

8747

 **ARCHAEOLOGY**

archaeology@durham.gov.uk



Source Number **23277**.....Event Number **8748**.....
Asset Number
Artefact Number..... Consultation.....

**AN ARCHAEOLOGICAL EVALUATION AT
CHALMERS' ORCHARD, NEWCASTLE ROAD,
CHESTER-LE-STREET, COUNTY DURHAM**

PRE-CONSTRUCT ARCHAEOLOGY

**An Archaeological Evaluation at Chalmers' Orchard, Newcastle Road,
Chester-le-Street, County Durham**

Central National Grid Reference: NZ 2745 5175

Site Code: CLS 05

Commissioning Client:

**CgMs Consulting
Morley House
26 Holborn Viaduct
London
EC1A 2AT**

Tel: 0207 583 6767



Contractor:

**Pre-Construct Archaeology Limited
Northern Office
Unit 19a, Tursdale Business Park
Tursdale
Durham
DH6 5PG**

Tel: 0191 377 1111



**© Pre-Construct Archaeology Limited
June 2005**

The material contained herein is and remains the sole property of Pre-Construct Archaeology Limited and is not for publication to third parties without prior consent. Whilst every effort has been made to provide detailed and accurate information, Pre-Construct Archaeology Limited cannot be held responsible for errors or inaccuracies herein contained.

CONTENTS

	<i>page</i>
1. NON-TECHNICAL SUMMARY	1
2. INTRODUCTION	3
3. PLANNING BACKGROUND AND RESEARCH OBJECTIVES	6
4. ARCHAEOLOGICAL AND HISTORICAL BACKGROUND	7
5. GEOLOGY AND TOPOGRAPHY	8
6. ARCHAEOLOGICAL METHODOLOGY	9
7. THE ARCHAEOLOGICAL SEQUENCE	11
8. CONCLUSIONS	18
9. REFERENCES	19
10. ACKNOWLEDGEMENTS AND CREDITS	20

APPENDICES

Appendix A: Stratigraphic Matrix

Appendix B: Context Index

Appendix C: Roman Pottery Assessment

Appendix D: Medieval and Post-Medieval Pottery and Clay Pipe Assessment

Appendix E: Biological Remains Assessment

LIST OF FIGURES

Figure 1	Site location	4
Figure 2	Trench location	5
Figure 3	Trench 1, plan and sections	15
Figure 4	Trench 2, plan and sections	16
Figure 5	Trench 3, plan and sections	17

1. NON-TECHNICAL SUMMARY

- 1.1 This report describes the results and working methods of an archaeological field evaluation undertaken by Pre-Construct Archaeology Limited at Chalmers' Orchard, Newcastle Road, Chester-le-Street, County Durham. The central National Grid Reference of the site is NZ 2745 5175~~5~~. The site is currently occupied by a residential dwelling surrounded by a large garden.
- 1.2 The work was commissioned by CgMs Consulting on behalf of McCarthy and Stone (Developments) Limited. The site is not currently the subject of a planning application, and the purpose of the evaluation was to clarify the presence/absence, date, condition and character of any archaeological remains so that the need for and scope of any archaeological mitigation measures prior to any future development on the site can be determined.
- 1.3 An archaeological desk-based assessment was undertaken by CgMs Consulting prior to the evaluation and a Written Scheme of Investigation was prepared by the same organisation. The archaeological evaluation comprised the investigation of three trenches, each measuring c. 10m x 2m, located within the boundary of the current garden at the property.
- 1.4 The Roman fort at Chester-le-Street, which is a Scheduled Ancient Monument, is located c. 500m to the south of the site. The line of the Roman road, which ran from Chester-le-Street to Newcastle-upon-Tyne, passes immediately to the west of the site.
- 1.5 In Trench 1, natural clay sub-stratum was truncated by an east-west aligned ditch from which Roman pottery was recovered. This was aligned at right angles to the Roman road, and may have been a property boundary delimiting a parcel of land to the east of the road. A shallow north-south aligned linear feature, probably a plough furrow of medieval origin, truncated the Roman ditch; fragments of medieval pottery dating from the 13th-14th century were recovered from this feature. Six shallow circular features were also recorded in Trench 1, these may have been stakeholes and postholes of medieval or earlier origin. The archaeological features described above were overlain by developed soils, with the uppermost deposit being modern topsoil.
- 1.6 In Trench 2, natural clay sub-stratum was truncated by a shallow east-west aligned linear feature, interpreted as a possible drainage gully of medieval or earlier origin. A north-south aligned linear feature in the western part of the trench may be part of the same plough furrow recorded to the north in Trench 1. A developed soil in Trench 2 was overlain by modern topsoil.
- 1.7 At the north-eastern end of Trench 3, natural sub-stratum was truncated by a sub-circular feature, partially exposed within the limits of the trench, which may have been the terminal end of a linear feature or part of a pit. This was of medieval or earlier origin and was overlain by a developed soil. Three irregular shaped discrete features truncated the developed soil, one of which contained post-medieval clay pipe fragments. These features are of recent origin, and may have been associated with the use of the site as an orchard or garden, and were overlain by topsoil.

- 1.8 In summary, the evaluation revealed the presence of features dating to the Roman and medieval periods within the areas investigated. A Roman ditch was encountered which is likely to have delimited a property boundary associated with the Roman road to the west. Artefactual material recovered from this feature comprised Roman pottery, including imported samian fine ware, and fragments of daub, this material often being associated with structures. The presence of this material within the boundary ditch indicates the likely presence of Roman settlement in the locality. Evidence recovered from the site indicates that it was probably utilised as agricultural land during the medieval and post-medieval periods until its more recent use as an orchard and subsequently a garden.
- 1.9 Two bulk soil samples from the Roman ditch were selected to be assessed for their bioarchaeological potential. This analysis demonstrated that ancient remains were limited to very small quantities of unidentifiable charcoal along with a few unidentifiable fragments of burnt bone.
- 1.10 The small assemblage of Roman pottery recovered from the investigations at the site is of some significance as it is likely to have been deposited in the years before or around the mid 2nd century AD. This is the earliest pottery so far recovered from Roman Chester-le-Street and dates prior to the establishment of the known Roman fort and associated settlement, around AD 175. The types of pottery present within the assemblage are consistent with Roman military consumption, such as at a fort, or consumption derived from or associated with a Roman military supply chain, as with a *vicus* or roadside settlement on a major road in a military zone.

2. INTRODUCTION

- 2.1 An archaeological evaluation was undertaken by Pre-Construct Archaeology Limited (hereinafter PCA) on May 9th-13th 2005, at Chalmers' Orchard, Newcastle Road, Chester-le-Street, County Durham. The central National Grid Reference for the site is NZ 2745 5175. The evaluation was commissioned by CgMs Consulting on behalf of McCarthy and Stone (Developments) Limited (hereinafter the Client).
- 2.2 The site is c. 0.4 hectares in extent and is bounded to the south by the rear of properties off Picktree Lane, to the west by Newcastle Road, to the north by Chester-le-Street Civic Centre and to the east by Aldi supermarket and the Territorial Army Centre (Figure 1). The site is roughly rectangular in shape.
- 2.3 At present, the north-eastern portion of the site is occupied by a detached house, 'Chalmers' Orchard,' with an access drive to the north and gardens on all other sides. PCA was contracted to undertake the archaeological evaluation in order to determine the archaeological potential of the site. This would allow the impact of any future development proposals upon the archaeological resource to be assessed, in order to inform the planning decision.
- 2.4 The Roman fort of Chester-le-Street, known as *Concanguim* or *Concangis*, a Scheduled Ancient Monument, is located c. 500m south of the site. The Roman road, which led from the fort to Newcastle-upon-Tyne, passed immediately to the west of the site. The Durham SMR records no archaeological sites or finds within the site itself, although a small number of sites and finds of Roman, medieval and post-medieval date occur in its wider vicinity.
- 2.5 The evaluation comprised the investigation of three trenches, each measuring c. 10m x 2m, which were positioned to assess the archaeological potential of the site (Figure 2).
- 2.6 The completed project archive, comprising written, drawn, and photographic records will be deposited at the County Durham Archaeological Archive at Bowes Museum, Barnard Castle, County Durham, under the site code CLS 05. The Online Access to the Index of Archaeological Investigations (OASIS) reference number is: preconst1-8466.



Figure 1. Site location
Scale 1:25,000

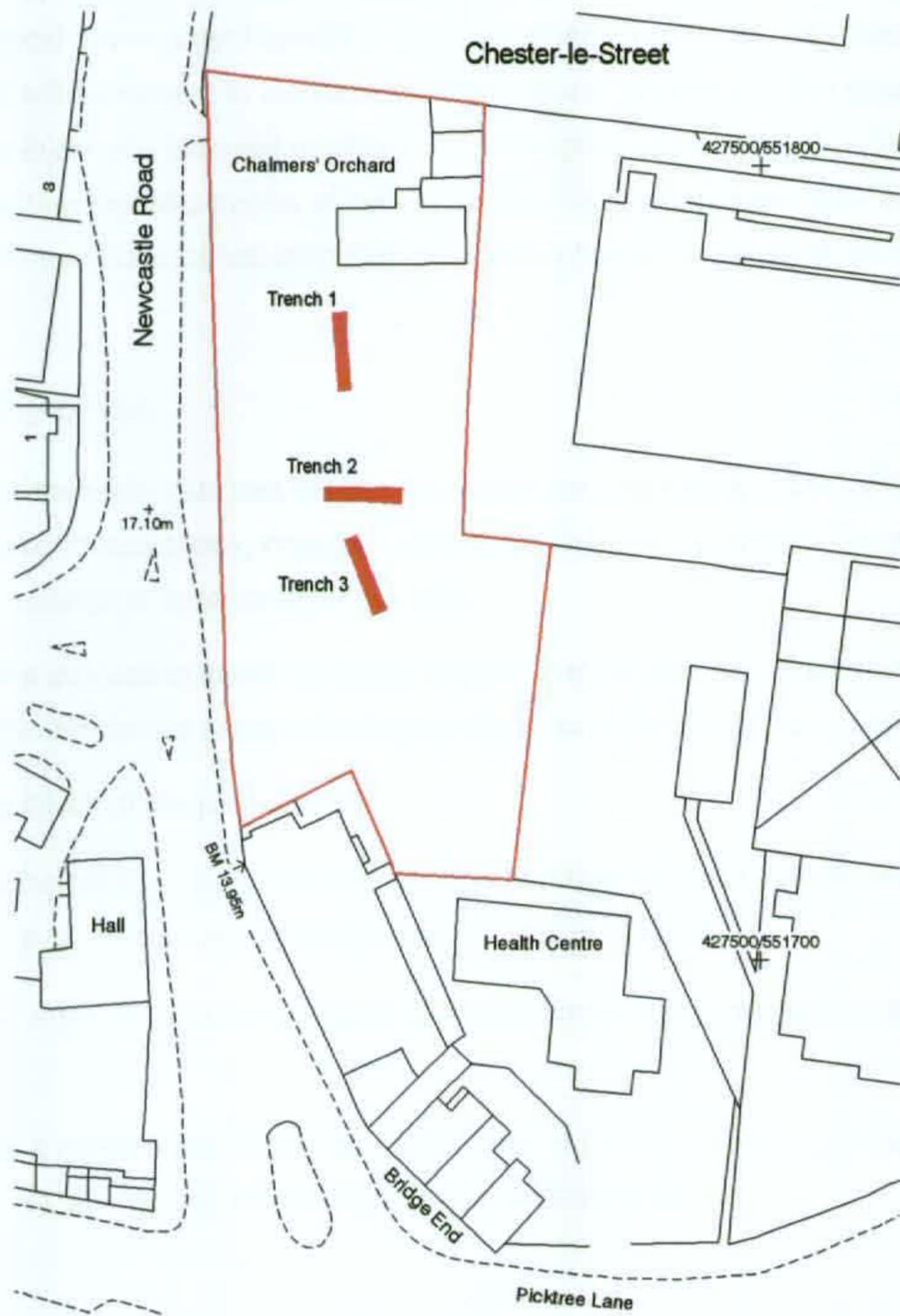


Figure 2. Trench location
Scale 1:1250

3. PLANNING BACKGROUND AND RESEARCH OBJECTIVES

3.1 Planning Background

3.1.1 A desk-based assessment¹ of the archaeological potential of the site was compiled prior to the evaluation.

3.1.2 A Written Scheme of Investigation² for the evaluation was prepared by CgMs Consulting and was approved by Durham County Archaeology Section (DCAS). The DCAS has responsibility for archaeological development control in County Durham. The DCAS identifies planning proposals that will be subject to archaeological conditions, although, in this case, the site is not currently the subject of a planning application. The purpose of the evaluation was therefore to assess the archaeological potential of the site so that the developer can establish the need for and scope of any archaeological mitigation prior to any future development on the site.

3.2 Research Objectives

3.2.1 The objective of the evaluation was to establish, within the constraints of the evaluation sampling strategy, the presence/absence, location, extent, date, character, condition and depth of any surviving archaeological remains within the site.

3.2.2 In particular, the evaluation sought to clarify whether the site had been trenched by the Territorial Army, and hence assess the degree of archaeological survival of buried deposits.

3.2.3 Additional objectives of the project were:

- to set out the background of the site, drawing together the results of previous archaeological, historical, and environmental work in the area;
- to compile a site archive consisting of all site and project documentary and photographic records;
- to compile a report that contains an assessment of the nature and significance of the stratigraphic, artefactual, archaeological and environmental data.

¹ CgMs Consulting, 2005a.

² CgMs Consulting, 2005b.

4. ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

- 4.1 Evidence for prehistoric activity was recorded during recent archaeological excavations at Highfield Hospital, c. 600m north of the site. A multi-period site was encountered, predominantly comprising prehistoric activity and Roman settlement to the north of the Cong Burn close to the Roman road. Additionally, a Bronze Age axe was found associated with Roman artefacts during an archaeological excavation on land off South Approach, c. 1km south-west of the site. This axe was found in a Roman context and as a result its provenance is unknown.
- 4.2 The site is situated c. 500m north of the Roman fort at Chester-le-Street. The Roman name for the fort was for many years thought to be *Concanguim*, but recent research suggests that it was *Concangis*.³ The fort was situated on a high bluff at c. 70m OD overlooking the River Wear to the east and the Cong Burn to the north. The north-south aligned Roman road, which led from Chester-le-Street to Newcastle (*Cades Road*), passed immediately to the west of the fort and the site, along the present day Newcastle Road and the High Street. Excavations in 1969/70 revealed the dimensions of the fort to be c. 165m x 152m, with an internal area of c. 2.5 hectares. A number of internal structures have been identified along with metalled surfaces and a rampart comprising three external ditches. Excavations external to the ramparts have identified a hypocausted building and the remains of a Roman bridge.
- 4.3 Recent excavations have revealed traces of a primary clay and timber fort dating from the second half of the 2nd century, evidence from samian pottery suggests this may date from after AD 175.⁴ The date of the construction of the secondary fort is difficult to establish, an inscription referring to construction work dated AD 216 may not relate to this fort, and may have been associated with additions to the primary fort. An archaeomagnetic date obtained for the burning on the north wall of the officers' quarters, presumed to related to the construction of the secondary fort, falls within a date range of AD 230-270. Pottery from the ditch fill indicates a construction date at the end of this date range as does coin evidence. Evidence from coins suggest that the fort was occupied until the middle of the 4th century, and the officers' quarters seem to have been demolished by the late 4th century.
- 4.4 Documentary evidence records a monastery founded at Chester-le-Street by the monks of Lindesfarne in the 8th century, and a timber cathedral existed within the ramparts of the Roman fort from 883 AD until 995 AD. It was replaced in 1056 AD by a stone church built by Bishop Egelric, and today is the site of the church of St. Mary and St. Cuthbert. The Roman road remained the main route over the Cong Burn to the focus of medieval settlement (now South Pelaw) north of the river, c. 600m west of the site.
- 4.5 The Ordnance Survey 1st edition map of 1872 shows the site as part of an orchard, which is not shown on the 2nd edition map of 1896. In recent times, the site was used by the Territorial Army for training exercises, which included digging trenches, and is shown as open space until the Ordnance Survey map of 1961. This shows the existing detached house '*Chalmers' Orchard*' and garden.

³ Bishop, *et al*, 1993.

⁴ *ibid*.

5. GEOLOGY AND TOPOGRAPHY

5.1 Geology

- 5.1.1 The geology of the site is characterised by Carboniferous Coal Measures overlain by Boulder Clay/Glacial Till. To date no geotechnical investigations have been carried out on the site.

5.2 Topography

- 5.2.1 The site comprises a detached house, '*Chalmers' Orchard*', located within the north-eastern portion of the site, with an access drive to the north and gardens on all other sides. Within the site, ground levels rise from the southern boundary at c. 13.95m OD to the northern boundary at c. 21m OD. Within the western boundary of the site, the garden slopes down in a steep bank to the level of the adjacent Newcastle Road. Generally, the site slopes southwards towards the Cong Burn, a tributary of the River Wear into which it flows c. 500m east of the site.

6. ARCHAEOLOGICAL METHODOLOGY

6.1 Fieldwork

- 6.1.1 The archaeological fieldwork at Chalmers' Orchard, Chester-le-Street was undertaken in accordance with the relevant standard and guidance documents of the Institute of Field Archaeologists.⁵ PCA is an IFA-Registered Archaeological Organisation.
- 6.1.2 Archaeological investigations were conducted in three trenches. The trenches were located following a site visit and consultation with the landowners.
- 6.1.3 All three trenches were rectangular in plan, measuring 10m x 2m, thus comprising a sample area of 60 square metres.
- 6.1.4 The turf in all three trenches was removed with a turf-cutting machine and stored for reinstatement. The topsoil and subsoils were excavated separately with a tracked 1.5 ton 'mini excavator' using a toothless ditching bucket. Overburden and archaeologically insignificant material was removed gradually by the machine, in spits of approximately 100mm thickness, down to the first significant archaeological horizon or to the level of the natural sub-stratum. All such work was carried out under archaeological supervision.
- 6.1.5 Archaeological excavation and recording was undertaken in accordance with recognised archaeological practice and following methodology set out in PCA's *'Field Recording Manual'*.⁶ At the maximum depth of excavation, the sections and the base of the trenches were cleaned using appropriate hand tools. A section and plan of each trench was drawn to scale. The position of each trench baseline was precisely located using appropriate surveying equipment.
- 6.1.6 Within appropriate archaeological horizons, partial excavation, the recovery of dating evidence or cleaning and recording of deposits was preferred to full excavation, and was practised wherever possible. Archaeological features were sampled sufficiently to characterise and date them.
- 6.1.7 A photographic record of the investigations was compiled using SLR cameras. This comprised black and white prints and colour transparencies (on 35mm film), illustrating in both detail and general context the principal features and finds discovered. The photographic record also included 'working shots' to illustrate more generally the nature of the archaeological operation mounted. All photographs included a graduated metric scale.
- 6.1.8 Temporary Bench Marks (TBMs) were established on the site using the Ordnance Survey Bench Mark (13.95m OD) located on the west facing wall of a building fronting onto Newcastle Road (A6127). The TBMs had values of 19.51m OD and 21.41m OD.

⁵ Institute of Field Archaeologists, 1999.

⁶ PCA, 1999.

6.2 Post-excavation

- 6.2.1 The site's stratigraphic data is represented by the written, drawn and photographic records. A total of 43 archaeological contexts were defined in the evaluation trenches. Post-excavation work involved checking and collating site records, grouping contexts, enhancing matrices and phasing the stratigraphic data. A written summary of the archaeological sequence was then compiled.
- 6.2.2 Artefactual material recovered during the fieldwork comprised a small assemblage of Roman, medieval and post-medieval pottery and two fragments of clay pipe. No specialist stabilisation of any recovered material was required. Similarly, there was no requirement for any assessment of potential for conservation research with regard to artefactual material. Specialist assessment of the artefactual material was undertaken as part of the post-excavation phase of work (Appendices C and D).
- 6.2.3 The project's palaeoenvironmental sampling strategy was to recover bulk samples where appropriate, from well-dated (where possible), stratified deposits covering the main periods or phases of occupation and the range of feature types represented, with specific reference to the objectives of the evaluation. Five bulk samples were taken, of which two were selected for assessment at this stage of the project (Appendix E).
- 6.2.4 Survival of all materials from archaeological fieldwork depends upon suitable storage. The complete project archive, comprising written, drawn and photographic records (including all material generated electronically during post-excavation) will be packaged for long term curation according to relevant guidelines.⁷ The depositional requirements of the receiving body, in this case the County Durham Archaeological Archive at Bowes Museum, will be met in full.

⁷ UKIC, 1990.

7. THE ARCHAEOLOGICAL SEQUENCE

Note: Discrete stratigraphic entities (e.g., a cut, a fill, a deposit) were assigned unique and individual 'context' numbers, and these are indicated in the following text as []. The archaeological sequence has been described by broad stratigraphic phases.*

7.1 Phase I – Natural

- 7.1.1 The basal deposit, [23], exposed in Trench 1, comprised sterile clay, which was yellowish brown with grey mottling. At the northern extent of the trench, this was encountered at a maximum height of 20.38m OD sloping down to 19.75m OD at the southern extent of the trench, 0.62m below the existing ground surface. The composition and sterile nature of the deposit indicate that it is the boulder clay sub-stratum, the natural drift geology of the area, of glacial origin.
- 7.1.2 In Trench 2, the natural sub-stratum, [31], comprised a sterile deposit of mid pink clay. This was encountered at a highest level of 18.49m OD at the eastern end of the trench sloping down to 18.36m OD at the western end, 0.56m below the existing ground surface.
- 7.1.3 In Trench 3, the natural sub-stratum, [28], comprised a sterile deposit of mid yellowish brown clay. At the northern end of the trench this was encountered at a highest level of 18.69m OD, sloping down to 18.03m OD at the southern end, 0.68m below the existing ground surface.
- 7.1.4 The level at which natural boulder clay was encountered within the areas investigated reflects the natural topography of the area, which slopes down southwards to the Cong Burn.

7.2 Phase II – Roman

- 7.2.1 In Trench 1, an east-west aligned linear feature, [12], measuring up to 0.66m wide by 0.48m deep, was recorded cutting the natural sub-stratum in the central portion of the trench (Figure 3). A section excavated through this feature revealed it to have steep sides, stepping to a narrow, flat base (west facing section, Figure 3). Its primary fill, [11], which was up to 0.13m thick, comprised greyish brown silty clay from which no datable material was recovered. The secondary fill, [6], comprised dark grey charcoal-rich silty clay, up to 0.17m thick. Roman pottery, including imported samian ware dated to c. AD 120-150, was recovered from this deposit (Appendix C), along with fragments of daub and burnt bone. The upper fill, [5], comprised greyish brown sandy silty clay, up to 0.20m thick. Roman pottery, including local greyware and Dorset Black-Burnished Ware, was also recovered from this deposit.
- 7.2.2 This feature is interpreted as a ditch of Roman origin and may represent a property boundary delimiting a parcel of land east of the Roman road adjacent to the site; the ditch may have had a secondary use as drainage feature. The secondary fill of the ditch contained quantities of domestic refuse such as charcoal flecks and fragments, flecks of burnt bone, daub and pottery. Smaller quantities of similar material were contained within the upper fill. This domestic refuse suggests the presence of Roman settlement in the near vicinity. Bulk soil samples taken from these two fills were assessed for their potential for bioarchaeological remains (Appendix E). Ancient remains were limited to very small quantities of unidentifiable charcoal and a few unidentifiable burnt bone fragments recovered from the secondary fill of the ditch.

7.3 Phase III – Medieval and Undated

- 7.3.1 In Trench 1, a linear feature, [4], aligned roughly north-south, truncated the upper fill of the Phase II ditch, [5]. This was up to 1.14m wide by 0.10m deep and was recorded along the length of the trench. It had gradual sloping sides and a concave base (Figure 3). Its single fill, [3], comprised mid brown sandy clay from which a small quantity of pottery was recovered, including fragments of green glazed pottery of 13th-14th century origin. This feature is interpreted as a medieval plough furrow.
- 7.3.2 In Trench 1, six shallow circular features, [14], [16], [18], [20], [22], [25], which varied in diameter from 0.08m to 0.16m truncated the natural sub-stratum (Figure 3). These all had moderate to gradually sloping sides and concave bases and were between 20mm and 70mm deep. Their fills were all similar, comprising greyish brown sandy clay. No dateable material was recovered from these features, although they were sealed by developed soil, [2], indicating that they were likely to be of medieval or earlier origin. In the absence of any dateable material, they have been placed in the latest phase to which they could have originated, but it is equally possible that they may be of Roman date. The function of these features was not determined, but their dimensions and profile suggests they may represent the bases of structural features such as postholes and stakeholes, horizontally truncated by later activity.
- 7.3.3 In Trench 2, a shallow east-west aligned linear feature, [8], was recorded cutting the natural sub-stratum. This had moderately sloping sides and a concave base and was observed along the length of the trench, measuring 9.12m by 0.28m wide by 0.10m deep (Figure 4). The single fill, [7], comprised grey silty clay from which no dateable material was recovered. The western extent of this feature was truncated by a north-south aligned linear feature, [10], and the eastern extent had been truncated by root disturbance. This feature has been interpreted as a shallow gully. In the absence of dateable material, it has been placed in the latest phase to which it may have dated, however, it may be of earlier, possibly Roman, date.
- 7.3.4 Part of what appeared to be a linear north-south aligned feature, [10], was partially exposed at the western extent of Trench 2 (Figure 4). This had moderately sloping sides and a concave base and the maximum exposed width was 0.98m (north facing section, Figure 4). It was up to 0.21 deep and its single fill, [9], comprised greyish brown silty clay from which no dateable material was recovered. This feature is likely to have been a continuation of the plough furrow, [4], recorded to the north in Trench 1.
- 7.3.5 At the north western extent of Trench 3, a sub-circular feature, [30], was partially exposed truncating the natural sub-stratum (Figure 5). This had a gradually-sloping edge and an irregular-shaped base and measured up to 0.36m wide by 0.34m in length, continuing beyond the limit of excavation, and was up to 0.11m deep. Its fill, [29], comprised yellowish brown sandy clay, from which no dateable material was recovered. The feature has accordingly been placed in the latest phase possible, however, as with the features described above, it may have been of earlier, possibly Roman, origin. The interpretation of this feature is uncertain as its full extent was not fully exposed, however, it may have been the terminal end of a linear feature, or part of a discrete feature such as a pit.

7.4 Phase IV: Medieval and Post-medieval Plough Soil

- 7.4.1 In Trench 1, natural boulder clay and the Phase II and III features were overlain by a layer, [2], comprising mid greyish brown silty clay. This was recorded across the extent of Trench 1 and was up to 0.20m thick. The highest level at which was 20.54m OD at the northern end of the trench, sloping down to 19.88m OD at the southern extent, reflecting the natural topography of the area. This deposit has been interpreted as a developed soil, which probably formed over a considerable timespan throughout the medieval and post-medieval periods, when the area was utilised as agricultural land and subsequently as an orchard.
- 7.4.2 A similar deposit, [43], comprising mid brownish grey sandy clay up to 0.38m thick was recorded across the extent of Trench 2. This overlay natural boulder clay and Phase III features, and is also interpreted as a long established developed soil.
- 7.4.3 In Trench 3, developed soil, [36], comprising mid brownish grey sandy clay, was up to 0.50m thick. The highest level at which this occurred was 18.91m OD in the north, sloping down to 18.26m OD in the south, also reflecting the southwards slope of the natural topography. The increase in thickness of the developed soil in this trench may be due in part to colluvial action.

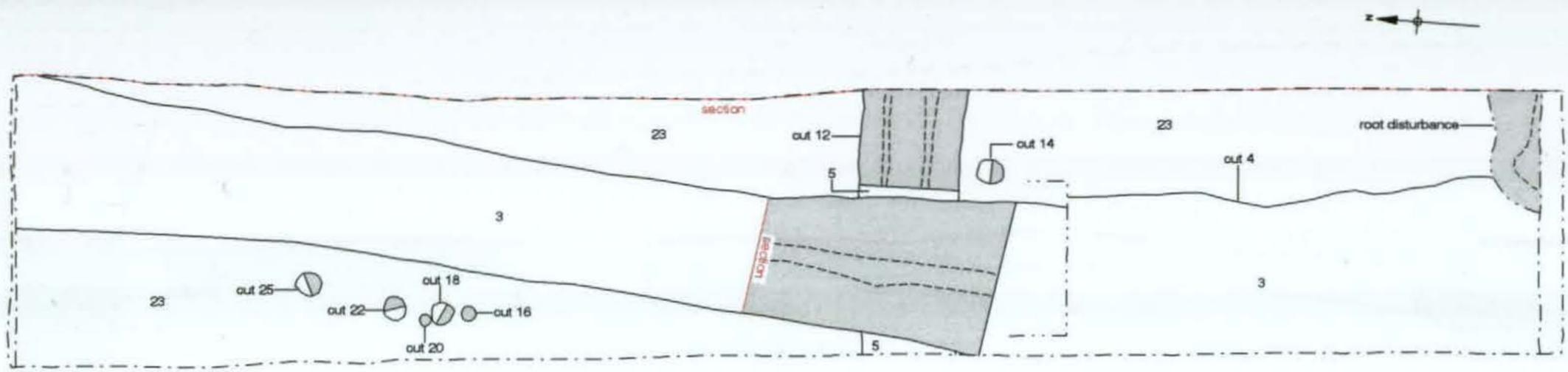
7.5 Phase V: Post-medieval Garden Soil

- 7.5.1 In Trench 1, developed soil [2] was overlain by a layer, [32], comprising dark greyish brown clayey silt. This was recorded across the extent of Trench 1 and was up to 0.22m thick. It occurred at a highest level of 20.68m OD in the northern portion of the trench, sloping down to 20.10m OD at the southern extent. This deposit has been interpreted as a post-medieval garden soil.

7.6 Phase VI: Modern

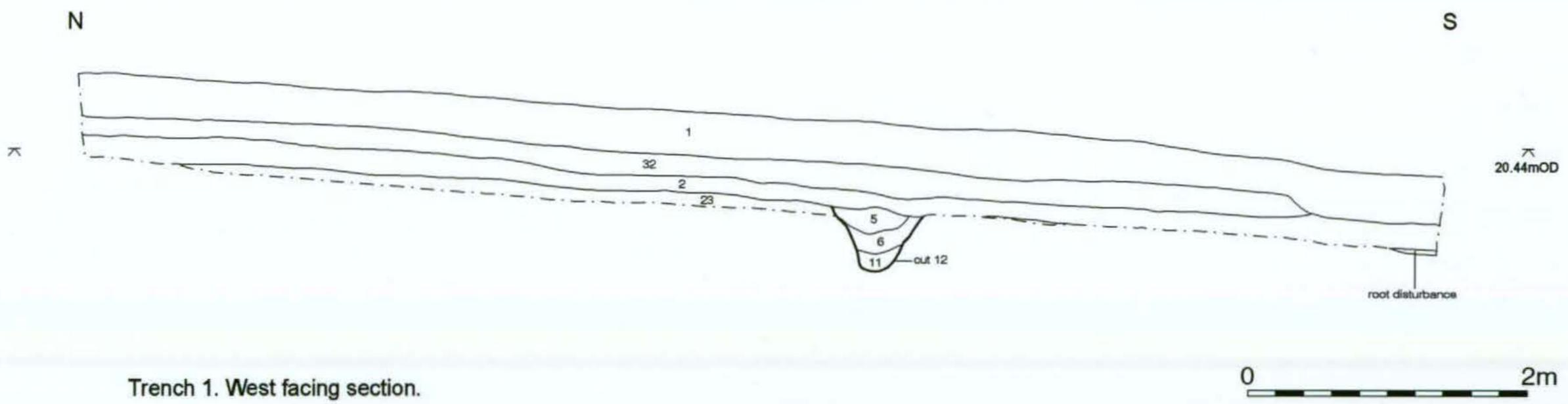
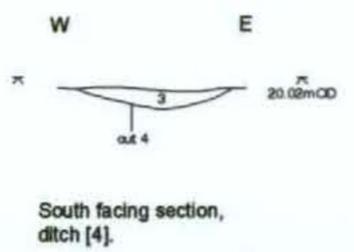
- 7.6.1 Topsoil, [1], comprising brownish grey sandy silty clay was recorded across the extent of Trench 1. This deposit was up to 0.36m thick, and was recorded at a highest level of 20.99m OD at the northern end of the trench, sloping down to 20.24m OD at the southern end.
- 7.6.2 Topsoil, [42], comprising brownish grey sandy silt clay was recorded across the extent of Trench 2. This deposit measured up to 0.28m thick, and the maximum and minimum height at which it was recorded was 18.96m OD and 18.80m OD.
- 7.6.3 In Trench 3, three irregular shaped features, [34], [39] and [41], truncated the Phase IV developed soil, [36] (Figure 5). Feature [34] had moderate to steep sides and an irregular shaped base and measured up to 1.76m by 0.70m by 0.24m deep. Feature [39] had steep sides and a flat base and measured 1.04m by at least 0.32m wide by 0.59m deep. This feature was not fully exposed and continued into the south-western limit of excavation. Feature [41] had moderate to steeply sloping sides with a concave base and measured 0.80m by 0.58m by 0.24m deep. The fills of these three features, [33], [38] and [40], were all similar in composition, being brownish grey silty clay and contained post-medieval artefactual material such as red brick and clay pipe.

- 7.6.4 The function of these features was not ascertained, but they may have been caused by root disturbance, associated with the use of the site as an orchard, or they may represent tree clearance from the change of use of the site from an orchard to a garden.
- 7.6.5 A similar irregular-shaped feature, [27], was recorded at the south-eastern extent of Trench 3. This measured 0.70m by 0.56m by 0.17m deep. Its fill, [26], comprised brown silty clay, from which no dateable material was recovered. It was not ascertained from which level the feature was cut from, although its similarity to Phase VI features [34], [39], [41], as described above, suggests they were contemporary.
- 7.6.6 Features [34] and [41] were overlain by a modern dump deposit, [37], comprising 60% coal fines and 40% sand with modern debris such as iron and glass throughout. The deposit was located towards the central area of the trench and measured 3.40m in length by at least 1.86m wide and up to 0.08m thick (north-east facing section, Figure 5).
- 7.6.7 The latest deposit encountered in Trench 3 comprised topsoil, [35], up to 0.40m thick. The highest level at which this occurred sloped down from 19.31m OD in the north to 18.61m OD in the south.



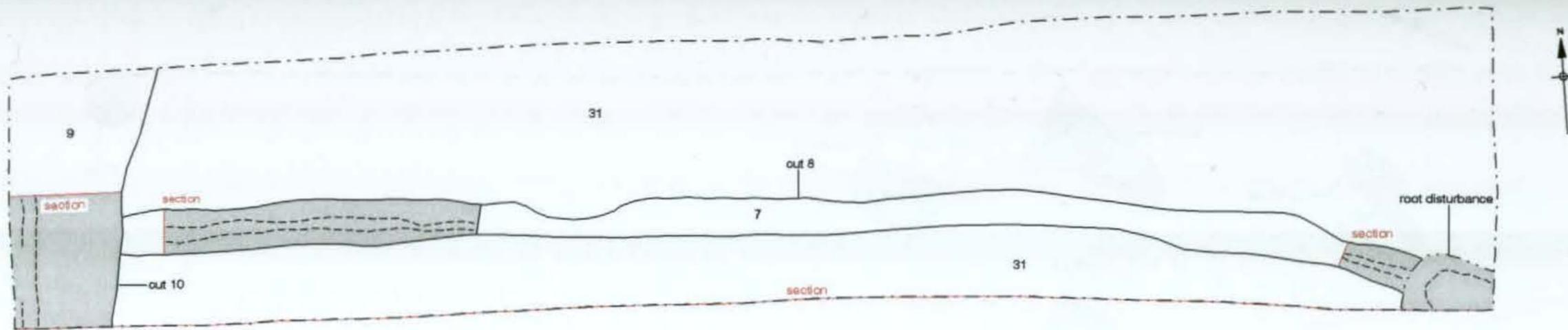
Trench 1. Plan.

excavated portion



Trench 1. West facing section.

Figure 3. Trench 1, plan and sections
Scale 1:50



Trench 2. Plan.

excavated portion

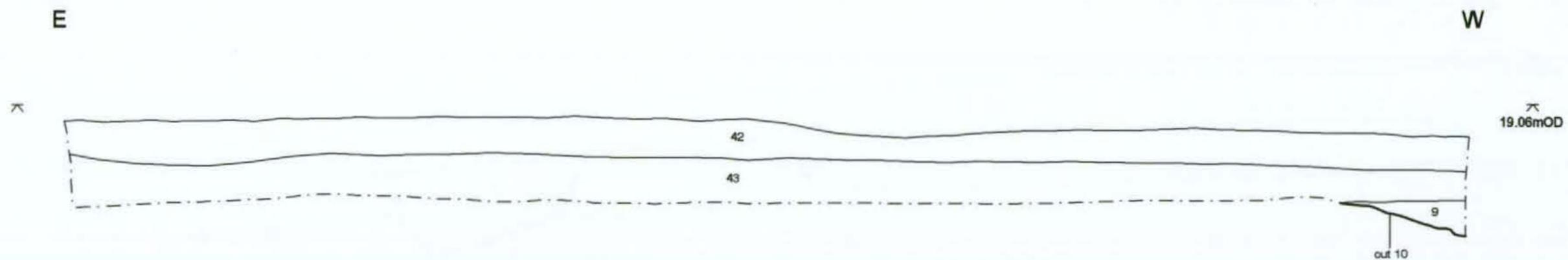
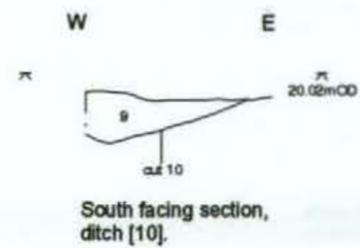
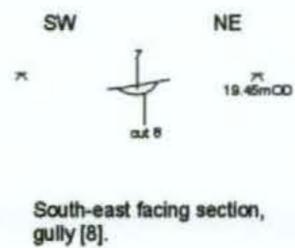
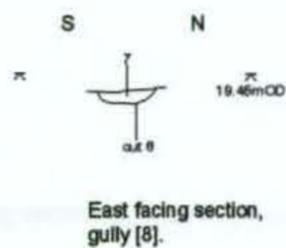
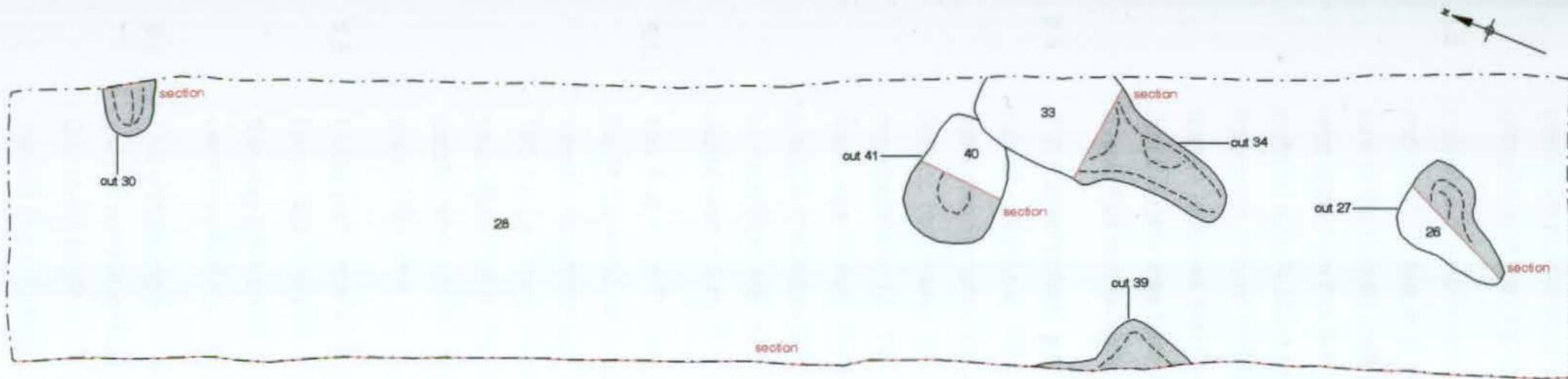


Figure 4. Trench 2, plan and sections
Scale 1:50



Trench 3. Plan.

■ excavated portion

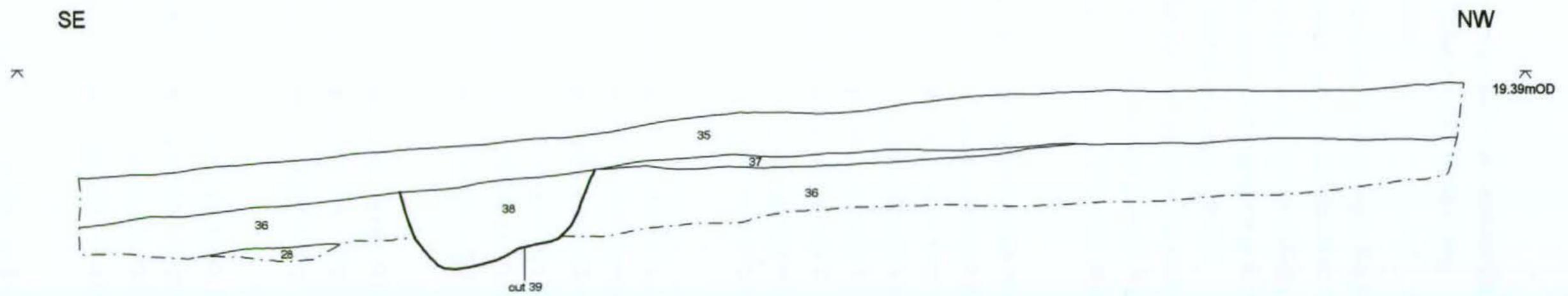
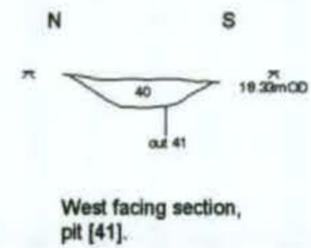
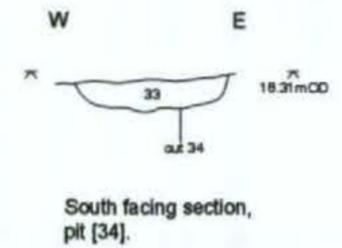
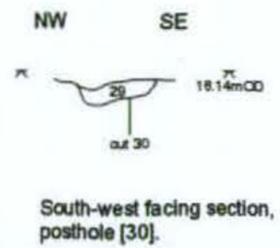
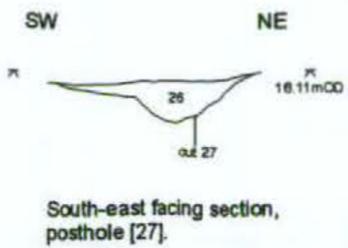


Figure 5. Trench 3, plan and sections
 Scale 1:50

17

8. CONCLUSIONS

- 8.1 The archaeological evaluation at Chalmers' Orchard, Chester-le-Street has demonstrated that significant archaeological remains are present at the site. These remains relate to the occupation of the site during the Roman and medieval periods.
- 8.2 Evidence of what may have been a Roman property boundary was encountered in the northern portion of the site, in Trench 1. This is likely to have delimited a parcel of land located to the east of the Roman road, which led from Chester-le-Street to Newcastle. Roman pottery recovered from this feature included imported samian ware, along with fragments of daub, such material usually being associated with structural remains. This feature also contained fragments of burnt bone and charcoal. The presence of domestic refuse within the boundary feature indicates that Roman settlement may have been located in the vicinity, and it is possible that the ditch may have delimited a parcel of land utilised for occupation, rather than being associated with an agricultural field system.
- 8.3 The Roman pottery assemblage recovered from the investigations comprised a wide range of fabrics, sources and form/functional types (Appendix C). The samian ware consists of plain ware dishes manufactured in Central Gaul, whilst the amphora originates from southern Spain, likely to be Dressel 20 which would have contained olive oil. Other imported material was represented by two fragments from a Black Burnished Ware bowl or dish, originating from south-east Dorset. Local wares included fragments of flagons, a beaker and a likely jar. This group is consistent with Roman military consumption (as at a fort), or consumption derived from or associated with a Roman military supply chain (as with a *vicus* or roadside settlement on a major road in a military zone).
- 8.4 The date of the Roman pottery assemblage is of some significance given that the known Roman fort and *vicus* are conventionally dated from AD 175. Fragments from two samian vessels recovered from the linear feature in Trench 1 date to c. AD 120-140 and c. AD 120-150, *i.e.* Hadrianic and Hadrianic-early Antonine. The assemblage as a whole is likely to have been deposited in the years before or around the mid 2nd century AD, and hence prior to the establishment of the fort, and suggests the presence of occupation or significant activity in the area at this time.
- 8.5 Evidence for medieval agricultural use of the land was also encountered at the site. A plough furrow, which yielded pottery dating from the 13th-14th century, was recorded in Trench 1, and this may have continued into Trench 2. Developed soils of medieval and post-medieval origin were recorded in all areas excavated.
- 8.6 The archaeological deposits of significance lie at a depth of 0.44m to 0.65m below the existing ground surface and, in the areas investigated, had not been affected by modern truncation. Due to the depth of overburden observed, there is high potential for archaeological deposits to survive at the northern end of the site, which at present is occupied by gardens, a driveway and detached building.
- 8.7 There was no evidence encountered to indicate that the site had been 'trenched' by the Territorial Army, as had been suspected.

9. REFERENCES

- Bishop, M., 1993. Excavations in the Roman Fort at Chester-le-Street (Concangis), Church Chare 1990-91, *Archaeologia Aeliana*, 5th Series, 21 (1993), 29-85.
- CgMs Consulting, 2005a. *Archaeological Desk-Based Assessment, Land off Newcastle Road, Chester-Le-Street, County Durham*, unpublished CgMs report.
- CgMs Consulting, 2005b. *Archaeological Written Scheme of Investigation for a Field Evaluation at Land off Newcastle Road, Chester-Le-Street, County Durham*, unpublished CgMs document.
- Department of the Environment, 1990. *Planning Policy Guidance Note 16: Archaeology and Planning (PPG 16)*, HMSO.
- Institute of Field Archaeologists, 1999. *Standards and Guidance for Archaeological Field Evaluation*, IFA.
- Pre-Construct Archaeology Limited, 1999. *Archaeological Site Recording Manual*, unpublished document, PCA.
- United Kingdom Institute for Conservation, 1990. *Conservation Guidelines No. 3. Environmental Standards for the Permanent Storage of Excavated Material from Archaeological Sites*, Archaeology Section of the UKIC.

10. ACKNOWLEDGEMENTS AND CREDITS

Acknowledgements

Pre-Construct Archaeology is grateful to CgMs Consulting Limited for commissioning the archaeological project herein described on behalf of McCarthy and Stone (Developments) Ltd. The role of Sally Dicks is particularly acknowledged.

The curatorial role of the Durham County Archaeology Service, particularly Lee White, is acknowledged.

The co-operation of the resident of Chalmers' Orchard is also acknowledged.

PCA Credits

Fieldwork: Aaron Goode (Site Supervisor), Emma Allen and Bryan Atkinson

Report: Aaron Goode

Project Management: Robin Taylor-Wilson

Post-excavation Project Management: Jenny Proctor

CAD: Adrian Bailey

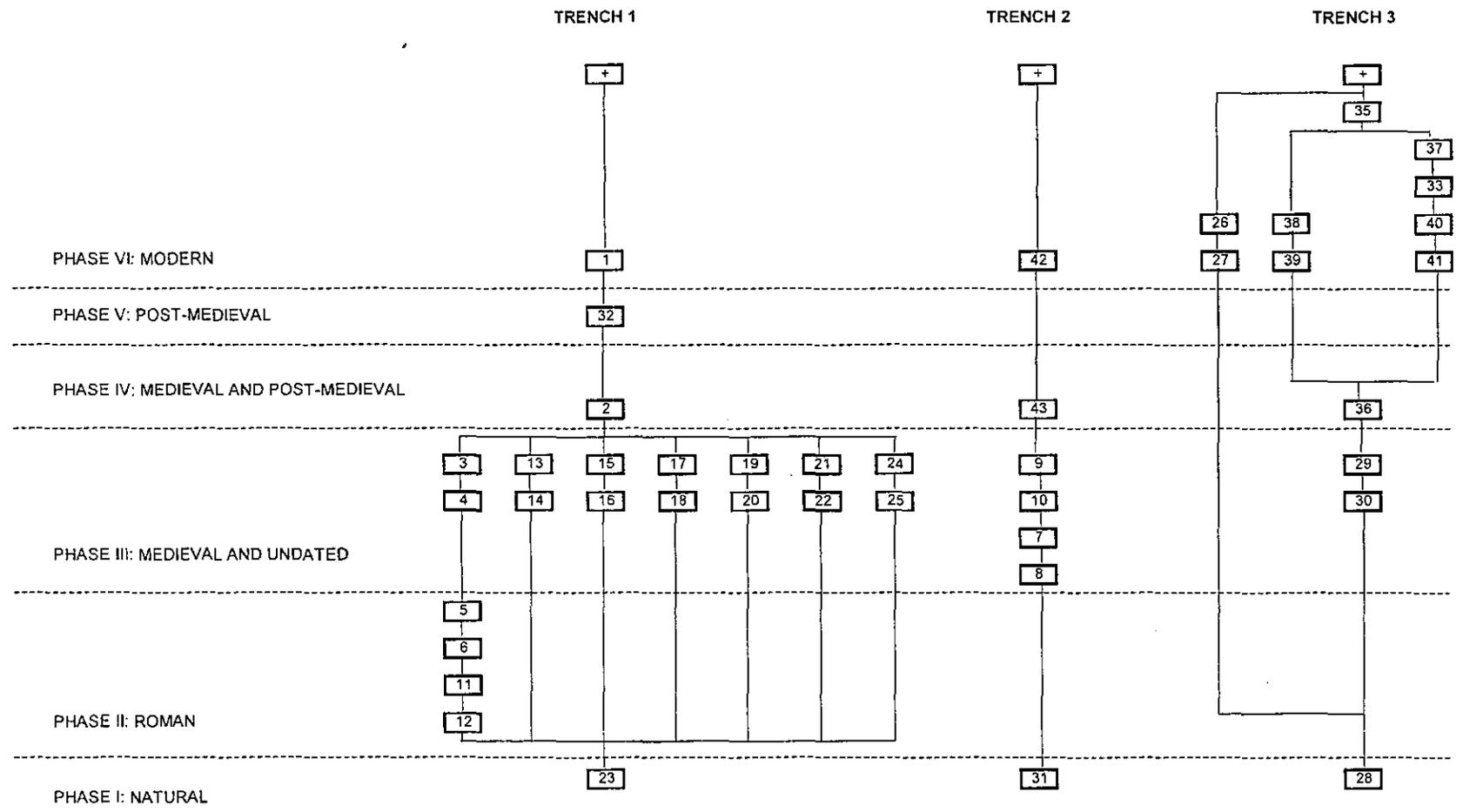
Other Credits

Roman Pottery Assessment: Steve Willis

Medieval and Post-medieval Finds: Jenny Vaughan (NCAS)

Environmental Assessment: Palaeoecology Research Services

**APPENDIX A
STRATIGRAPHIC MATRIX**



**APPENDIX B
CONTEXT INDEX**

Context	Phase	Type	Type	Trench	Description	Interpretation
1	VI	Deposit	Layer	1	Friable; dark brownish grey; sandy silty clay; occasional small sub rounded pebbles, occasional small sub angular coal fragments and flecks, very occasional clay pipe and post med pottery; extends across Trench 1, up to 0.36m thick	Topsoil
2	IV	Deposit	Layer	1	Firm; mid greyish brown; silt clay; moderate small sub angular coal fragments and flecks, occasional small sub rounded pebbles, very occasional pottery fragments, extends across Trench 1, up to 0.25m thick	Developed soil
3	III	Deposit	Fill	1	Firm to hard; mid brown; sandy clay; occasional small sub-round and sub-angular pebbles, occasional small sub-rounded and sub-angular sandstone fragments, occasional small sub angular coal fragments and flecks; measures 9.74m N-S x 1.14 E-W x up to 0.10m thick	Fill of furrow
4	III	Cut	Linear	1	Linear; medium to gradual top break of slope; gradual sloping sides; gradual break of slope at base; slightly concave base; measures 9.74m N-S x 1.14m E-W x up to 0.10m deep	Plough furrow
5	II	Deposit	Fill	1	Firm; mid greyish brown; sandy silty clay; occasional small sub-rounded and sub-angular sandstone, occasional coal and charcoal flecks, moderate small lumps of redeposited natural; measures 1.72m E-W x 0.53m N-S x up to 0.20m thick	Fill of ditch
6	II	Deposit	Fill	1	Soft; small charcoal fragments and flecks (40%) in a silt clay (60%); moderate small sub-angular coal fragments, occasional small sub-rounded sandstone, very occasional cbm and fired clay/daub fragments, very occasional small flecks of burnt/cremated bone; measures >0.70m E-W x 0.59m N-S x up to 0.17m thick	Fill of ditch
7	III	Deposit	Fill	2	Firm; mid grey; silt clay; very occasional sub-rounded stones, very occasional small pieces of degraded coal, very occasional small flecks of orange cbm, very occasional small flecks of charcoal; measures 9.12m E-W x 0.28m N-S x up to 0.10m thick	Fill of gully
8	III	Cut	Linear	2	Linear; sharp top break of slope; sides vary from a moderate to steep sloping concave side; break of slope at base varies from gradual to imperceptible; concave base; orientated E-W turning to a SE-NW direction at its eastern extent; measures 9.12m E-W x 0.28m N-S x up to 0.28m deep	Gully
9	III	Deposit	Fill	2	Firm; mid greyish brown; silt clay; very occasional small sub-rounded stones, very occasional small charcoal flecks, very occasional small flecks of cbm; measures 2.0m N-S x >0.98m E-W x up to 0.21m thick	Fill of furrow
10	III	Cut	Ditch	2	Linear; sharp top break of slope; shallow sloping concave sides; break of slope at base is imperceptible; measures 2.0m N-S x >0.98m E-W x up to 0.21m deep	Plough furrow
11	II	Deposit	Fill	1	Firm to soft; mid greyish brown; silty clay; occasional charcoal flecks, occasional small sub-angular sandstone fragments; measures > 0.70m E-W x 0.31m N-S x up to 0.13m thick	Fill of ditch
12	II	Cut	Linear	1	Linear; top break of slope varies from moderate to sharp; sides are moderate to steep breaking to a steep slope; break of slope at base varies from moderate to sharp; measures >1.72m E-W x 0.66m N-S x up to 0.48m deep	Boundary/drainage ditch
13	III	Deposit	Fill	1	Firm; mid brown; sandy clay; measures 0.16m in diameter x 0.04m thick	Fill of possible stakehole
14	III	Cut	Stakehole	1	Circular; top break of slope varies from moderate to sharp; moderately steep sloping side; break of slope at base is gradual; concave base; measures 0.16m in diameter x 0.04m deep	?Stakehole
15	III	Deposit	Fill	1	Firm; mid greyish brown; sandy clay; measures 0.08m in diameter x 0.07 thick	Fill of possible stakehole
16	III	Cut	Stakehole	1	Circular; sharp top break of slope; moderate to steep sloping side; break of slope at base is gradual; concave base; measures 0.08m in diameter x 0.07m deep	?Stakehole
17	III	Deposit	Fill	1	Firm; mid greyish brown; sandy clay; measures 0.14m NW-SE x 0.12m NE-SW x up to 0.02m thick	Fill of possible posthole
18	III	Cut	Posthole	1	Sub-circular; top break of slope is sharp; sides vary from a moderate to gradual slope; break of slope at base gradual; measures 0.14m NW-SE x 0.12m NE-SW x up to 0.02m deep	?Posthole
19	III	Deposit	Fill	1	Firm; mid greyish brown; sandy clay; measures 0.08m in diameter x up to 0.05m thick	Fill of possible stakehole
20	III	Cut	Stakehole	1	Circular; sharp top break of slope; steep sloping side; break of slope at base is sharp; measures 0.08m in diameter x up to 0.05m deep	?Stakehole
21	III	Deposit	Fill	1	Firm; mid greyish brown; sandy clay; measures 0.14m in diameter x 0.02m thick	Fill of possible posthole
22	III	Cut	Posthole	1	Circular; sharp top break of slope; moderate to steep sloping sides; flat base; measures 0.14m in diameter x 0.02m deep	?Posthole
23	I	Deposit	Layer	1	Firm to hard; mid yellowish brown with light grey mottling; clay; occasional patches of manganese, occasional sub angular sandstone fragments; extends across Trench 1	Natural boulder clay
24	III	Deposit	Fill	1	Firm; mid greyish brown; sandy clay; measures 0.16m in diameter x 0.06m thick	Fill of possible posthole
25	III	Cut	Posthole	1	Circular; sharp top break of slope; moderate to steep sloping sides; break of slope at base is sharp; flat base; measures 0.16m in diameter x up to 0.06m deep	?Posthole
26	VI	Deposit	Fill	3	Firm; mid to dark brown; silt clay; occasional small sub-rounded pebbles; measures 0.70m SW-NE x 0.56m NW-SE x up to 0.17m thick	Fill of possible posthole/pit
27	VI	Cut	Posthole	3	Sub-circular; top break of slope is sharp; sides vary from moderate to steep sloping; break of slope at base is gradual; shallow concave base; measures 0.70m SW-NE x 0.56m NW-SE x up to 0.17m deep	?Posthole/pit
28	I	Deposit	Layer	3	Firm; mid yellowish brown; clay with occasional large patches of brownish yellow sand; occasional small sub-angular sandstone fragments; extends across Trench 3	Natural boulder clay
29	III	Deposit	Fill	3	Loose; mid yellowish brown; sandy clay; occasional small sub-rounded pebbles, frequent small fragments of coal; measures 0.36m N-S x 0.34m E-W x up to 0.11m deep	Fill of possible posthole

Context	Phase	Type	Type	Trench	Description	Interpretation
30	III	Cut	Not known	3	Sub-circular continuing into eastern bank; sharp top break of slope; side varies from a steep slope to a shallow slope; break of slope at base is gradual; concave base; measures 0.36m N-S x 0.34m E-W x 0.11 deep	Terminus of linear of part of pit
31	I	Deposit	Layer	2	Firm; mid pink; clay; occasional small pieces of degraded coal, very occasional small sub-rounded stones; extends across Trench 3	Natural boulder clay
32	V	Deposit	Layer	1	Friable to firm; dark greyish brown; clay silt; occasional small sub-angular sandstone fragments, occasional small sub-angular fragments of coal; extends across Trench 3 up to 0.22m thick	Developed soil
33	VI	Deposit	Fill	3	Firm; mid brownish grey; silt clay; very occasional small sub-rounded and sub-angular sandstone, very occasional small flecks of charcoal, very occasional small flecks of cbm; measures 1.76m NE-SW x >0.70m SE-NW x up to 0.24m thick	Fill of pit
34	VI	Cut	Pit	3	Irregular; top break of slope is sharp; sides vary from a moderate to steep slope; break of slope at base varies from gradual to steep; irregular base; measures 1.76m NE-SW x 0.70m NW-SE x up to 0.24 deep	Pit
35	VI	Deposit	Layer	3	Friable; dark brownish grey; sandy silt; frequent small sub-angular sandstone fragments; extends across Trench 3 up to 0.40m thick	Topsoil
36	IV	Deposit	Layer	3	Firm; mid brownish grey; sandy clay; frequent small sub-angular coal fragments and flecks, moderate small sub-round sandstone fragments, occasional small fragments of cbm; extends across Trench 3 up to 0.50m thick	Developed soil
37	VI	Deposit	Layer	3	Loose; dark grey; coal fines (60%) in a dark grey sand(40%); moderate small sub-angular coal fragments; measures 3.40m NW-SE x >1.80m NE-SW x up to 0.08m thick	Modern dump layer
38	VI	Deposit	Fill	3	Soft; mid brownish grey; sandy clay; occasional small sub-round sandstone fragments, occasional small sub-angular coal fragments and flecks, occasional small patches of redeposited natural; measures 1.40m NW-SE x >0.32m NE-SW x up to 0.59m thick	Fill of pit
39	VI	Cut	Pit	3	Irregular; top break of slope is sharp; sides are moderately steep to steep; break of slope at base is gradual; flat base; measures 1.40m NW-SE x >0.32m NE-SW x up to 0.59m deep	Pit
40	VI	Deposit	Fill	3	Firm; mid brownish grey; sandy silty clay; moderate small flecks of coal, occasional small sub-rounded sandstone fragments, occasional small patches of redeposited natural; measures 0.80m E-W x 0.58m N-S x up to 0.24m thick	Fill of pit
41	VI	Cut	Pit	3	Oval; Sharp top break of slope; sides are a moderate steep slope; break of slope at base is gradual; concave base; measures 0.80m E-W x 0.58m N-S x up to 0.24m deep	Pit
42	VI	Deposit	Layer	2	Friable; dark brownish grey; sandy silt; frequent small sub-angular sandstone fragments; extends across Trench 3 up to 0.28m thick	Topsoil
43	IV	Deposit	Layer	2	Firm; mid brownish grey; sandy clay; frequent small sub-angular coal fragments of coal and flecks, moderate small sub-angular and sub-round sandstone fragments, occasional small cbm fragments; extends across Trench 2 up to 0.38m thick	Developed soil

APPENDIX C
ROMAN POTTERY ASSESSMENT

ROMAN POTTERY ASSESSMENT

By: *Steven Willis*

Introduction

The evaluation produced a small assemblage of pottery including eighteen sherds from Roman vessels. The Roman pottery comes from a wide variety of functional types, from a diversity of sources. All of the pottery was stratified. Four contexts yielded Roman pottery (namely [5], [6], [33] and [43]). This group is interesting in its variety, and likely date, seeming to indicate Roman occupation at or close by the area examined, importantly pointing to a date earlier than any previously recorded pottery groups from Roman Chester-le-Street (e.g. Gillam and Tait 1968). The pottery generally shows abrasion and weathering, but this is not to a degree that inhibits specific identifications.

Although Chester-le-Street has seen various small-scale archaeological explorations in the past, the nature of the development of the site in Roman times is known only to a limited degree. Hence the present material can add to the corpus of knowledge of Roman Chester-le-Street.

The Pottery Fabrics

Eight different fabrics are represented amongst the 18 sherds. These are identified and described below.

Fabric 1. The fabric is pale grey throughout. It is hard with a slightly rough feel and regular fractures. The clay matrix is dense with fine quartz grains present in sparse frequency, some being translucent; fine grog pellets seem also to be present. The source of this fabric is uncertain; in composition it is undiagnostic while, generically, being typical of early Roman greyware fabrics found in Britain. A local or regional source is likely. Two examples.

Fabric 2. The fabric has light to mid reddish brown surfaces and margins, excepting one case where the interior surface is a yellowish-red; margins can be light grey grading into the core; cores are dark grey. On one item the interior surface has patches of what appears to be an off-white slip of the type often seen on Roman flagons. This fabric is fairly hard with a slightly rough feel and displays regular fractures. The clay of this fabric may not have been well mixed as streaks and veining in the paste are discernible. Inclusions in the clay are, overall, common; fine/very fine quartz and grit grains occur in moderate frequency many being sub-rounded; fine rounded grog pellets are sparse to moderate, while ferrous pellets, c. 1mm in dimension are also present, though rare. This fabric is undiagnostic. The source of this ware is not clear but it is likely to have been made in the Yorkshire/North-East England region for a range of vessel types. Five sherds.

Fabric 3. The fabric has pale red margins and a grey core and may have had red surfaces. It is soft with a powdery to slightly rough feel and regular fractures. The clay matrix is dense and contains well sorted sub-rounded fine quartz grains in various colours; these occur in common frequency; red pellets, evidently of ferrous material indigenous to the clay occur. This fabric may be a finer version of Fabric 2, fired to an oxidized finish; a local or regional source can therefore be presumed. One example.

Fabric 4. (South East) Dorset black-burnished ware 1 (BB1) (Tyers 1996, 182-6; Tomber and Dore 1998, 127). Two sherds.

Fabric 5. Central Gaulish samian ware from Lezoux (Webster 1996). Five sherds.

Fabric 6. Baetican amphora fabric from the Gaudalquivir valley principally associated with the Dressel form 20 (Tyers 1996, 87-9; Tomber and Dore 1998, 84). One example.

Fabric 7. The fabric is very pale red at its surfaces and margins and with a pale brown core. It is fairly hard with a rough feel and regular fractures. It contains common fine quartz grains with evidently some being sub-angular; these are well-sorted through the fabric. The source is uncertain but manufacture in the east or north-east of England is highly likely. One example.

Fabric 8. This is a mid to dark grey fabric throughout. It is hard with a slightly abrasive feel and regular fractures. The clay is packed with common to abundant sub-rounded quartz grains, a proportion of which are black, while others are translucent. Again, the source of this fabric is uncertain, though generically it is typically early Roman in character. A local or regional source is highly probable. One example.

Catalogue

The catalogue lists all the Roman sherds from the works. The catalogue adheres to a consistent format. Sherds are listed in phase order and by trench and context number order within phase. Then the following data are given: the number of sherds and their type (*i.e.* whether a sherd is from the rim, base (footring) or body of a vessel), the fabric type of the item, the vessel form, the weight of the sherds in grams, the percentage of any extant rim (*i.e.* the RE figure, where 1.00 would represent a complete circumference) or base (*i.e.* the BE figure) and the rim and base diameters, and an estimate of the date of the sherd in terms of calendar years (this being the date range of deposits with which like pieces are normally associated). Any further attributes are then noted.

Phase II: Roman

Trench 1, Context [5], a ditch fill deposit

Body sherd, in Fabric 1, from a beaker or, less likely, a jar, 3g, c. AD 70-200/250. The sherd is somewhat abraded and weathered.

Body sherd, in Fabric 2, probably from a flagon, 2g, c. AD 70-200/250. This sherd joins two further sherds from context 6. The sherd is weathered.

Body sherd, in Fabric 3, probably from a flagon, 1g, c. AD 70-200/250. This sherd is rather weathered and abraded.

One rim sherd and a conjoining body sherd, in Fabric 4, from a bowl or dish, 17g, RE: 0.07, Diam. 174mm, c. AD 110-400+. The sherds are somewhat abraded and weathered.

Trench 1, Context [6], a ditch fill deposit

Two conjoining body sherds (with fresh break), in Fabric 2, probably from a flagon. 6g, c. AD 70-200/250. The sherd in Fabric 2 from context [5] joins these sherds.

Rim sherd, in Fabric 5, from a dish of form Drag 18/31, 6g, RE: 0.07, Diam. 170mm, c. AD 120-140. From a different vessel from the other sherds of 18/31 recovered from this context. This sherd is rather weathered.

Three body sherds from the same vessel, in Fabric 5, from a dish of form Drag 18/31, 33g, c. AD 120-150. All three sherds are in a good state of preservation. The vessel is comparatively thick.

Rim sherd, in Fabric 5, from a dish of form Drag 18/31, 4g, RE: 0.06, Diam. 170mm, c. AD 120-150. Probably, but not certainly, from the same 18/31 represented by 3 sherds in this context. Burnt and weathered.

Phase V: Post-Medieval

Trench 2, Context [43], garden soil

Body sherd, in Fabric 6, from an amphora, presumably of Dressel form 20, 44g, c. AD 40-230. The sherd is abraded but displays a fairly recent (pre-excavation) break.

Rim sherd, in Fabric 1, from a jar, RE: 0.08, Diam. 150mm, 10g, c. AD 70-200/250. This sherd is abraded and weathered.

Body sherd, in Fabric 7, part of a handle from a flagon, 7g, c. AD 70-200/250. The sherd is abraded and weathered.

Body sherd, in Fabric 8, from jar, 5g, c. AD 70-200/250.

Phase VI: Modern

Trench 3, Context [33]

Body sherd, in Fabric 2, form of vessel represented uncertain but probably a bowl or jar, 3g, c. AD 70-200/250. Potentially from a different vessel from the other sherd in this fabric recovered from this context. The sherd is abraded and weathered and shows signs of exposure to burning.

Body sherd, in Fabric 2, form of vessel represented uncertain but probably a bowl or jar, 2g, c. AD 70-200/250. The sherd is somewhat abraded.

Discussion of Pottery Chronology

The most important pottery for establishing the chronology of the area is that recovered from the stratified ditch layers, contexts [5] and [6]. All of the pottery from these deposits is Roman. The lower of the two contexts yielded sherds from 3 or possibly 4 vessels, and these include the most chronologically precise pottery of the entire collection. The group contains two samian vessels that date to c. AD 120-140 and c. AD 120-150, that is, in imperial terms, one Hadrianic vessel and a Hadrianic-early Antonine vessel. There is a further samian sherd that may belong to the vessel dated to c. AD 120-150, but this is not necessarily the case, hence there are either two or three vessels which one would normally date to the period before c. AD 150. The other vessel represented in Context [6] is a likely flagon in Fabric 2; this vessel has a less precise date range as the type may have been manufactured over a long period. This particular item may belong to any time between the late first century and the earlier third century. Hence its date range is not inconsistent with the date of the samian vessels from this context.

The upper ditch fill, context [5], likewise produced a small pottery group. The date of these sherds may also be in line with that of the samian from context [6]. Specifically present are a further sherd from the probable flagon present in context [6], a black-burnished ware vessel dating to after c. AD 110, a sherd from a second flagon (Fabric 3) of similar date to that in Fabric 2 and a fine grey ware item, probably from a beaker, dating to c. AD 70-200/250.

Overall, therefore, the picture is of an early Roman pottery group, quite likely to have been deposited in the years before or around the mid 2nd century AD and hence prior to the establishment of the known Roman fort and associated settlement site at Chester-le-Street around AD 175 (Hartley 1968; Rivet and Smith 1979, 314-5; Breeze and Dobson 1985; Evans *et al.* 1991; Mike Bishop pers. comm.). A later date for deposition is possible but unlikely for two reasons. Firstly, samian ware becomes significantly more frequent in Britain after c. AD 150 and so if the ditch became infilled after c. AD 150 one would expect some representation of samian of this date, rather than earlier material. Secondly, the establishment of the fort in the second half of the 2nd century would be associated with a substantial supply of samian and other pottery types indicative of the second half of the 2nd century AD, but these are not apparent in this ditch at Chalmers' Orchard.

The two other contexts with pottery present at this site are of much later date, being post-medieval (context [43]) and modern (context [33]). The pottery from context [43] is also indicative of a comparatively early date. An amphora dating to c. AD 40-230 occurs together with sherds from three other vessels which all date to the period c. AD 70-200/250, but which are most likely to belong to the period before c. AD 200.

The chronology of these items conforms with the date of the material from contexts [5] and [6]. Finally, there are two small sherds from the modern deposit, context [33], both of which come from vessels in Fabric 2, dating to c. AD 70-200/250.

In sum, the date of the Roman pottery from this site, and particularly contexts [5] and [6] is noteworthy, given that the known Roman fort and *vicus*, to the south of the present site, are conventionally dated from c. AD 175 (see above). Earlier Roman occupation at Chester-le-Street, focused on Roman Dere Street, before the known Roman fort dating from c. AD 175 has been speculated upon and a few finds of earlier date are known (*cf.* Hartley 1968; Evans 1991) but have not been encountered previously in groups and stratified contexts. The present assemblage suggests the prospect of occupation or significant activity in this area before or around the mid 2nd century AD. This date may have been unexpected given the established dates for the known fort, but if this material represents an earlier Roman military presence, it is, from the wider view of Roman military deployment in the north of England (Breeze and Dobson 1985), not surprising.

The Composition of the Pottery; Types Represented

The group is small but displays a wide range of fabrics, sources and form/functional types. The samian ware consists of plain table ware dishes manufactured in Central Gaul, while the amphora present is also an import from another province, coming from southern Spain. It is highly likely that the form represented is Dressel 20 and that the original contents were olive oil. These types reached the north of England and the northern military frontier in great numbers in the period c. AD 70-250. Another extra-regional type is the black-burnished ware item (Context [5]) from south-east Dorset; everyday functional types in this ware were transported to northern England in quantity through the 2nd, 3rd and 4th centuries. The sources of the other items are less clear but they are likely to be from the region. These include flagons and a beaker and a likely jar. Taken together, the group appears consistent with Roman military consumption (as at a fort), or consumption derived from or associated with a Roman military supply chain (as with a *vicus* or a roadside settlement on a major road in a military zone).

The Character of the Roman Pottery Assemblage

In general, the Roman pottery assemblage is composed of small sherds of low weight indicating material in an advanced state of fragmentation. The reasons for this are not apparent from the present evidence. The sherds are somewhat weathered and abraded but not excessively so and their condition in these respects is not abnormal. Some items are well preserved.

Summary

The works produced a small assemblage of Roman pottery representing various types. *The dating indicators point to activity at the area investigated which is earlier than that previously recorded for the Roman era at Chester-le-Street.* Although the sample and the sherds themselves are small, significant information can be gained from the pottery regarding this area of Chester-le-Street in the Roman period.

Bibliography

- Breeze, D.J. and Dobson, B. 1985. 'Roman military deployment in north England', *Britannia* 16, 1-19.
- Evans, J., Jones, R.F.J and Turnbull, P. 1991. 'Excavations at Chester-le-Street, Co. Durham, 1978-9', *The Durham Archaeological Journal*, 7, 5-48.
- Gillam, J.P. and Tait, J. 1968. 'The Roman fort at Chester-Le-Street', *Archaeologia Aeliana*, 46, 75-96.
- Hartley, B.R. 1968. 'Potter's stamps on samian ware as evidence for the date of the fort at Chester-le-Street', *Archaeologia Aeliana*, 46, 91-6.
- Rivet, A.L.F. and Smith, C. 1979. *The Place Names of Roman Britain*, Batsford, London.
- Tomber, R.S. and Dore, J. 1998. *The National Roman Fabric Reference Collection: A Handbook*, Museum of London Archaeology Service, London.
- Tyers, P.A. 1996. *Roman Pottery in Britain*, B.T. Batsford, London.
- Webster, P.V. 1996. *Roman Samian Pottery in Britain*, CBA, York.

APPENDIX D
MEDIEVAL AND POST-MEDIEVAL POTTERY AND CLAY PIPE ASSESSMENT

MEDIEVAL AND POST-MEDIEVAL POTTERY AND CLAY PIPE ASSESSMENT

By: *Jenny Vaughan (NCAS)*

Eight items were presented for assessment, one which was an undateable chip of brick or tile and two of which (from [1] and [3]) were very abraded, and also undateable, pottery fragments. The fragment of slipware from [1] is of 18th century or later date. The two fragments of medieval pottery were of 13th to early 14th century type. Although the two fragments of clay pipe were very small, the wide bore and the shape of the bowl indicated that they were of 17th century rather than later date.

A simple catalogue of all the items is appended.

The presence of the medieval sherds is presumably the result of manuring, and although not as small and abraded as such material often is, probably does not necessarily indicate that further work would produce a significant assemblage.

Context	Ceramic type	No.	Weight (g)	Comment	Date
[1]	Brownware: slip trailed	1	4	Fragment of hollow vessel	18 th C or later
[1]	Orange earthenware	1	11	Small abraded fragment	Undated
[3]	Green glazed medieval	2	15	Sandy grey fabric- joining	13 th – 14 th C
[3]	Pink	1	1	Abraded, could possibly be samian	Undated
[33]	Orange chip	1	3	Brick or tile	Undated
[38]	Clay pipe stem	1	1	Bore 8/64 th	17 th C or later
[40]	Clay pipe bowl fragment	1	3		17 th C or later

APPENDIX E
BIOLOGICAL REMAINS ASSESSMENT

BIOLOGICAL REMAINS ASSESSMENT

By: John Carrott, Juliet Mant and Stewart Gardner (PRS)

Introduction

Two sediment samples ('GBA'/'BS' *sensu* Dobney *et al.* 1992) and a very small quantity of hand-collected bone were submitted to Palaeoecology Research Services Limited (PRS) for an evaluation of their bioarchaeological potential. Both of the sediment samples were recovered from fills of the Roman ditch revealed in Trench 1. The hand-collected bone was from two contexts, Context [40] (modern) and Context [2] (medieval/post-medieval plough soil).

Methods

Sediment samples

The sediment samples were inspected in the laboratory and their lithologies recorded, using a standard *pro forma*, prior to the processing of subsamples, broadly following the procedures of Kenward *et al.* (1980), for the recovery of plant and invertebrate macrofossils. The subsamples were disaggregated in water for at least 24 hours before processing and their volumes recorded in a waterlogged state.

Plant and invertebrate remains in the processed subsample fractions (residues and washovers) were recorded briefly by 'scanning' using a low-power microscope (where necessary), identifiable taxa and other components being listed on paper. The residue and washovers were largely of inorganic or charred organic material and were examined dry. Nomenclature for plant taxa follows Stace (1997).

Hand-collected vertebrate remains

For the hand-collected vertebrate remains, subjective records were made of the state of preservation, colour of the fragments, and the appearance of broken surfaces ('angularity'). Other information, such as fragment size, dog gnawing, burning, butchery and fresh breaks, was noted where applicable.

Fragments were identified to species or species group using the PRS modern comparative reference collection. The bones that could not be identified species were described as the 'unidentified' fraction.

Results

Sediment samples

Archaeological information, provided by the excavator, is given in square brackets. A brief summary of the processing method and an estimate of the remaining volume of unprocessed sediment follows (in round brackets) after the sample numbers.

Context [5] [upper fill of ?boundary/drainage Ditch [12], immediately above Context [6]; Phase II – Roman]

Sample 2/T (3 kg/2.5 litres sieved to 300 microns with washover; approximately 15 litres of unprocessed sediment remain).

More or less dry, mid brown to mid grey, brittle to crumbly (working plastic), slightly silty clay, with fragments of coal and a modern seedling present.

There was a tiny washover (~ 5 ml, examined dry) of modern rootlet fragments and fine charcoal (to 2 mm), with a few fragments of unidentified charcoal (to 3 mm) and a little cinder and sand.

The small residue (dry weight 0.49 kg) was mostly of stones (to 18mm, though most to only 3 mm) and sand, with traces of brick/tile (to 6 mm, <1 g), coal/cinder (to 11 mm, 3 g) and some ferro-magnetic material (to 20 mm, 3 g).

Context [6] [secondary fill of ?boundary/drainage Ditch [12], immediately below Context [5]; Phase II – Roman]

Sample 3/T (3 kg/2.7 litres sieved to 300 microns with washover; approximately 23 litres of unprocessed sediment remain).

Moist, mid brown to mid to dark grey-brown (the darker colour being the result of abundant fine ?charred material and coal), crumbly (working soft and somewhat plastic), clay silt, with some modern rootlets.

The small washover (~10 ml, examined dry) was mostly of very fine coal, cinder and charcoal (all to 1 mm), with some modern rootlets and other modern plant debris and a few unidentified charred seeds. There were also some modern invertebrate remains, including beetles, mites and ?earthworm egg capsules.

The small residue (dry weight 0.54 kg) was mostly of coal (to 38 mm, 58 g) and cinder (to 35 mm, 44 g), with some sand, a few stones (to 40 mm) and trace amounts of brick/tile (to 38 mm, 8 g) and pot (one sherd to 28 mm, 2 g). Ten small fragments of unidentified bone (to 8 mm, <1 g) that had been burnt white were also recovered.

Hand-collected vertebrate remains

Only three fragments of hand-collected bone were recovered. Context [2] (Phase IV – medieval and post-medieval plough soil) gave a single fragment of a butchered pig pelvis and Context [40] (Phase VI – modern) two small and unidentifiable fragments.

Discussion and statement of potential

Ancient biological remains recovered from the processed subsamples were restricted to tiny quantities of unidentified charcoal and, in one case (Context [6]), a few unidentified burnt bone fragments.

No material suitable for submission for radiocarbon dating was recovered.

The three fragments of hand-collected bone were too few to be of any interpretative value.

Recommendations

No further study of the biological remains considered here is warranted.

On the basis of the current evidence, any future interventions in this area are unlikely to reveal deposits with interpretatively valuable assemblages of biological remains. It would, however, be prudent to set aside a contingency against the possibility of encountering deposits with greater concentrations of charred remains in any future investigations at the site.

Retention and disposal

All of the remaining unprocessed sediment may be discarded. The plant and invertebrate remains recovered from the processed subsamples, together with the small amount of hand-collected bone, should be retained for the present.

Archive

All material is currently stored by Palaeoecology Research Services (Unit 8, Dabble Duck Industrial Estate, Shildon, County Durham), along with paper and electronic records pertaining to the work described here.

References

- Dobney, K., Hall, A. R., Kenward, H. K. and Milles, A. (1992). A working classification of sample types for environmental archaeology. *Circaea, the Journal of the Association for Environmental Archaeology* 9 (for 1991), 24-6.
- Kenward, H. K., Hall, A. R. and Jones, A. K. G. (1980). A tested set of techniques for the extraction of plant and animal macrofossils from waterlogged archaeological deposits. *Science and Archaeology* 22, 3-15.
- Stace, C. (1997). *New flora of the British Isles: 2nd Edition*. Cambridge: Cambridge University Press.

PCA

PRE-CONSTRUCT ARCHAEOLOGY LIMITED

UNIT 54

BROCKLEY CROSS BUSINESS CENTRE

96 ENDWELL ROAD

BROCKLEY

LONDON SE4 2PD

TEL: 0207 732 8925/0207 639 9091

FAX: 0207 639 9588

EMAIL: info@pre-construct.com

PRE-CONSTRUCT ARCHAEOLOGY LIMITED (NORTHERN OFFICE)

UNIT 19A

TURSDALE BUSINESS PARK

DURHAM DH6 5PG

TEL: 0191 377 1111

FAX: 0191 377 0101

EMAIL: info.north@pre-construct.com

