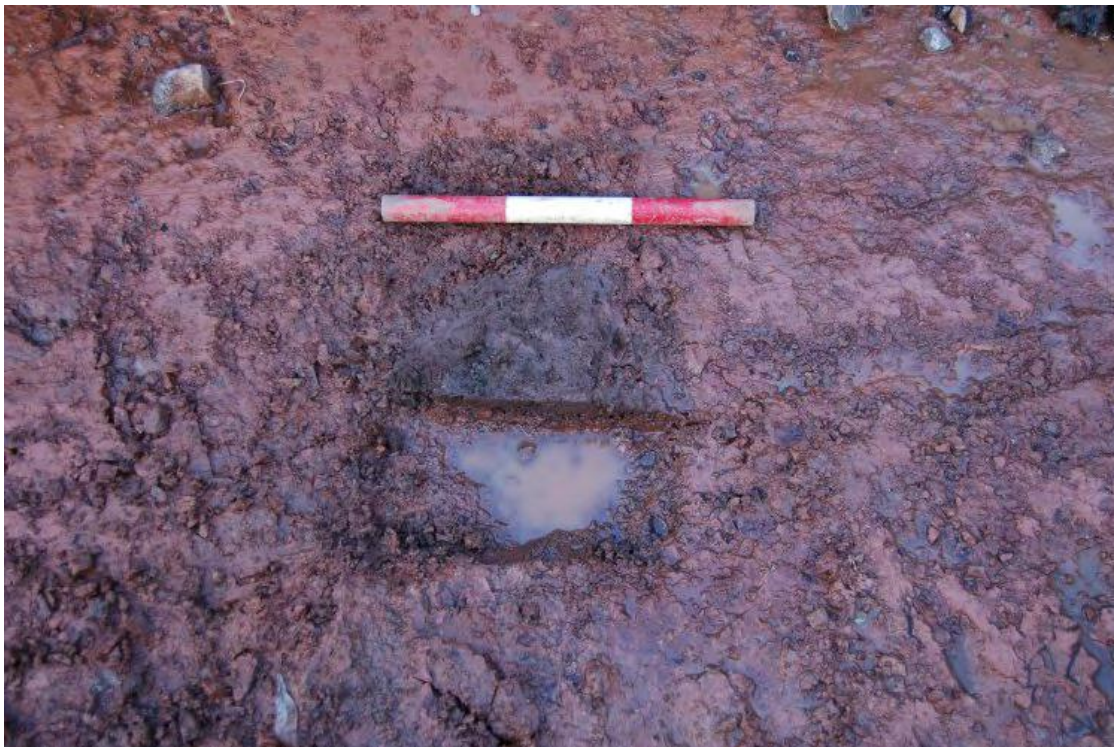


Plate 21: Trench 19, base of heavily undated posthole (1904), scale at 0.3m. Facing north-east.



Plate 22: General view of Trench 20, scale at 1m. Facing south-east.



Plate 23: Trench 21, northeast/southwest aligned medieval ditch (2108) visible in centre of trench, scale at 1m. Facing north-west.



Plate 24: Trench 21, circular Roman pit (2112) below scale, pit (2109) in centre of trench being recorded, scale at 1m. Facing south-east.



Plate 25: Eastern end of Trench 21 showing extensive mixed alluvial clay deposit (2113), scale at 1m. Facing east.

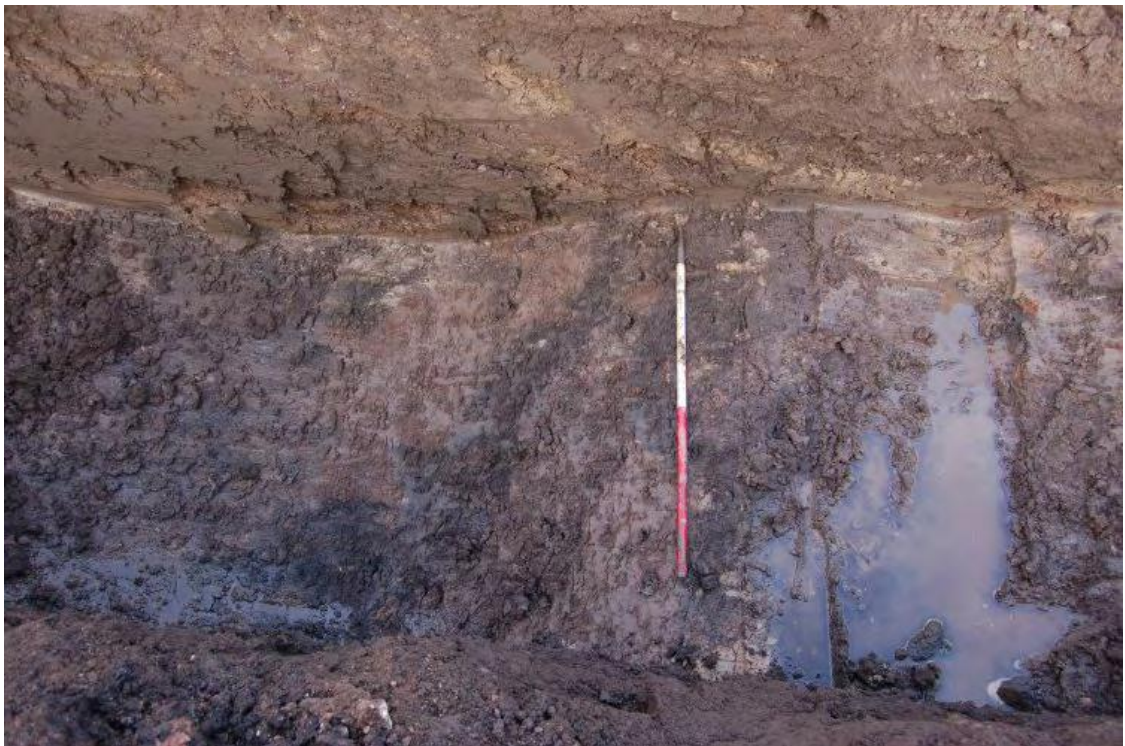


Plate 26: Trench 22, two roughly north/south aligned unexcavated ditches (2208, 2210) below the scale, scale at 1m. Facing north.



Plate 27: General view of Trench 23, north/south aligned linear ditch (2311) visible in centre of trench, scale at 2m. Facing north.



Plate 28: General view of Trench 24, mixed alluvial clay (2406) visible at base of trench, scale at 1m. Facing west.



Plate 29: General view of Trench 25, scale at 1m. Facing south.



Plate 30: Trench 25, partially exposed pit cut (2517), scale at 0.3m. Facing west.



Plate 31: Trench 26, circular pit cut (2615) below north/south aligned linear ditch (2613), scale at 1m. Facing west.



Plate 32: Trench 27, north/south aligned Roman ditch (2703) in foreground, scale at 1m. Facing east.



Plate 33: General view of Trench 28, interface between yellow flood plain alluvial clays and red Mercian Mudstone of the terrace slope can be seen in the bottom right hand corner of the trench, scale at 2m. Facing north-west.



Plate 34: General view of Trench 29, scale at 2m. Facing east.

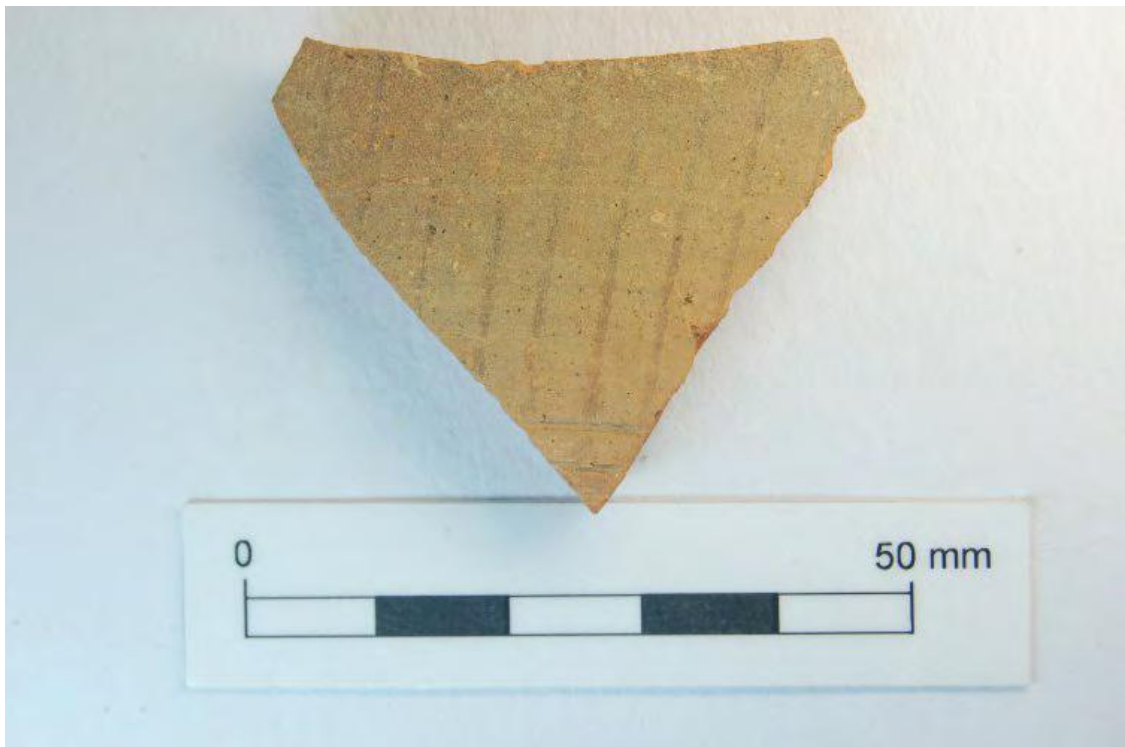


Plate 35: Roman Severn Valley Ware, with rare 'pencil' decoration (2305).

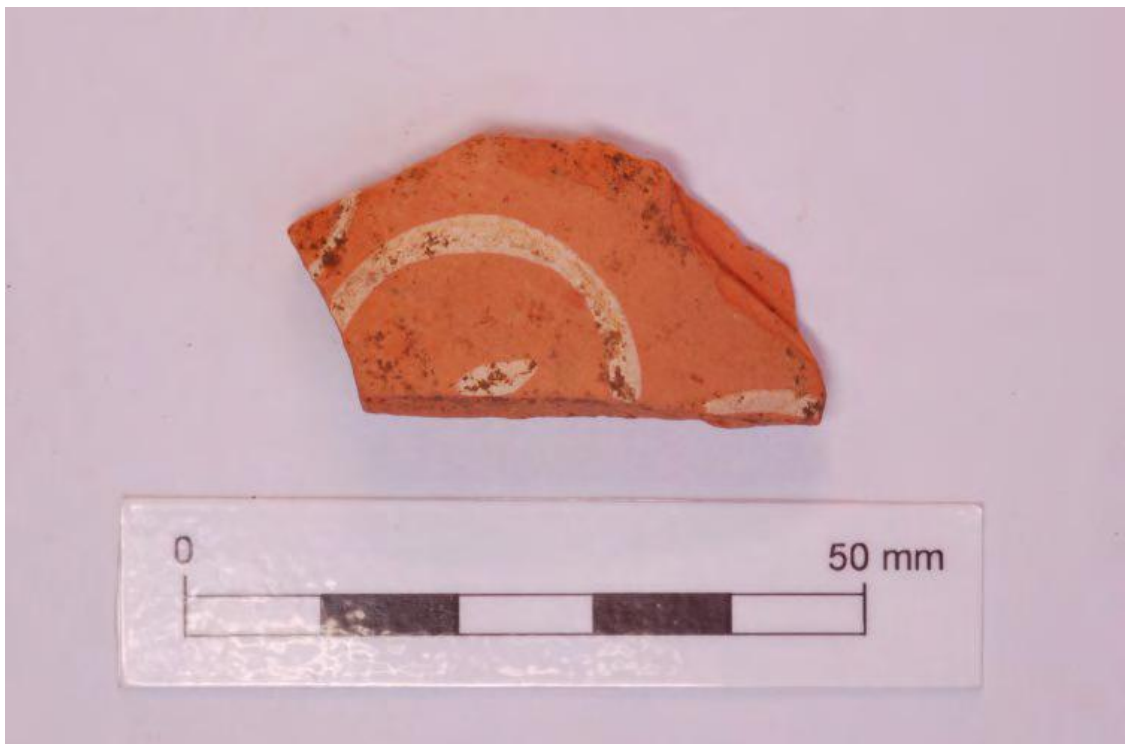


Plate 36: 1st – 2nd century Oxfordshire colour coat pottery sherd, with painted white circles and pellets (1208).



Plate 37: Roman Malvernian lid, with impressed finger decoration and 'piecrust' rim (2505).

Appendix 1 Artefact tables

Table 1: Quantification of the assemblage with *terminus post quem* dates

Context	Material	Type	Total	Weight (g)	Tpq date
105	Iron	Slag	2	80	18 th century
105	Pottery	Post-medieval	1	19	
105	Pottery	Various	3	18	
106	Pottery	Roman	1	5	Mid 1 st to 4 th century
203	Pottery	Post-medieval	2	88	Late 18 th to 19 th century
204	Pottery	Post-medieval	1	4	Late 18 th century
205	Shell		1	32	Unknown
212	Pottery	Post-medieval	1	5	17 th to 18 th century
212	Shell		1	4	
214	Pottery	Various	2	3	17 th to 18 th century
304	Pottery	Post-medieval	1	3	18 th century
312	Iron	Slag	2	151	Late 11 th to 14 th century
312	Pottery	Roman	1	6	
312	Pottery	Various	2	15	
502	Shell		1	4	18 th century
502	Various	Post-medieval	8	170	
503	Pottery	Roman	7	29	13 th to 18 th century
603	Iron	Slag	1	47	Late 18 th century
603	Pottery	Various	4	25	
603	Shell		1	7	
604	Pottery	Roman	3	33	Mid 1 st to 4 th century
700	Pottery	Various	36	541	18 th century
702	Pottery	Various	3	23	Mid to late 18 th century
702	Shell		1	4	
703	Pottery	Various	4	237	18 th century
705	Iron	Slag	6	1736	Possible 3 rd -4 th century with intrusive post-medieval sherd
705	Pottery	Various	20	386	
800	Pottery	Various	2	26	19 th century
801	Pottery	Roman	0	0	18 th century
801	Pottery	Various	18	619	
904	Pottery	Various	7	154	13 th to 18 th century
1100	Pottery	Various	3	33	Late 18 th century
1110	Pottery	Various	3	26	Late 18 th century
1200	Pottery	Roman	21	432	Residual material
1204	Pottery	Roman	1	30	17 th to 18 th century
1204	Various	Post-medieval	0	0	
1206	Pottery	Post-medieval	1	11	18 th century
1207	Pottery	Roman	2	1	Mid 2 nd to early 3 rd century
1208	Pottery	Medieval	1	21	Mid 2 nd to early 3 rd century
1208	Pottery	Roman	215	2796	
1209	Pottery	Roman	4	16	Mid 1 st to 2 nd century
1210	Pottery	Roman	6	52	Mid 1 st to 2 nd century
1212	Iron	Slag	1	152	Mid 1 st to 4 th century
1213	Ceramic building material	Roman	1	4	17 th to 18 th century
1213	Pottery	Medieval	2	134	
1213	Pottery	Roman	46	474	
1213	Various	Post-medieval	0	0	
1215	Pottery	Roman	2	6	Mid 1 st to 2 nd century
1217	Iron	Slag	3	76	2 nd to 3 rd century, with single small intrusive(?) post-medieval creamware.
1217	Pottery	Various	10	197	
1219	Iron	Slag	1	114	14 th to 16 th century
1219	Pottery	Medieval	1	35	
1225	Pottery	Roman	3	45	Mid 2 nd to early 3 rd century
1303	Pottery	Various	14	523	18 th to 19 th century
1307	Pottery	Various	5	104	16 th to 18 th century
1321	Pottery	Various	55	3194	Mid to late 19 th century
1403	Iron	Slag	3	672	2 nd to 3 rd century
1403	Pottery	Roman	38	293	
1403	Shell		1	9	
1414	Various	Post-medieval	0	0	17 th to 18 th century
1416	Iron	Slag	2	713	18 th century

Context	Material	Type	Total	Weight (g)	Tpq date
1416	Pottery	Various	53	687	
1502	Pottery	Roman	1	13	18 th century
1502	Various	Post-medieval	0	0	
1503	Various	Post-medieval	0	0	18 th century
1508	Various	Medieval to post-medieval	0	0	Medieval or post-medieval
1509	Pottery	Roman	1	6	18 th century
1522	Pottery	Various	5	30	18 th century
1706	Pottery	Late post-medieval to early modern	1	22	Late 17 th to 18 th century
1804	Pottery	Post-medieval	2	16	18 th century
2003	Pottery	Roman	2	15	18 th century
2003	Various	Post-medieval	0	0	
2103	Iron	Slag	7	287	19 th century
2103	Pottery	Various	50	512	
2105	Ceramic building material	Roman	1	19	Early 2 nd to 2 nd century
2105	Iron	Slag	10	485	
2105	Pottery	Roman	10	118	
2108	Pottery	Roman	11	253	13 th to 15 th century
2110	Iron	Slag	2	427	3 rd century
2110	Pottery	Roman	3	15	
2111	Iron	Slag	6	162	3 rd to 4 th century
2111	Pottery	Roman	22	297	
2113	Clay	Fired	1	7	Mid 3 rd to 4 th century
2113	Iron	Slag	2	275	
2113	Pottery	Roman	38	491	
2203	Pottery	Roman	1	9	Late 3 rd to 4 th century
2204	Clay	Fired	3	31	Late 3 rd to 4 th century
2204	Iron	Slag	1	141	
2204	Pottery	Roman	34	650	
2206	Iron	Slag	9	1387	Mid to late 3 rd century
2206	Pottery	Roman	63	956	
2207	Iron	Slag	1	88	Mid to late 3 rd century
2207	Pottery	Roman	15	639	
2209	Pottery	Roman	27	430	2 nd to mid 3 rd century
2212	Iron	Slag	4	168	2 nd to mid 3 rd century
2212	Pottery	Roman	15	236	
2304	Iron	Slag	7	840	Late 13 th to early 17 th century
2304	Pottery	Various	68	771	
2304	Shell		3	142	
2305	Clay	Fired	6	66	3 rd century
2305	Iron	Slag	10	3930	
2305	Pottery	Roman	122	3330	
2310	Iron	Slag	27	2654	Early 2 nd to late 2 nd century
2310	Pottery	Roman	69	1019	
2312	Iron	Slag	7	174	2 nd to 3 rd century
2312	Pottery	Roman	6	52	
2314	Brooch	Roman	1	22	3 rd century
2314	Clay	Fired	3	16	
2314	Iron	Slag	38	1677	
2314	Pottery	Roman	64	1009	
2404	Pottery	Roman	3	44	Mid 3 rd to early 4 th century
2405	Clay	Fired	3	12	Mid 3 rd to early 4 th century
2405	Iron	Slag	7	1086	
2405	Pottery	Roman	11	50	
2406	Iron	Slag	9	1709	120AD to mid 3 rd century
2406	Pottery	Roman	14	190	
2502	Clay pipe stems (unquantified)	Post-medieval	0	0	17 th to 18 th century
2503	Iron	Slag	4	202	2 nd century ?
2503	Pottery	Roman	2	13	
2505	Iron	Slag	8	490	Mid-late 2 nd century
2505	Pottery	Roman	71	1111	
2512	Pottery	Roman	4	13	2 nd century
2514	Pottery	Roman	4	19.5	2 nd century
2520	Pottery	Roman	2	49	Mid 1 st to 2 nd century

Context	Material	Type	Total	Weight (g)	Tpq date
2603	Iron	Slag	4	95	2 nd century
2603	Pottery	Roman	5	33	
2604	Iron	Slag	7	488	2 nd century
2604	Pottery	Roman	17	378	
2612	Clay	Fired	1	15	Mid 1 st to 4 th century
2612	Iron	Slag	1	26	
2612	Pottery	Roman	6	9	
2614	Clay	Fired	2	16	3 rd century
2614	Iron	Slag	2	75	
2614	Pottery	Roman	3	230.5	
2620	Pottery	Roman	2	59	2 nd century
2702	Various	Mod	0	0	Late 19 th –20 th century
2704	Iron	Slag	16	1415	Early to mid 2 nd century
2704	Pottery	Roman	21	402	
2801	Pottery	Various	5	78	18 th to 19 th century
2802	Iron	Slag	3	213	Late 2 nd –3 rd century
2802	Pottery	Roman	19	159	
2901	Pottery	Various	2	6	18 th century

Table 2: Quantification of the Romano-British pottery by fabric

Context	Fabric number	Fabric name	Total	Weight
604	12	Severn Valley ware	3	33
1207	12.2	Organically tempered Severn Valley ware	2	1
1208	12	Severn Valley ware	26	381
1208	12.1	Reduced Severn Valley ware	9	106
1208	12.2	Organically tempered Severn Valley ware	106	1477
1208	12.3	Reduced organically tempered Severn Valley ware	40	427
1208	12V	Severn Valley ware variant	5	72
1208	12V	Severn Valley ware variant	7	70
1208	21.3	Early micaceous ware	1	21
1208	29V	Oxfordshire red and brown colour coated ware variant	2	10
1208	3	Hand made Malvernian ware	16	216
1208	32V	Mancetter Hartshill variant fabric	1	7
1208	43	Samian	1	3
1208	43.2	Central Gaulish samian	1	6
1209	12	Severn Valley ware	3	10
1209	12.2	Organically tempered Severn Valley ware	1	6
1210	12.2	Organically tempered Severn Valley ware	6	52
1215	12.2	Organically tempered Severn Valley ware	1	1
1215	3/19	Hand made or wheel made Malvernian	1	5
1217	12	Severn Valley ware	6	172
1217	12V	Severn Valley ware variant	1	6
1217	21.3	Early micaceous ware	1	7
1217	3	Hand made Malvernian ware	2	12
1225	12.2	Organically tempered Severn Valley ware	3	45
1403	12	Severn Valley ware	12	92
1403	12.1	Reduced Severn Valley ware	2	3
1403	12.2	Organically tempered Severn Valley ware	3	12
1403	12.3	Reduced organically tempered Severn Valley ware	18	140
1403	12V	Severn Valley ware variant	1	3
1403	22	Black Burnished ware, type 1	1	4
1403	3	Hand made Malvernian ware	1	39
2105	12	Severn Valley ware	7	98
2105	12V	Severn Valley ware variant	1	8
2105	22	Black Burnished ware, type 1	1	1
2105	43	Samian	1	11
2110	12V	Severn Valley ware variant	1	7
2110	19	Wheelmade Malvernian	1	3
2110	43	Samian	1	5
2111	12	Severn Valley ware	9	196
2111	12.1	Reduced Severn Valley ware	1	12
2111	12.2	Organically tempered Severn Valley ware	4	31

Context	Fabric number	Fabric name	Total	Weight
2111	12V	Severn Valley ware variant	8	58
2113	12	Severn Valley ware	24	257
2113	12.2	Organically tempered Severn Valley ware	9	145
2113	3/3.1	Hand made, possible slab built Malvernian ware	3	71
2113	43	Samian	2	18
2203	12	Severn Valley ware	1	9
2204	12	Severn Valley ware	16	234
2204	12.2	Organically tempered Severn Valley ware	14	316
2204	3/3.1	Hand made, possible slab built Malvernian ware	3	86
2204	98	Miscellaneous Roman wares	1	14
2206	12	Severn Valley ware	20	409
2206	12.2	Organically tempered Severn Valley ware	27	319
2206	12?	Severn Valley ware	1	5
2206	12V	Severn Valley ware variant	8	68
2206	19	Wheelmade Malvernian	3	67
2206	22	Black Burnished ware, type 1	2	9
2206	42.1?	Dressel 20 type amphorae	1	51
2206	43.3	East Gaulish samian ware	1	28
2207	12	Severn Valley ware	1	93
2207	12.2	Organically tempered Severn Valley ware	10	473
2207	12V	Severn Valley ware variant	1	17
2207	19	Wheelmade Malvernian	1	25
2207	22	Black Burnished ware, type 1	2	31
2209	12	Severn Valley ware	17	269
2209	12.2	Organically tempered Severn Valley ware	3	29
2209	12V	Severn Valley ware variant	5	121
2209	43	Samian	2	11
2212	12	Severn Valley ware	5	107
2212	12.1	Reduced Severn Valley ware	1	10
2212	12.2	Organically tempered Severn Valley ware	8	54
2212	3/3.1	Hand made, possible slab built Malvernian ware	1	65
2305	12	Severn Valley ware	30	826
2305	12.2	Organically tempered Severn Valley ware	52	863
2305	12.3	Reduced organically tempered Severn Valley ware	10	298
2305	12?	Severn Valley ware	1	23
2305	12V	Severn Valley ware variant	1	25
2305	19	Wheelmade Malvernian	10	240
2305	22	Black Burnished ware, type 1	4	39
2305	29	Oxfordshire red and brown colour coated ware	1	17
2305	3.1	Hand made slab-built Malvernian ware	3	802
2305	3.1?	Hand made slab-built Malvernian ware	5	54
2305	34?	West Midlands Mortaria	1	52
2305	43	Samian	3	87
2305	44	Rhenish ware	1	4
2310	12	Severn Valley ware	17	273
2310	12.1	Reduced Severn Valley ware	3	35
2310	12.2	Organically tempered Severn Valley ware	35	461
2310	12?	Severn Valley ware	4	25
2310	19	Wheelmade Malvernian	3	26
2310	22	Black Burnished ware, type 1	3	91
2310	28	Nene Valley ware	1	1
2310	3.1	Hand made slab-built Malvernian ware	2	106
2310	43.2	Central Gaulish samian	1	1
2312	12	Severn Valley ware	4	41
2312	19	Wheelmade Malvernian	2	11
2314	12	Severn Valley ware	15	133
2314	12.1	Reduced Severn Valley ware	1	7
2314	12.2	Organically tempered Severn Valley ware	13	203
2314	12.3	Reduced organically tempered Severn Valley ware	3	51
2314	12V	Severn Valley ware variant	3	33
2314	19	Wheelmade Malvernian	11	227
2314	22	Black Burnished ware, type 1	3	22
2314	29	Oxfordshire red and brown colour coated ware	1	6
2314	3.1?	Hand made slab-built Malvernian ware	8	157
2314	3/3.1	Hand made, possible slab built Malvernian ware	2	158
2314	37.3?		1	1

Context	Fabric number	Fabric name	Total	Weight
2314	43	Samian	2	4
2314	98	Miscellaneous Roman wares	1	7
2404	12	Severn Valley ware	2	12
2404	32	Mancetter Hartshill mortaria	1	32
2405	12.2	Organically tempered Severn Valley ware	8	20
2405	29	Oxfordshire red and brown colour coated ware	1	2
2405	3.1	Hand made slab-built Malvernian ware	2	28
2406	12	Severn Valley ware	5	46
2406	12.3	Reduced organically tempered Severn Valley ware	8	139
2406	43	Samian	1	5
2503	12.2	Organically tempered Severn Valley ware	2	13
2505	12	Severn Valley ware	24	184
2505	12.1	Reduced Severn Valley ware	5	65
2505	12.2	Organically tempered Severn Valley ware	20	307
2505	12.3	Reduced organically tempered Severn Valley ware	3	67
2505	18?	Malvernian derived ware	2	46
2505	19	Wheelmade Malvernian	1	5
2505	22	Black Burnished ware, type 1	8	182
2505	3?	Hand made Malvernian ware	1	95
2505	41	Unprovenanced white ware	1	2
2505	43.1	South Gaulish samian ware	2	32
2505	43.3	East Gaulish samian ware	4	126
2512	12.1	Reduced Severn Valley ware	1	4
2512	12.2	Organically tempered Severn Valley ware	1	4
2512	3	Hand made Malvernian ware	2	5
2514	12.2	Organically tempered Severn Valley ware	2	17
2514	22	Black Burnished ware, type 1	1	0.5
2514	3?	Hand made Malvernian ware	1	2
2520	12.2	Organically tempered Severn Valley ware	2	49
2603	12.2	Organically tempered Severn Valley ware	5	33
2604	12	Severn Valley ware	14	359
2604	22	Black Burnished ware, type 1	1	4
2604	12.1	Reduced Severn Valley ware	1	6
2604	12.2	Organically tempered Severn Valley ware	1	9
2612	12.2	Organically tempered Severn Valley ware	6	9
2614	12	Severn Valley ware	1	0.5
2614	12V	Severn Valley ware variant	1	6
2614	3.1	Hand made slab-built Malvernian ware	1	224
2620	12.2	Organically tempered Severn Valley ware	2	59
2704	12	Severn Valley ware	2	21
2704	12.1	Reduced Severn Valley ware	1	12
2704	12.2	Organically tempered Severn Valley ware	1	33
2704	12.3	Reduced organically tempered Severn Valley ware	7	66
2704	22	Black Burnished ware, type 1	1	16
2704	3	Hand made Malvernian ware	4	147
2704	3/19	Hand made or wheel made Malvernian	3	101
2704	43	Samian	1	1
2704	43.3	East Gaulish samian ware	1	5
2802	12	Severn Valley ware	4	61
2802	12.2	Organically tempered Severn Valley ware	12	86
2802	12V	Severn Valley ware variant	2	8
2802	43	Samian	1	4
2802	43.2	Central Gaulish samian	0	0

Appendix 2 Environment tables

Context	Weight (g)	No frags	Notes
0104	6	1	
0207	2	1	
0212	2	1	
0306	8	2	
0312	8	3	
0502	47	4	
0503	10	1	
0603	25	5	
0703	15	1	
0703	20	4	
0705	8	1	
0706	287	37	
0801	7	3	
1010	6	1	
1103	15	1	
1204	22	1	
1204	67	3	
1207	5	1	
1208	80	6	
1208	8	1	signs of waterlogging
1208	402	30	signs of waterlogging
1208	91	8	signs of waterlogging
1213	61	5	signs of waterlogging
1217	10	2	
1307	3	1	
1414	31	2	
1416	3	1	
2304	69	18	
2305	160	37	v fragmented, tiny frags not counted
2310	36	3	
2310	8	2	
2310	121	10	incl cattle teeth
2310	53	16	
2314	7	2	
2314	64	6	
2505	63	4	incl cattle teeth
2505	18	3	
2704	123	12	
2801	53	4	signs of waterlogging
2802	13	4	
TOTAL	2037	248	

Table 3: List of hand-collected animal bone

Context	Sample	Context type	Description	Period	Sample volume (L)	Volume Processed (L)	Residue assessed	Flot assessed
1208	8	layer		RBR	40	10	Y	Y
1217	9	pit		RBR	40	10	Y	Y
2004	11	layer		RBR/MED	20	10	Y	Y
2008	10	pit		RBR	10	10	Y	Y
2310	1	Linear	?ditch	RBR	10	10	Y	Y
2312	2	Pit/		RBR	10	0	Y	
2314	3	Linear	?ditch	RBR	10	10	Y	Y
2406	7	layer		RBR	10	10	Y	Y
2512	4	pit		RBR	10	10	Y	Y
2514	6	pit		RBR	10	10	Y	Y
2516	5	pit		RBR	10	10	Y	Y

RBR – Romano-British

MED = medieval

Table 4: List of environmental samples

Context	Sample	large mammal	bird	charred plant	waterlogged plant	phosphate concretions	Comment
1208	8	occ-mod					
1217	9	occ					
2004	11	occ	occ	occ			
2008	10						No identifiable remains
2310	1	occ				occ	
2312	2	occ					
2314	3	occ					
2406	7	occ		occ			
2512	4	occ		occ			
2514	6	occ					
2516	5			occ	occ		

Key: Occ = occasional; mod = moderate

Table 5: Summary of environmental remains from bulk samples

Latin name	Family	Common name	Habitat	2004	2310	2406	2512	2514	2516
Charred plant remains									
<i>Hordeum vulgare</i> grain (hulled)				+					
<i>Vicia/lathyrus</i> sp	Fabaceae	vetch/pea	ABCD				+		
<i>Pisum sativum</i>	Fabaceae	garden pea	AF			+			
Waterlogged plant remains									
<i>Rubus</i> sect <i>Glandulosus</i>	Rosaceae	bramble	CD						+
unidentified thorn	unidentified					+			
unidentified herbaceous fragments					+		+/++	++	++

Key:

Habitat	Quantity
A= cultivated ground	+ = 1 - 10
B= disturbed ground	++ = 11- 50
C= woodlands, hedgerows, scrub etc	+++ = 51 -100
D = grasslands, meadows and heathland	++++ = 101+
E = aquatic/wet habitats	
F = cultivar	

Table 6: Plant remains from bulk samples

Context	No Fragments	Weight (g)	Date range	Date range of context	TPQ	Period
2304	3	142				
205	1	32				
502	1	4				
603	1	7				
1403	1	9				
212	1	4				
702	1	4				
TOTAL	9	202				

Table 7: Hand-collected oyster shell

Appendix 3 Trench descriptions

Trench 1:

Maximum dimensions: Length: 6.10m Width: 2.70m Depth: 1.35m

Orientation: E-W

Context	Classification	Description	Depth below ground surface – top and bottom of deposits
100	Layer	Modern tarmac.	0m – 0.06m
101	Layer	Red-orange gravel and rubble.	0.06m – 0.10m
102	Layer	Loose light-mid reddish brown sandy silt, gravel inclusions.	0.10m – 0.41m
103	Layer	Mid-dark brown sandy silt, rare gravel and small pebbles.	0.41m – 0.56m
104	Layer	Light-mid whitish orange sand and lime mortar.	0.56m – 0.62m
105	Layer	Mid-dark blackish grey-brown sandy silt, occasional pebbles, rare charcoal flecks.	0.62m – 1.08m
106	Layer	Mid brownish grey sandy silt, occasional pebbles.	1.08m – 1.35m
107	Natural	Loose light-mid orange-brown silty sand, abundant pebbles, occasional cobbles.	1.35m+
108	Fill	Dark greyish brown sand, CBM and mortar inclusions. Fill of 114.	0.62m – 1.20m
109	Layer	Mid greyish brown silty sand, gravel and pebble inclusions.	0.62m – 1.20m
110	Modern pipe cut	Filled by 112.	0.10m – 1.23m
111	Modern pipe cut	Filled by 113.	0.10m – 0.61m
112	Fill	Mid brown sandy silt, mortar inclusions. Fill of 110.	0.10m – 1.23m
113	Fill	Mid brown sandy silt, mortar and pebble inclusions. Fill of 111.	0.10m – 0.61m
114	Pit cut (?)	Appears circular in plan but extends under eastern edge of trench. Steeply sloping sides, base not observed. Filled by 108.	0.62m – 1.20m+

Trench 2

Maximum dimensions: Length: 10.20m Width: 3.30m Depth: 1.14m

Orientation: E-W

Context	Classification	Description	Depth below ground surface
200	Layer	Modern tarmac.	0m – 0.10m
201	Layer	Reddish orange brick and rubble, coarsely crushed.	0.08m – 0.10m
202	Natural	Mid brownish orange sandy gravel, occasional to moderate small pebbles.	1.14m+
203	Layer	Light beige-brown sandy gravel, abundant pebbles.	0.10m – 0.24m
204	Layer	Brownish pink sandy gravel, abundant pebbles.	0.24m – 0.43m

Context	Classification	Description	Depth below ground surface
205	Layer	Dark brown sandy silt, CBM and charcoal inclusions.	0.41m – 0.46m
206	Layer	Whitish orange sandy mortar.	0.46m – 0.50m
207	Layer	Dark brown sandy silt, CBM and charcoal inclusions.	0.50m – 0.99m
208	Layer	Light beige-brown sand, occasional pebbles.	0.99m – 1.14m
209	VOID	VOID	
210	Pit cut	Irregular and elongated in plan but extends under southern edge of trench. ‘U’ shaped in section with moderately steep sides and a flat base. Filled by 211 and 212.	0.98m – 0.126m
211	Fill	Loose light beige-brown silty sand, occasional small, oval pebbles. Fill of 210.	1.00m – 1.26m
212	Fill	Moderately compact dark greyish brown sandy silt, occasional small, oval pebbles, charcoal, CBM and pottery. Fill of 210.	0.98m – 1.14m
213	Pit cut	Oval in plan but extends under southern edge of trench. ‘U’ shaped in section with steep sides and a flat base. Filled by 214.	0.96m – 1.27m
214	Fill	Dark greyish brown sandy silt with lenses of orangey brown sand, occasional small, oval pebbles, CBM and pottery. Fill of 213.	0.96m – 1.27m
215	Posthole cut	Approximately circular in plan. ‘U’ shaped in section with steep sides to east and south and gently sloping western side, irregular base. Filled by 216.	1.00m – 1.14m
216	Fill	Loose and friable mid orangey brown silty sand, moderate small, oval and angular pebbles, occasional charcoal flecks. Fill of 215.	1.00m – 1.14m

Trench 3

Maximum dimensions: Length: 6.90m Width: 1.85m Depth: 1.76m

Orientation: N-S

Context	Classification	Description	Depth below ground surface – top and bottom of deposits
300	Layer	Modern tarmac.	0m – 0.12m
301	Layer	Loose dark brown sandy silt, moderate small, oval pebbles, occasional mortar, CBM and slate. Same as 307.	0.12m – 0.88m
302	Natural	Loose and friable brownish orange coarse sand, moderate fine gravels, lenses of small, oval pebbles.	1.76m+
303	Layer	Loose and friable whitish pink mortar, CBM inclusions.	0.18m – 0.40m
304	Layer	Loose and friable dark brown sandy silt, occasional small, oval pebbles, mortar, CBM, charcoal and pottery.	0.20m – 0.88m
305	Layer	Brownish pink clay with angular gravel inclusions.	0.88m – 0.93m
306	Layer	Loose and friable dark yellowish brown sandy silt, moderate small, oval pebbles, occasional charcoal and pottery.	0.93m – 1.60m

Context	Classification	Description	Depth below ground surface – top and bottom of deposits
307	Layer	Same as 301.	0.12m – 0.88m
308	Wall	Brick wall aligned east/west, ten courses high, bonded with lime mortar. Fill of 309.	0.40m – 1.13m
309	Construction cut for 308	Square in section, sharp BFS, vertical sides, sharp BTB, flat base. Filled by 308 and 313.	0.91m – 1.20m
310	Layer	Yellowish brown sand with darker brown silty mottles, occasional oval pebbles and gravel.	1.06 – 1.76m
311	Cut	Linear in plan aligned east/west. Sides steeply sloping to north, gently sloping to south, irregular base. Filled by 312.	1.56m – 1.88m
312	Fill	Loose dark yellowish brown silty sand, occasional small-medium pebbles and charcoal. Fill of 311.	1.56m – 1.88m
313	Fill.	Loose and friable dark greyish brown sandy silt, occasional small pebbles, mortar and CBM. Fill of 309.	0.91m – 1.20m

Trench 4

Not excavated

Trench 5

Maximum dimensions: Length: 5.80m Width: 1.60m Depth: 1.40m (sondage excavated to 1.81m)

Orientation: NNE-SSW

Context	Classification	Description	Depth below ground surface – top and bottom of deposits
500	Layer	Modern tarmac.	0m – 0.07m
501	Layer	Brick and mortar rubble.	0.07m – 0.18m
502	Layer	Dark greyish brown silty sand, occasional sub-rounded gravels and pebbles, occasional charcoal flecks.	0.18m – 1.22m
503	Layer	Mid to dark brown sand, moderate charcoal flecks. Transition layer between 502 and 504 (natural).	1.22m – 1.53m
504	Natural	Loose orangey brown sand.	1.53m+
505	Fill	Dark greyish brown silty sand, occasional sub-rounded gravels and pebbles, occasional charcoal flecks. Fill of 506.	1.40m – 1.50m
506	Pit cut	Circular in plan, gently sloping sides, concave base. Filled by 505.	1.40m – 1.50m

Trench 6

Maximum dimensions: Length: 10.20m Width: 1.58m Depth: 1.26m

Orientation: E-W

Context	Classification	Description	Depth below ground surface – top and bottom of deposits
600	Layer	Modern tarmac.	0m – 0.10m
601	Layer	Compact mid-dark greyish brown silty sand, abundant sub-rounded and rounded pebbles.	0.10m – 0.18m
602	Layer	Loose mid-dark blackish brown rubble, moderate CBM and grit.	0.18m – 0.28m
603	Layer	Compact mid-dark greyish brown sandy silt, abundant charcoal.	0.28m – 0.62m
604	Layer	Compact mid-dark greenish/greyish black sandy silt, occasional charcoal, rare sub-rounded pebbles.	0.62m – 0.88m
605	Layer	Loose light-mid orangey brown sandy silt, abundant rounded pebbles.	0.88m – 1.03m
606	Fill	Loose light orangey brown sandy silt, abundant cobbles and pebbles, occasional charcoal. Fill of 607.	1.00m – 1.50m
607	Pit cut (?)	Oval in plan but extends under northern edge of trench. Steeply sloping sides, sloping, flat base. Filled by 606.	1.00m – 1.50m
608	Natural	Light orangey-yellow silty sand, abundant pebbles and cobbles.	1.03m+
609	Fill	Light yellowish brown sandy silt, occasional cobbles. Fill of 610.	0.98m – 1.39m
610	Pit cut (?)	Oval in plan but extends under southern edge of trench. Steeply sloping sides, sloping, flat base. Filled by 609.	0.98m – 1.39m

Trench 7

Maximum dimensions: Length: 13.00m Width: 1.60m Depth: 1.55m

Orientation: N-S

Context	Classification	Description	Depth below ground surface – top and bottom of deposits
700	Topsoil	Friable dark brownish black silty loam, occasional sub-rounded pebbles and charcoal.	0m – 0.28-0.45m
701	Layer	Topsoil mixed with crushed mortar.	0.28m – 0.38m
702	Subsoil	Moderately compact dark greyish brown silty sand, moderate gravels and sub-rounded pebbles, occasional charcoal, mortar and fired clay.	0.38 – 1.08m
703	Layer	Loose orangey brown sand with mottles of dark greyish brown sand, moderate gravels and pebbles. Transition layer between 702 (subsoil) and 704 (natural).	0.80 – 1.40m
704	Natural	Orangey-brown sand, occasional gravel inclusions.	1.06m+
705	Fill	Moderately compact dark greyish brown silty sand, moderate gravels and sub-rounded pebbles, occasional charcoal, mortar and fired clay. Fill of 714.	1.06m – 1.57m

Context	Classification	Description	Depth below ground surface – top and bottom of deposits
706	Fill	Loose orangey brown sand with mottles of dark greyish brown sand, moderate gravels and pebbles. Fill of 714.	1.26m – 1.60m
707	Fill	Loose orangey brown sand with mottles of dark greyish brown sand, moderate gravels and pebbles. Fill of 708.	1.40m – 1.82m
708	Gully cut (?)	Linear north/west to south/east cut. ‘U’ shaped in profile with gently sloping sides to concave base. Filled by 707.	1.40m – 1.82m
709	Wall	Brick wall with white mortar with yellow inclusions, four courses high.	0.20m – 0.60m
710	Layer	Same as 702.	0.40m – 1.02m
711	Layer	Same as 703.	0.96m – 1.14m
712	Fill	Orangey brown sand, abundant pebbles and cobbles, occasional charcoal and fired clay. Fill of 713.	1.15m – 1.61m
713	Pit cut	Elongated oval in plan, near vertical sides with an irregular base. Filled by 712.	1.15m – 1.61m
714	Ditch cut	Linear in plan aligned north/east to south/west. Gently sloping sides with a flat base. Filled by 705 and 706.	1.06m – 1.60m

Trench 8

Maximum dimensions: Length: 14.50m Width: 2.60m Depth: 1.60m

Orientation: N-S

Context	Classification	Description	Depth below ground surface – top and bottom of deposits
800	Topsoil	Friable dark brownish black silty loam, occasional sub-rounded pebbles and charcoal.	0 – 0.18m
801	Subsoil	Moderately compact dark greyish brown silty sand, moderate gravels and sub-rounded pebbles, occasional charcoal, mortar and fired clay.	0.10 – 0.99m
802	Layer	Orangey brown sand with moderate mottles of greyish brown silty sand, moderate gravels and pebbles. Transition layer between 801 (subsoil) and 803 (natural).	0.97 – 1.41m
803	Natural	Loose orangey brown sand.	1.38m+

Trench 9

Maximum dimensions: Length: 11.00m Width: 1.60m Depth: 1.21m

Orientation: N-S

Context	Classification	Description	Depth below ground surface – top and bottom of deposits
900	Layer	Loose light brown sand.	0m – 0.08m
901	Topsoil	Dark brown silty sand, occasional sub-rounded gravels.	0.08m – 0.13m
902	Layer	Modern mortar.	0.13m – 0.18m
903	Layer	Dark reddish brown silty sand, moderate sub-rounded gravels.	0.18m – 0.25m
904	Layer	Dark greyish brown sand, occasional to moderate pebbles.	0.25m – 0.83m
905	Layer	Loose mid to dark brown sand, occasional pebbles and charcoal.	0.83m – 1.13m
906	Natural	Orangey brown sand, rare stone inclusions.	1.13m+
907	Fill	Brownish grey sand, abundant sub-rounded pebbles. Fill of 908.	1.21m – 1.50m
908	Posthole cut (?)	‘U’ shaped profile with steeply sloping sides and a concave base. Filled by 907.	1.21m – 1.50m
909	Wall	Brick wall visible in west-facing section of trench, twelve courses high.	0.30m – 1.10m
910	Layer	Modern paving stones.	0.00m – 0.04m

Trench 10

Maximum dimensions: Length: 9.60m Width: 1.60m Depth: 1.22m

Orientation: N-S

Context	Classification	Description	Depth below ground surface – top and bottom of deposits
1000	Layer	Modern tarmac.	0m – 0.08m
1001	Layer	Blue-grey crushed stone with light yellowish brown clay (hardcore).	0.08m – 0.50m
1002	Subsoil	Dark greyish brown silty sand, occasional pebbles.	0.50m – 0.76m
1003	Layer	Mid brown silty sand, moderate pebbles.	0.76m – 1.01m
1004	Layer	Loose orangey brown sand, abundant gravels and pebbles.	1.01m – 1.22m
1005	Natural	Loose orangey brown sand, moderate gravel.	1.22m+
1006	Fill	Mid brown silty sand, moderate pebbles. Secondary fill of 1008.	1.01m – 1.14m
1007	Fill	Loose orangey brown sand with lenses of mid brown silty sand, abundant gravels and pebbles. Primary fill of 1008.	1.14m – 1.38m
1008	Pit cut	Appears circular in plan but extends under eastern edge of trench. Steeply sloping sides with a pointed base. Filled by 1007 and 1006.	1.01m – 1.38m

Context	Classification	Description	Depth below ground surface – top and bottom of deposits
1009	Fill	Mid brown silty sand, moderate pebbles. Fill of 1011.	0.97m – 1.12m
1010	Fill	Loose orangey brown sand with lenses of mid brown silty sand, abundant gravels and pebbles. Fill of 1011.	1.12m – 1.45m
1011	Pit cut/ditch terminus	Elongated oval in plan but extends under the eastern edge of trench. ‘V’ shaped in profile with steeply sloping sides to pointed base. Filled by 1009 and 1010.	0.97m – 1.45m
1012	Fill	Mid brown silty sand, moderate pebbles. Fill of 1014.	0.94m – 1.10m
1013	Fill	Loose orangey brown sand with lenses of mid brown silty sand, abundant gravels and pebbles. Fill of 1014.	1.10m – 1.34m
1014	Pit cut/ditch terminus	Semi-circular in plan but extends under the western edge of the trench. Steeply sloping sides with an irregular base. Filled by 1012 and 1013.	0.94m – 1.34m

Trench 11

Maximum dimensions: Length: 11.05m Width: 1.60m Depth: 1.76m

Orientation: N-S

Context	Classification	Description	Depth below ground surface – top and bottom of deposits
1100	Topsoil	Friable dark brownish black silty loam, occasional sub-rounded pebbles and charcoal.	0m – 0.39m
1101	Layer (construction debris)	Loose crushed lime mortar with brick rubble, occasional reddish brown sand and gravels.	0.39m – 0.54m
1102	Layer	Friable dark brown sandy silt, frequent sub-rounded pebbles and charcoal.	0.54m – 1.28m
1103	Layer	Friable greenish brown sandy silt, frequent sub-rounded pebbles, occasional charcoal.	1.28m – 1.50m
1104	Natural	Loose yellow sand, occasional sub-rounded gravels.	1.50m+
1105	Wall	Brick wall aligned east/west with hard grey mortar, five courses high. Bricks: 244mm x 112mm x 74mm. Fill of 1107.	0.54m – 1.02m
1106	Fill	Dark silty sand, abundant crushed mortar and brick rubble. Fill of 1107.	0.54m – 1.02m
1107	Cut	Construction cut for brick wall 1105. Vertical sides with a flat base. Filled by 1105 and 1106.	0.54m – 1.02m
1108	Wall	Single width brick abutment to 1105 with hard mortar, three courses high. Bricks: 244mm x 112mm x 74mm. Fill of 1109.	0.54m – 0.81m
1109	Cut	Construction cut for wall 1108. Vertical sides with a flat base. Filled by 1108.	0.54m – 0.81m
1110	Fill	Loose dark brown sandy silt. Fill of 1111.	1.73m – 2.08m

Context	Classification	Description	Depth below ground surface – top and bottom of deposits
1111	Cut	Linear in plan aligned east/west. Concave sides with a concave base. Filled by 1110.	1.73m – 2.08m

Trench 12

Maximum dimensions: Length: 9.90m Width: 1.80m Depth: 1.45m

Orientation: E - W

Context	Classification	Description	Depth below ground surface – top and bottom of deposits
1200	Layer	Modern tarmac	0m – 0.10m
1201	Layer	Light creamy orange hardcore with angular stones.	0.10m – 0.30m
1202	Layer	Dark pinkish orange hardcore with angular stones.	0.30m – 0.40m
1203	Layer	Dark greyish black silt with lenses of tile and hardcore.	0.40m – 0.50m
1204	Layer	Moderately compact dark purplish brown sandy silt, occasional small-medium oval pebbles and charcoal, lenses of CBM and slate. Same as 1223.	0.40 – 0.85m
1205	Posthole cut	Steep sides with a flat base. Filled by 1206.	0.45m – 1.15m
1206	Fill	Moderately compact dark brown sandy silt, occasional charcoal and small oval pebbles. Fill of 1205.	0.45m – 1.15m
1207	Layer	Loose dark brownish black sandy silt, occasional small-medium oval pebbles.	0.75m – 0.98m
1208	Layer	Loose dark brownish black sandy silt, occasional small oval pebbles.	0.70m – 1.15m
1209	Fill	Loose mid greyish brown sandy silt, occasional small gravels and charcoal. Secondary fill of 1211.	0.70m – 0.94m
1210	Fill	Loose dark brownish black sandy silt, occasional small-medium oval pebbles. Primary fill of 1211.	0.94m – 1.30m
1211	Pit cut	Steeply sloping on western edge, gently sloping on eastern edge with a pointed base. Filled by 1209 and 1210.	0.70m – 1.30m
1212	Pit cut/ditch terminus	'U' shaped in section with concave sides and curving to flat base. Filled by 1213.	0.70m – 1.30m
1213	Fill	Loose and friable mid brown sandy silt, occasional small oval pebbles, charcoal and mortar. Fill of 1212.	0.70m – 1.30m
1214	Layer	Loose and friable orange sand with black mottles, occasional manganese and medium-large cobbles. Same as 1221.	1.04m – 1.42m
1215	Layer	Loose and friable pinkish brown silty sand with dark grey mottles, occasional small-medium oval pebbles.	1.18m – 1.42m
1216	Natural	Orangey brown sand and gravel with some darker mottles, occasional small, oval pebbles.	1.42m+

Context	Classification	Description	Depth below ground surface – top and bottom of deposits
1217	Fill	Dark greyish brown silty sand, occasional pebbles. Fill of 1218.	1.19m – 1.67m
1218	Posthole cut/ pit cut	Appears circular in plan but extends under northern edge of trench. Steeply sloping eastern edge, gently sloping western edge with a concave base. Filled by 1217.	1.19m – 1.67m
1219	Layer	Loose and friable dark greyish brown sandy silt, moderate small-medium pebbles, CBM and mortar.	0.50m – 0.70m
1220	Layer	Loose orangey brown sand and gravel. Same as 1214.	1.00m – 1.30m
1221	Layer	Mid orangey brown sand with dark greyish brown mottles. Same as 1214.	1.19m – 1.45m
1222	Fill	Loose dark greyish brown sandy silt, occasional small oval pebbles, charcoal and mortar. Fill of 1227.	0.98m – 1.26m
1223	Layer	Moderately compact dark greyish brown silty sand, occasional small-medium oval pebbles and charcoal, lenses of CBM and slate. Same as 1204.	1.00m – 1.19m
1224	Fill	Compact mid brown sandy silt, frequent small sub-rounded stones, occasional charcoal flecks. Fill of 1227.	1.18m – 1.32m
1225	Layer	Moderately compact dark brownish grey sandy clay, occasional small, oval pebbles.	0.59-0.84m – 1.20m
1226	Layer	Loose pinkish brown silty sand with dark grey mottles, occasional small-medium oval pebbles.	0.94m – 1.05m
1227	Pit cut	Circular (?) cut, vertical straight sides, sharp break of slope to flat, regular base. Filled by 1222, 1224. Partially exposed in northern section.	0.98 – 1.32m

Trench 13

Maximum dimensions: Length: 10.20m Width: 2.70m Depth: 1.40m

Orientation: N-S

Context	Classification	Description	Depth below ground surface – top and bottom of deposits
1300	Layer	Modern tarmac. Same as 1312.	0m – 0.06m
1301	Layer	Hardcore and crushed tarmac. Same as 1313.	0.06m – 0.12m
1302	Layer	Light brown sand. Same as 1314.	0.12m – 0.14m
1303	Subsoil	Friable dark greyish brown sandy silt, occasional gravel. Same as 1315.	0.14m – 0.85m
1304	Layer	Mid brown silty sand, moderate gravel and pebbles. Same as 1317.	0.85m – 1.05-1.20m
1305	Natural	Loose orangey brown sand with lenses of mid greyish brown sand, occasional gravels and pebbles.	1.05m+
1306	Pit cut	Circular in plan. Near vertical sides with a flat, sloping base. Filled by 1307.	1.37m – 1.57m

Context	Classification	Description	Depth below ground surface – top and bottom of deposits
1307	Fill	Friable mid brown sandy silt, occ sub-rounded pebbles. Fill of 1306.	1.37m – 1.57m
1308	Cut	Construction cut for drain 1310. Linear in plan. Near vertical northern side, steeply sloping southern side with a flat base. Filled by 1309 and 1310.	1.08m – 1.26m
1309	Fill	Silty sand with charcoal and fired clay. Fill of 1308.	1.08m – 1.26m
1310	Fill	Brick drain. Fill of 1308.	1.26m+
1311	Layer	Mixed rubble. Same as 1318.	0.14m – 0.19m
1312	Layer	Same as 1300.	0.00m – 0.04m
1313	Layer	Same as 1301.	0.04m – 0.12m
1314	Layer	Same as 1302.	0.12m – 0.14m
1315	Layer	Same as 1303.	0.19m – 0.82m
1316	Layer	Friable dark blackish brown sandy silt, occasional small sub-rounded pebbles and gravels.	0.82m – 1.00m
1317	Layer	Same as 1304.	1.00m – 1.20m
1318	Layer	Same as 1311.	0.14m – 0.19m
1319	Layer	Loose and friable mid pinkish brown sandy silt, occasional charcoal.	0.30m – 0.35m
1320	Structure	Brick structure. Bricks: 230 x 115 x 70mm. Consists of two raised channels on upright brick tiers. To east an iron grate with possible stoke pit.	0.35m – 0.98m
1321	Layer	Moderately compact dark brownish grey sandy clay with building rubble and debris, occasional small-medium oval pebbles.	0.10m – 0.30m
1322	Layer	Yellowish white mortar.	0.06m – 0.10m
1323	Fill	Moderately compact dark greyish brown loam, occasional small, oval pebbles, rare charcoal and CBM. Fill of 1325.	0.98m – 1.36m
1324	Wall	Brick wall visible in east facing section, seven courses high. Bricks: 230 x 115 x 70mm. Relates to structure 1320.	0.35m – 0.98m
1325	Cut	Irregular shape in section. Steeply sloping northern side, southern side and base not observed. Filled by 1323.	0.98m – 1.36m

Trench 14

Maximum dimensions: Length: 10.80m Width: 2.10m Depth: 1.47m

Orientation: E-W

Context	Classification	Description	Depth below ground surface – top and bottom of deposits
1400	Layer	Modern tarmac.	0m – 0.03m.
1401	Layer	Sand and hardcore.	0.03m – 0.14m
1402	Layer	Compact greyish black silt, moderate bricks and small, angular pebbles.	0.03m – 0.50m
1403	Layer	Moderately compact greyish brown sandy silt, occasional small, oval pebbles, CBM, coal and charcoal.	0.33m – 1.16m
1404	Layer	Light beige brown silty sand, moderate small- medium, oval pebbles.	1.10m – 1.30m
1405	Natural	Orange sand with lenses of red and brown sand.	1.43m+
1406	Layer	Loose orangey grey sandy silt with lenses of reddish brown gravel, occasional pebbles.	1.24m – 1.43m
1407	Cut	Construction cut for wall 1409. Linear in plan. Eastern side stepped, western side truncated by 1410, pointed base. Filled by 1408 and 1409.	0.80m – 1.14m
1408	Fill	Loose dark brownish grey silt, moderate small - medium flattened, rounded stones. Fill of 1407.	0.80m – 1.14m
1409	Wall	Brick wall. Re-used brick with soft pink mortar, six courses high. Brick dimensions 230 x 110 x 70mm	0.35m – 0.86m
1410	Pit cut	Gently sloping and stepped eastern side, steeply sloping western side, narrow concave base. Filled by 1411.	0.33m – 1.29m
1411	Fill	Loose mid greyish brown silt, moderate small, rounded and angular pebbles and CBM. Fill of 1410.	0.33m – 1.29m
1412	Fill	Loose mid greyish brown silt, moderate small, rounded and angular pebbles and CBM.	0.48m – 0.96m
1413	Ditch cut/pit cut	Not fully excavated. Vertical sides, base not exposed. Filled by 1414.	1.47m+
1414	Fill	Orangey brown sand with abundant gravel and pebbles and with dark greyish brown mottles. Fill of 1413.	1.47m+
1415	Ditch cut/pit cut	Not fully excavated. Filled by 1416.	1.47m+
1416	Fill	Dark greyish brown silty sand with orangey brown sandy mottles, occasional pebbles. Fill of 1415.	1.47m+

Trench 15

Maximum dimensions: Length: 8.20m Width: 2.10m Depth: 1.98m

Orientation: E-W

Context	Classification	Description	Depth below ground surface – top and bottom of deposits
1500	Layer	Modern tarmac.	0m – 0.06m
1501	Layer	Crushed tarmac, sand, brick and mortar rubble.	0.06m – 0.12m
1502	Layer	Dark greyish brown silty sand, abundant charcoal, occasional CBM and pebbles.	0.12m – 0.84m
1503	Layer	Moderately loose mid brown silty sand, moderate gravel, pebbles, charcoal and CBM.	0.66m – 0.98m
1504	Fill	Dark greyish brown silty sand, abundant charcoal, occasional CBM and pebbles. Fill of 1505.	0.66m – 0.94m
1505	Ditch cut	Linear in plan aligned east/west. ‘U’ shaped profile with steeply sloping sides and a concave base. Filled by 1504.	0.66m – 0.94m
1506	Layer	Loose orangey brown sand, abundant pebbles. Possibly re-deposited natural.	0.66m – 1.44m
1507	Posthole cut/pit cut	Oval in plan. ‘U’ shaped profile with steeply sloping sides and a narrow, level base. Filled by 1508.	0.75m – 0.90m
1508	Fill	Moderately compact mid brown sandy clay, moderate small, sub-angular pebbles, occasional CBM and coal.	0.75m – 0.90m
1509	Layer	Mid-dark greyish brown silty sand, occasional gravels and pebbles.	0.98m – 1.33m
1510	Wall	Brick wall/structure. Brick dimensions 230 x 110 x 65mm. Fill of 1511.	0.04m – 0.78m
1511	Cut	Construction cut for brick wall / structure. Eastern side gently sloping, western side not observed, flat base. Filled by 1510, 1512, 1515.	0.57m – 0.60m
1512	Fill	Purplish brown silty sand. Fill of 1511.	0.57m – 0.60m
1513	Layer	Dark greyish brown sandy silt, moderate small, oval pebbles, CBM and mortar.	0.06m – 0.44m
1514	Layer	Dark greyish brown sandy clay, occasional mortar and CBM.	0.60m – 0.94m
1515	Fill	Dark greyish brown sandy silt, moderate mortar, CBM and charcoal, occasional small, oval pebbles. Fill of 1511.	0.04m – 0.57m
1516	Ditch (modern) cut	Not excavated. Filled by 1517.	1.14m+
1517	Fill	Moderately compact mid orangey brown sandy clay, occasional small oval and angular stones and CBM. Not excavated. Fill of 1516.	1.14m+
1518	Layer	Mid beige brown sand and angular stones.	0.04m – 0.06m
1519	Layer	Loose coarse orange sand, occasional small-medium sub-rounded stones. Re-deposited natural.	0.86m – 1.40m
1520	Layer	Moderately compact dark blackish brown silty sand, occasional small-medium stones, CBM, charcoal, mortar.	1.20m – 1.40m

Context	Classification	Description	Depth below ground surface – top and bottom of deposits
1521	Layer	Loose orangey brown silty sand.	1.40m – 1.60m
1522	Layer	Moderately compact dark blackish brown silty sand, occasional small-medium stones, CBM, charcoal, mortar.	1.60m – 1.80m
1523	Natural	Orange sand and gravels.	1.80m+

Trench 16

Not excavated

Trench 17

Maximum dimensions: Length: 4.25m Width: 1.77m Depth: 3.00m

Orientation: E-W

Context	Classification	Description	Depth below ground surface – top and bottom of deposits
1700	Layer	Friable mid-dark brownish black silty clay.	0m – 00.38m
1701	Layer	Friable mid reddish pink silty clay, abundant charcoal, occasional brick.	0.12m – 0.90m
1702	Layer	Friable mid brownish black silty clay, abundant sub-rounded pebbles, occasional charcoal.	0.12m – 2.00m
1703	Layer	Friable mid brownish black sandy silt, abundant cobbles and brick.	0.12m – 2.47m
1704	Layer	Friable mid-light greyish yellow-brown silty clay, abundant charcoal.	0.72m – 2.58m
1705	Layer	Friable mid brown silty sand, abundant charcoal and pebbles.	2.58m – 2.61m
1706	Fill	Moderately compact dark blackish brown silty clay. Fill of 1707.	1.52m – 3.03m
1707	Pit cut	Gently sloping sides with a flat base. Filled by 1706.	1.52m – 3.03m
1708	Natural	Friable light orangey yellow silty sand, abundant gravels and small pebbles.	0.12m+
1709	Fill	Friable mid orangey brown silty sand, occasional charcoal, rare pebbles. Fill of 1710.	0.39m – 0.75m
1710	Posthole cut/pit cut	Irregular oval in plan. Steeply sloping sides with a concave base. Filled by 1709.	0.39m – 0.75m

Trench 18

Maximum dimensions: Length: 10.90m Width: 1.80m Depth: 1.10m

Orientation: E-W

Context	Classification	Description	Depth below ground surface – top and bottom of deposits
1800	Layer	Modern tarmac.	0m – 0.04m
1801	Layer	Light pinkish brown silt with gravels, occasional small, angular stones.	0.04m – 0.50m
1802	Natural	Moderately compact light-mid orangey pink mudstone.	0.10m+
1803	Cut	Irregular in plan, aligned north/south. Steeply sloping western side, eastern side stepped; flat base. Filled by 1804.	0.04m – 1.00m
1804	Fill	Mid-dark blackish brown silty clay. Fill of 1803.	0.04m – 1.00m

Trench 19

Maximum dimensions: Length: 11.50m Width: 1.75m Depth: 0.76m

Orientation: NW-SE

Context	Classification	Description	Depth below ground surface – top and bottom of deposits
1900	Layer	Modern tarmac.	0m – 0.06m
1901	Layer	Sub-angular stones and grey gravels.	0.06m – 0.68m
1902	Natural	Compact laminated reddish brown clay. Mercian mudstone.	0.68m+
1903	Fill	Friable dark brown silty clay, occasional charcoal. Fill of 1904.	0.80m – 0.84m
1904	Posthole cut	Circular in plan. Vertical sides with a flat base. Filled by 1903.	0.80m – 0.84m

Trench 20

Maximum dimensions: Length: 10.10m Width: 1.75m Depth: 1.45m

Orientation: NW-SE

Context	Classification	Description	Depth below ground surface – top and bottom of deposits
2000	Layer	Modern tarmac.	0m – 0.10m
2001	Layer	Bluish crushed stone (hardcore).	0.10m – 0.12m
2002	Layer	Compact dark greyish brown sandy silt, moderate medium-large oval stones and CBM.	0.12m – 0.85m
2003	Layer	Moderately compact mid greyish brown sandy clay, moderate charcoal, occasional medium, oval pebbles, occasional CBM.	0.35m – 1.05m
2004	Layer	Moderately compact light brown sandy clay, occasional small pebbles.	0.88m – 1.20m
2005	Layer	Compact light brownish yellow alluvial silt with brown mottles, occasional small-medium pebbles. Visible at NW end of trench.	1m+

Context	Classification	Description	Depth below ground surface – top and bottom of deposits
2006	Natural	Compact mid pinkish red mudstone with occasional lenses of sand and gravel. Visible at SE end of trench.	1.05m+
2007	Pit cut	Irregular oval in plan. ‘U’ shaped in section, steeply sloping on eastern side, gently sloping on western side with a sloping base. Filled by 2008.	1.25m – 1.47m
2008	Fill	Compact light yellowish brown sandy clay, moderate small, oval and flattened pebbles and charcoal. Fill of 2007.	1.25m – 1.47m

Trench 21

Maximum dimensions: Length: 9.60m Width: 5.50m Depth: 2.40m

Orientation: E-W

Context	Classification	Description	Depth below ground surface – top and bottom of deposits
2100	Layer	Modern tarmac.	0m – 0.06m
2101	Layer	Friable light yellowish brown sand, moderate CBM.	0.06m – 0.49m
2102	Layer	Friable dark black silty sand, abundant charcoal, burnt clay, small rounded pebbles and CBM.	0.49m – 0.90m
2103	Layer	Friable mid-dark orangey brown silt, abundant charcoal and CBM.	0.90m – 1.70m
2104	Ditch cut	Curvilinear in plan. Steeply sloping sides with a flat base. Filled by 2105.	1.87m – 2.07m
2105	Fill	Compact mid-dark blackish brown silty clay, occasional pebbles. Fill of 2104.	1.87m – 2.07m
2106	Layer	Compact light yellow alluvial clay.	1.70m+
2107	Ditch cut	Linear in plan aligned northeast/southwest. Steeply sloping sides with a pointed base. Filled by 2108.	2.40m – 2.72m
2108	Fill	Friable mid-dark brown sandy silt, occasional sub-angular stones. Fill of 2107.	2.40m – 2.72m
2109	Pit cut (?)	Irregular oval in plan but extends under northern edge of trench. Gently sloping southern side, northern side not observed, base not observed. Filled by 2110.	2.40m – 2.52m
2110	Fill	Compact mid-dark blackish brown silty clay, occasional pebbles. Fill of 2109.	2.40m – 2.52m
2111	Fill	Dark brownish black sandy silt with lenses of yellow clay, occasional charcoal, sub-rounded stones. Fill of 2112.	2.00m – 2.32m
2112	Pit cut	Appears circular in plan but extends under southern and western edges of trench. Steeply sloping concave sides, gentle break of slope to gently sloping base. Filled by 2111.	2.00m – 2.32m
2113	Layer	Mixed black and dark brown silty sand with lenses of yellow alluvial clay.	2.40m+

Trench 22

Maximum dimensions: Length: 11.10m Width: 2.00m Depth: 2.40m

Orientation: E-W

Context	Classification	Description	Depth below ground surface – top and bottom of deposits
2200	Layer	Modern tarmac.	0m – 0.05m
2201	Layer	Rubble consisting of bricks, mortar and tarmac fragments.	0.05m – 0.37m
2202	Layer	Reddish brown sandy clay, abundant gravel and pebbles, occasional CBM.	0.37m – 0.73m
2203	Subsoil	Mid-dark greyish brown clayey sand, occasional sub-rounded pebbles and charcoal flecks.	0.73m – 1.16m
2204	Layer	Mid-dark greyish brown silty sand, occasional pebbles and cobbles.	1.16m – 1.44m
2205	Layer	Mid brown silty sand, occasional pebbles and cobbles.	1.32-m – 1.76m
2206	Layer	Light yellowish brown clay with mottles of mid brown sandy clay (mainly mixed natural). Same as 2211 and 2212.	1.76m+
2207	Fill	Friable dark brown/black silty sand, occasional small sub-angular stones and charcoal. Fill of 2208. Not excavated.	2.24m+
2208	Ditch cut	North/south aligned. Filled by 2207. Not excavated.	2.24m+
2209	Fill	Friable mid-dark brown silty clay, occasional small sub-rounded gravels and stones, occasional charcoal. Fill of 2210. Not excavated.	2.34m+
2210	Ditch cut	Linear in plan aligned northeast/southwest. Filled by 2209. Not excavated.	2.34m+
2211	Layer	Compact dark blackish brown sandy, silty clay, banded within yellow alluvial clay. Same as 2206 and 2212.	2.08m – 2.32m
2212	Layer	Compact mid-dark brownish black sandy, silty clay, occasional sub-rounded pebbles. Same as 2206 and 2211.	1.72m – 2.08m
2213	VOID		

Trench 23

Maximum dimensions: Length: 12.50m Width: 2.00m Depth: 2.46m

Orientation: NW - SE

Context	Classification	Description	Depth below ground surface – top and bottom of deposits
2300	Layer	Modern tarmac.	0m – 0.02m
2301	Layer	Mid-light greyish blue stone within mid-dark brownish red sandy silt.	0.02m – 0.19m
2302	Layer	Compact mid-dark orangey brown clay, abundant CBM, occasional rounded pebbles and charcoal.	0.10-m – 0.35m
2303	Layer	Mid-dark brownish black compact clay, abundant oyster shell, occasional charcoal.	0.28m – 0.55m
2304	Layer	Friable mid-dark blackish brown silt.	0.19m – 1.00m
2305	Layer	Friable dark blackish blue silt, abundant rounded pebbles, moderate charcoal.	1m – 1.82m
2306	Layer	Friable mid black and yellow silty clay.	1.40m – 1.84m
2307	Layer	Compact dark brownish black sandy silty clay, moderate charcoal and burnt clay.	1.34m – 1.74m
2308	Layer	Compact light-mid pinkish brown silty clay, occasional charcoal.	1.36m – 1.96m
2309	Layer	Compact light-mid yellow/orange brown clay.	1.74-1.96m+
2310	Fill	Compact mid brown clay with yellow/green mottles. Fill of 2311.	2.46m – 2.83m
2311	Ditch cut	Linear in plan aligned north/south. Steeply sloping sides with a flat base. Filled by 2310.	2.46m – 2.83m
2312	Fill	Compact mid brown clay with yellow/green mottles. Fill of 2313.	2.07m – 2.21m
2313	Pit cut	Circular in plan. Gently sloping southern side, steeply sloping northern side with a sloping base. Filled by 2312.	2.07m – 2.21m
2314	Fill	Compact mid brown clay with yellow/green mottles. Fill of 2315.	1.92m – 2.26m
2315	Ditch cut	Linear in plan aligned east/west. Steeply sloping sides with a sloping base. Filled by 2314.	1.92m – 2.26m

Trench 24

Maximum dimensions: Length: 4.20m Width: 1.80m Depth: 2.70m

Orientation: N-S

Context	Classification	Description	Depth below ground surface – top and bottom of deposits
2400	Layer	Modern tarmac.	0m – 0.06m
2401	Layer	Loose blackish brown silty sand with abundant small gravels.	0.06m – 0.15m
2402	Layer	Compact mixed building debris within silty sand.	0.15m – 0.76m
2403	Layer	Moderately compact dark brown sandy clay loam, moderate CBM, charcoal and sub-rounded stones, occasional mortar flecks.	0.76m – 1.29m
2404	Layer	Compact mid brown sandy clay loam, moderate CBM, charcoal and sub-rounded stones, occasional mortar flecks.	1.29m – 1.97m
2405	Layer	Moderately compact mid greyish brown sandy clay loam, occasional CBM, fired clay, charcoal and sub-rounded stones.	1.97m – 2.42m
2406	Layer	Compact yellow clay with abundant mottles of greyish brown sandy clay loam.	2.42m+

Trench 25

Maximum dimensions: Length: 11.60m Width: 1.70m Depth: 2.20m

Orientation: N-S

Context	Classification	Description	Depth below ground surface – top and bottom of deposits
2500	Layer	Modern tarmac.	0m – 0.04m
2501	Layer	Mixed stones and gravel (hardcore).	0.04m – 0.20m
2502	Layer	Compact brown clay, occasional charcoal, CBM and small oval pebbles.	0.20m – 0.84m
2503	Layer	Loose dark blackish brown silt, occasional mortar.	0.84m – 1.70m
2504	VOID		
2505	Layer	Moderately compact light greyish brown silty clay.	1.70m – 1.85m
2506	Layer	Firm light orangey yellow clay.	1.85m+
2507-10	VOID		
2511	Pit cut	Oval in plan but extends under the western edge of trench. Steeply sloping eastern side with an irregular base. Filled by 2512.	1.73m – 1.81m
2512	Fill	Greyish brown silty clay, occasional pebbles and charcoal. Fill of 2511.	1.73m – 1.81m
2513	Pit cut	Irregular oval in plan but extends under the western edge of trench. Gently sloping eastern side with a concave base. Filled by 2514.	1.76m – 1.94m
2514	Fill	Mid-dark greyish brown silty clay, rare pebbles. Fill of 2513.	1.76m – 1.94m
2515	Pit cut	Circular in plan but extends under eastern edge of trench. 'U' shaped in section with a concave base. Filled by 2516.	2.03m – 2.23m
2516	Fill	Mid greyish brown silty clay, rare charcoal and fired clay flecks. Fill of	2.03m – 2.23m

Context	Classification	Description	Depth below ground surface – top and bottom of deposits
		2515.	
2517	Pit cut	Irregular in plan and extends under the western edge of trench. Shallow, gently sloping sides with a flat base. Filled by 2518.	1.77m – 1.82m
2518.	Fill	Mid greyish brown silty clay, rare charcoal and fired clay flecks. Fill of 2517.	1.77m – 1.82m
2519	Pit cut	Oval in plan but extends under the northern edge of trench. Stepped eastern side, gently sloping western side, concave base. Filled by 2520.	1.58m – 1.83m
2520	Fill	Friable dark blackish brown clayey silt, moderate small oval pebbles. Fill of 2519.	1.58m – 1.83m

Trench 26

Maximum dimensions: Length: 8.50m Width: 1.60m Depth: 2.48m

Orientation: E-W

Context	Classification	Description	Depth below ground surface – top and bottom of deposits
2600	Layer	Modern tarmac.	0m – 0.05m
2601	Layer	Friable dark black gravel with sandy silt, abundant CBM.	0.05m – 0.49m
2602	Layer	Friable mid-dark yellowish brown sandy silt, moderate slate, glass and CBM.	0.49m – 1.05m
2603	Layer	Mid-dark brownish black silty clay.	1.05m – 1.90m
2604	Layer	Compact mid yellowish brown silty/sandy clay. Transition layer between 2603 and 2605.	1.90m – 2.13m
2605	Layer	Compact light-mid yellow alluvial clay.	2.13m+
2606	Posthole cut	Appears circular in plan but extends under the northern and eastern trench edges. Filled by 2607. Not excavated.	2.26m+
2607	Fill	Compact light-mid brown silty clay, moderate charcoal. Fill of 2606. Not excavated.	2.26m+
2608-11	VOID		
2612	Fill	Friable dark brownish black silty clay, moderate charcoal and sub-angular stones. Fill of 2613.	2.48m – 2.58m
2613	Ditch cut	Linear in plan aligned north/south. Gently sloping sides with a concave base. Filled by 2612.	2.48m – 2.58m
2614	Fill	Friable dark brown sandy silt with lenses of yellow clay. Fill of 2615.	2.48m – 2.72m
2615	Pit cut	Appears circular in plan but only partly exposed. Steeply sloping sides with a shallow, concave base. Filled by 2614.	2.48m – 2.72m
2616	Ditch cut	Linear in plan aligned east/west. Stepped northern side, southern side not observed, flat base. Possibly same as 2619. Filled by 2617, 2618.	2.06m – 2.47m

Context	Classification	Description	Depth below ground surface – top and bottom of deposits
2617	Fill	Moderately compact yellow clay with mottles of light brown sandy silt, occasional small-medium sub-rounded stones and charcoal. Primary fill of 2616.	2.26m – 2.47m
2618	Fill	Moderately compact light brown sandy silt with lenses of yellow clay and blackish brown sandy silt, occasional small-medium sub-rounded stones and charcoal. Secondary fill of 2616.	2.06m – 2.26m
2619	Ditch cut	Linear in plan aligned north/south. Filled by 2620. Possibly same as 2616. Not excavated.	2.02m+
2620	Fill	Compact mid-dark blackish brown clay. Fill of 2619. Not excavated.	2.02m+

Trench 27

Maximum dimensions: Length: 9.40m Width: 1.60m Depth: 1.35m

Orientation: NE-SW

Context	Classification	Description	Depth below ground surface – top and bottom of deposits
2700	Layer	Modern tarmac	0m – 0.15m
2701	Layer	Loose light-dark blackish yellow sandy grit, abundant charcoal, occasional CBM.	0.15m – 0.43m
2702	Layer	Friable mid-dark brownish orange silty clay, occasional charcoal.	0.43m – 0.83m
2703	Ditch cut	Linear in plan aligned north/south. Gently sloping sides with a flat, sloping base. Filled by 2704.	1.06m – 1.31m
2704	Fill	Friable mid greyish brown silty clay. Fill of 2703.	1.06m – 1.31m
2705	Layer	Friable mid orangey brown silty clay, abundant pebbles.	0.83m – 1.06m
2706	Ditch cut	Linear in plan aligned northwest/southeast. Modern service trench. Filled by 2707. Not excavated.	1.20m+
2707	Fill	Friable mid-dark orangey brown mottles sandy clay, moderate CBM.	1.20m+
2708	Natural	Friable mid orangey brown sandy silt, abundant pebbles and cobbles.	1.20m+

Trench 28

Maximum dimensions: Length: 7.70m Width: 1.46m Depth: 1.50m

Orientation: E-W

Context	Classification	Description	Depth below ground surface – top and bottom of deposits
2800	Layer	Modern tarmac.	0m – 0.05m
2801	Layer	Compact dark brown clay, moderate CBM, slate and rounded pebbles, occasional charcoal.	0.05m – 1.00m
2802	Layer	Compact dark black silty clay, abundant rounded pebbles.	1.00m – 1.10m
2803	Layer	Compact light-mid brownish yellow clay.	1.10m – 1.39m
2804	Layer	Compact light orangey yellow clay, occasional rounded pebbles.	1.39m+

Trench 29

Maximum dimensions: Length: 9.10m Width: 2.46m Depth: 1.25m

Orientation: N-S

Context	Classification	Description	Depth below ground surface – top and bottom of deposits
2900	Layer	Modern tarmac.	0m – 0.17m
2901	Layer	Moderately compact light-mid yellowish brown sandy clay, moderate modern building debris.	0.17m – 1.22m
2902	Natural	Moderately compact light-mid orangey brown sand, abundant pebbles.	1.06m+

Appendix 4 Technical information

The archive

The archive consists of:

28	Trench record sheets AS41
5	Fieldwork progress records AS2
14	Photographic records AS3
917	Digital photographs
1	Sample records AS17
3	Abbreviated context records AS40
119	Scale drawings
9	Boxes of finds

The project archive is intended to be placed at:

Worcester City Museum
