

Further investigations of extra-mural activity at an upland Roman military site



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Cover illustration:

Decorated piece of Samian vessel (Drag 37) found in Test Pit 27 in the 1995 evaluation. It is in the style of 'The Potter of the large Rossette', with the subdivided vertical panels suggesting it was manufactured in the very late 1st century AD (Pollard 1996). Drawn by R Clark. Scale 1:1.

### Summary

In August 1996, a second stage of evaluation at Castleshaw examined in more detail the nature of Roman occupation at Daycroft Field south of the Roman fort (identified in the 1995 evaluation) and investigated the potential of Tangs Field beyond the fort's west side. In Daycroft Field possible remains of the main highway were located together with a roadside ditch. A narrow service road running east to west within the extra-mural area was found and this also had a drainage ditch. Two boundary ditches running out of the settlement area were also identified but there does not appear to be a perimeter ditch defining the occupied area. Further evidence was revealed for buildings in this area and the destruction of the site by fire. Pollen analysis of ditch fills indicate open pasture with the site's abandonment dramatically represented, followed by regeneration of shrubs, trees and bracken. There were fewer finds than last season partly because this year's investigation concentrated on the edges of the settlement. The impression of an early 2nd-century AD date for the occupation remains unchanged. In Tangs Field test pitting showed no evidence for Roman activity except in a small area adjacent to the south-west corner of the fort where undated deposits of Roman character were found. Only one possible road surface in Tangs Field occurred and this was close to the south-west corner of the fort, running beside the fort's western ditch edge before entering the west gate.

In terms of its poor defensive qualities and the possibility of allotments or building plots, the extra-mural area would appear to have been a *vicus* rather than a military annexe. The settlement seems to have been of one short-lived phase in the early 2nd century AD, probably dating to the last phase of the fortlet. If this is the case then it is possible that the activity in Daycroft Field has a specialist function related to the unusual character of the fortlet. Only future investigation of the layout and nature of buildings at this site can reveal its true function.

### 1. Introduction

This report presents the results of a second (Stage 2) archaeological evaluation of extra-mural activity at Castleshaw Roman fort, the first part of which was reported in January 1996 (Redhead 1996). The second stage had two aims: to better define the extent and nature of Roman occupation in Daycroft Field and to examine Tangs Field to the west of the fort for evidence of Roman activity. A two week site investigation was carried out from Monday 5th August to Saturday 17th August 1996. The project was directed by Norman Redhead of the Greater Manchester Archaeological Unit, with support from staff of the University of Manchester Archaeological Unit and volunteers. Once again the work was generously funded by North West Water Plc.

This report has been written by Norman Redhead, with contributions by Dr Barbara Brayshay (pollen analysis), Richard Clark (finds), Chris Howarth (desk top publishing and graphics), Dave Power (illustrations) and Ivan Hradil (charcoal analysis).

# 2. Location, Topography and Geology

The Roman fort and fortlet at Castleshaw (SD 9988 0965) lie on a spur (named Castle Hill) on the eastern slopes of the Castleshaw Valley. The site is at 275m OD, at the foot of Standedge, the summit of the Pennine ridge (450m OD), and is overlooked by higher ground on all sides. The site is, nevertheless, extremely well placed with clear visibility up and down the valley.

Evaluation Stage 2 further examined the top of Daycroft Field, which occupies the remaining flattish part of the spur immediately south of the Roman forts. This hill top area forms a rough triangle with the ground falling steeply away to the south towards Waters Clough but on the west side it shelves away much more gently (figure 1). The Tangs Field, immediately to the west of the fort defences, was also investigated in the 1996 evaluation. This field takes the form of land sloping gently westwards before dropping more steeply down to Castle Hill Cote.

The geology of the central Pennine region dates from the Carboniferous and is formed of alternating beds of coarse grained sandstone (Millstone Grit) and soft, quickly rotting shales. The Castleshaw site lies on a step formed by the 'Grindslow Shale', a little below its junction with the 'Kinderscout Grit' of Standedge.



# 3. Archaeological Background

Castleshaw consists of an Agricolan fort, displaying two phases of occupation, built around AD79 and abandoned probably in the mid-AD90s. This was overlain, after a period of abandonment of the site, by a small fortlet erected around AD105 which also had two phases of development before being slighted in the mid-AD120s. All phases of construction were in turf and timber. Excavations carried out by the Greater manchester Archaeological Unit from 1984-8 are reported in Castleshaw – the Archaeology of a Roman Fortlet (Walker 1989), this volume also summarises the results of earlier investigations at the site.

The fort had a standard auxiliary infantry cohort which guarded the main York to Chester highway as it climbed to the Pennine pass. A sister fort only 8 miles away at Slack near Huddersfield controlled the eastern approach to the Pennines. At Castleshaw the fortlet which succeeded the fort was more unusual. It occupied 1950 sq m and comprised principally an over-large granary, commander's house, courtyard building, workshop, and one barrack block and had two possible roles: a base fortlet containing the core buildings of a normal infantry cohort where most of the troops were out-stationed, or a commissary fortlet dedicated to an administrative role for control or/and supply (Walker 1989).

Until the current programme of evaluation, the area outside the defences of the fort have never been investigated archaeologically; although it was suspected that extra-mural activity may have taken place, there was little firm evidence for this.

The York to Chester Roman highway is clearly evident as a low earthwork as it approaches the fort complex, both from the east and west. However, Stage 1 of the evaluation suggested that, contrary to popular belief, it does not run along the narrow band of available land south of the forts (Redhead 1996).

The area of extra-mural activity identified in Daycroft Field in the 1995 Stage 1 evaluation showed that Roman deposits were sealed by a thick deposit of plough soil, average depth 24cm (ranging from 10 to 52cm deep), with *c* 20cm topsoil on top of this. The ploughing, which took place some time between AD1752 and AD1897, has smoothed the landscape and effectively masked Roman features. Undoubtedly ploughing has disturbed the top of Roman deposits, as is evidenced by Roman pottery occurring frequently in the lower 10cm of ploughsoil. However, Roman levels have generally survived remarkably well and it is anticipated that generally negative features and floor surfaces will survive.

As part of the 1984-8 project a resistivity survey was carried out over the whole area of the forts and extending some 30m south into Daycroft Field, the subject of the current evaluation. The results were inconclusive. The intention was to pick up the line of the Roman highway coming up the valley. The results seemed to be complicated by geological patterns and no evidence for this road could be found.

In September 1994 a short evaluation examined a cropmark thought to indicate a three cell building opposite the south west corner of the fortlet in Daycroft Field. Two small trial trenches were excavated: one came across a Roman deposit (not excavated) and several sherds of pottery, the other was sterile. The trench with positive results was located just to the east of what appeared to be a denuded bank.

Confirmation of a Roman deposit at this spot outside the Roman defences led, in August 1995, to a much larger scale evaluation. The evaluation (Stage 1 of the current project) had two aims: firstly, to excavate a section through the low bank (noted above), secondly, to assess the extent of Roman deposits across the upper, flattish part of Daycroft Field. The results of this work are presented in a report: 'Daycroft Field, Castleshaw – an evaluation of extra-mural activity south of the Roman fort complex' (Redhead January 1996). The results can be summarised as follows:

The low bank was not Roman in origin, but comprised imported soil covering a shallow Roman ditch
which marked the edge of the extra-mural settlement at this point. A stone capped drain terminated
a short way downhill from the ditch. East of the ditch was evidence for a building founded on a dwarf

wall, associated with a post-hole. A thick destruction deposit was encountered and appears to represent conflagration of the structure. This trial trench provided a good assemblage of stratified pottery which provisionally gives an early 2nd-century AD origin for the activity here ie. fortlet phase.

31 test pits of 1m square and at 10m intervals were excavated to the top of Roman levels or natural
across the top of Daycroft Field. Evidence for buildings, drains, a hearth, trackway, and a ditch system
was found within a triangular area measuring 90m long by a maximum of 30m wide. The main York
to Chester road was not encountered and is therefore likely to be located elsewhere.

# 4. Evaluation Methodology

The second stage of the evaluation continued the examination of the upper part of Daycroft Field, immediately to the south of the fort complex. This area occupies the remaining flattish part of the spur. Investigations also concentrated on the area west of the forts, in fields which gently fall away westwards before dropping more steeply down to Castle Hill Cote.

#### Aims and objectives

The overall aim of the current evaluation project was to define the extent and nature of extra-mural activity at Castleshaw to facilitate:

- i) An informed review of the Scheduled area and assessment of the potential for academic research.
- ii) Appropriate management and presentation of the site.
- iii) A re-assessment of the academic significance and potential of the site within the setting of the Roman occupation of northern England.

Evaluation Stage 2 had the following main objectives:

- To better define the ditch system encountered in Evaluation Stage 1, thereby improving our understanding of the extra-mural area south of the fortlet defences.
- To increase the sample of stratified ceramic material to secure firmer dating of the extra-mural settlement.
- Locate the true line of the main Roman highway as it approaches and leaves the military site.
- Examine the gently sloping area immediately west of the fort for evidence of extra-mural activity.
- Investigate land beside Waters Clough for Roman deposits.

The full extent of extra-mural settlement is not known. Within the Scheduled area (marked by the fence line) it has been identified but not quantified east of the fort. The southern side has now been defined by evaluation, though we do not know if there were structures beside the stream in the bottom of the valley. The western and northern sides are a mystery. Of the two, the western side has by far the greatest potential. The land slopes gently up to the fort defences and it is possible that the main road runs into the western gateway. As elsewhere, ploughing has obliterated evidence for earthworks here and this is certainly an area beyond the Scheduled site that is worthy of evaluation. Oblique aerial photographs taken in June 1995 show a linear cropmark running westwards from the north west defences of the Agricolan fort (see figure 1). The cropmark may be an ancient field boundary; however, it is not indicated on any published maps and could therefore be of Roman origin.

Where does the major trans-Pennine highway, the Chester to York road, run? One of the most surprising elements of the first stage evaluation was a lack of evidence for this road. It has generally been assumed that the road continued in a straight line from the valley floor, running just outside the southern fort gate before climbing up to Standedge. When the south gate of the fort was excavated in 1986 it was noted that the road surface was rutted, an indication that this gateway was heavily used as one might expect if it was the principal access to the main highway. The road is clearly visible as an earthwork 100m south of the fort and 100m north of it but is indistinct close to the fort itself.

Given the spacing of test pits it is highly unlikely that a road of this scale can have been missed; yet the evaluation covered the only suitably flat ground capable of carrying the road on the southern side of the fort. It would be unusual but not inconceivable that the road was channelled through the western fort gate and exited from the eastern one. This unorthodox arrangement could add a new dimension to our understanding of the Roman occupation at Castleshaw. Another possibility is that the road was deliberately removed during the fortlet phase, being replaced by a military annexe. The road was then re-routed around the north side of the fortlet. Certainly Bruton, in his excavations, found evidence for a road curving through the west and east fort gates to run outside the north fortlet entrance (Bruton 1908). The location of the main road formed a major component of the 1996 evaluation.

#### Methodology for Stage 2 Evaluation

The following section lists the main objectives of the 1996 fieldwork together with the methodology to achieve those objectives. Locations of trenches and test pits are shown in figure 2 and figure 11. All orientations are described according to grid north.

1) Identify edge of Roman activity around hearth found in TP11.

Using the successful test pitting technique of Stage 1 Evaluation, 4 one metre square test pits (TP32-35) were excavated at 5m intervals in a line 5m south of TP7 and TP11. A further two were located either side of TP11, with TP36 5m west of TP11 and TP37 5m east. A 5m long by 1m wide trench (Trench 2) was dug between TP11 and TP34 to look for evidence of a ditch south of the hearth.

2) Excavate a section through the ditch indicated by TP13 to define its orientation and function.

The orientation of this ditch (or large negative feature) was unknown prior to this stage. Two 5m x 1m trenches, at right angles to each other, and centred on TP13, were excavated through topsoil and ploughsoil to the top of the Roman level. Once the orientation of the ditch was established the trench cutting at right angles to the feature was to be excavated through Roman levels (Trench 3).

3) Excavate sections through the ditches represented in TP28 and TP29 to record their full profiles and to better define the boundary to this easterly part of the settlement.

A 7m x 1m trench (Trench 4) was excavated along a south to north axis across TP29. A 5m x 1m trench (Trench 5) was excavated along a south-east to north-west axis across TP28.

 Examine the sterile area of TP20-21 through test pitting to look for ditches or evidence of the edge of Roman occupation here.

A maximum of 10 test pits (1m sq) were excavated at 5m intervals in single lines either side of the sterile row TP20, TP21 and TP22. These pits were taken down to the top of Roman deposits. If a potential ditch was encountered then a 5m x 1m trench was to be excavated at right angles across it. In the event time limited investigations here to only two test pits, TP40 and TP41. These were excavated to the top of Roman levels.

5) Using the test pit evaluation technique, locate the line of the Roman road south of the fort complex and outside the Scheduled area. Use same to examine evidence for Roman remains in the field (shown as 'The Tangs' on Bruton's plan of 1907) west of the Roman fort.

1m sq test pits at 10m intervals (TP100-110) were dug along a line 100m in length indicated in figure 1, running west from the south-west corner of the Agricolan fort. This was designed to test both for extra-mural activity and for evidence of the main road being diverted towards the west gate. Another line of test pits (TP111-117) were excavated at right angles to this line to run parallel with the Roman defences. Further test pits (TP118-121) were excavated north of TP100 to try to verify the presence of



a road. A stone spread was located between TP119 and TP121 leading to the strip between them being opened up as a trench 11m long by 1m wide (Trench 10).

#### Work not completed in 1996

Investigate the linear cropmark running westwards from the north-west corner of the Agricolan fort.

A 5m x 1m trench was to be excavated at right angles across this feature. It was decided that, based on test p ts results in the Tangs Field, this cropmark almost certainly represented a field boundary post-dating Roman occupation and therefore resources were concentrated elsewhere.

Look for evidence of the bath house beside Waters Clough (figure 1).

Features and areas of more recent origin ie. water management features relating to mills and the more modern water works activity close to the stream were to be identified and areas deemed to have little disturbance and potential for Roman occupation were to be test pitted. This work was not carried out as part of the 1996 evaluation but it is intended to do this fieldwork in spring 1997. Again regularly spaced lin sq test pits will be used.

#### **Excavation** Technique

Archaeological layers were excavated stratigraphically (ie. layer by layer), in order to recover securely stratified finds. The west facing section of each trench was drawn at a scale of 1:10. Individual layers and features were recorded by context sheet. Each section was photographed in monochrome and colour print and colour slide. The ditch cut was also be planned at a scale of 1:20 and a series of levels taken. Any archaeological features encountered beyond the ditch that were deemed to be of Roman origin were recorded in plan and excavated if relevant to our understanding of the site's occupation. On-site recording, including finds, was based on that used during the 1984-8 fortlet project.

#### Finds

At Castleshaw the damaging affect of acid soil makes even Samian ware 'soapy' when damp and powdery when dry. All pottery was consolidated by applying a 5% Primal WS24/water solution which was dabbed on with a soft brush. Three or four coats were applied, with each coat being allowed to partly dry before applying the next. The sherds were then allowed to dry for four to six hours before careful cleaning was attempted. If necessary, further application of the consolidating solution was then made.

Metalwork corrodes very badly in the acidic soil. All metalwork finds were carefully wrapped in acid free tissue paper and bagged with silica gel. A trained conservator supervised finds processing and undertook finds conservation on site.

#### **Environmental Sampling**

It was anticipated, based on Stage 1 Evaluation Test Pit 28, that ditch silts might provide pollen and macro fossil remains worthy of laboratory analysis. Funding was allocated to carry out this research, which was undertaken by the Palaeoecological Research Unit (PERU), University of Manchester. Samples were taken by members of PERU and results of their research are presented in section 7 Environmental Analysis.

#### Staffing

Fieldwork was undertaken by a team of 24 excavators, comprising 3 professional staff from UMAU (who provided supervisory support), experienced and inexperienced volunteers, and undergraduate students. In the first week a smaller team of *c* 11 undertook the work with the number doubling in the second week. The experienced volunteers were made up of a core of people who have been excavating in Castleshaw valley for 4 previous seasons and include professional archaeologists taking vacation, ex-professional

archaeologists, students with good experience in excavation and experienced amateur archaeologists from local archaeology societies. A finds conservator and a metal detectorist also took part in the excavation.

#### Health and Safety

CMAU and UMAU follow the University of Manchester's policy statement on Health and Safety and the SCAUM guidelines on Health and Safety in Field Archaeology. Comprehensive insurance for all survey, investigations and excavations is provided under Royal Insurance (UK) Ltd Public and Employers Liability Insurance - Victoria University of Manchester. Professional Indemnity Insurance of 2m is provided through the University of Manchester by Denham Direct Underwriters Ltd.

### 5. Results

#### DAYCROFT FIELD

#### Test Pits 32-37

Last year TP11 revealed part of the remains of an oven or hearth base some 30m south from the Roman fort defences. This year several more test pits were located around the hearth in order to pick up the edge of Roman occupation at this point (plate 1). TP34 was positioned 5m south of TP11 with TP32 and TP33 being to the west of TP34 at 10m and 5m distance respectively, and TP35 being 5m to the east. All four test pits proved sterile. The plough soil formed a substantial deposit in these test pits, being up to 40cm deep. But removal of this material revealed a similar mid-yellow clay loam natural in each case. No Roman finds came from any of these test pits which seem to be beyond the edge of Roman occupation.

Plate 1 Test pitting, TP 32-7, looking south-west.

Two further test pits were dug in this area. One, TP36, was 5m to the west of TP11 and the other, TP37, was 5m to the east of TP11. Both pits produced good evidence for Roman occupation and were excavated in the hope of finding evidence of ditches defining the edge of settlement.

In TP36 it was noted that the plough soil layer 002 thickened out from east to west, from 30 to 40cm in depth (figure 3). Beneath this was 030, an interface layer characterised by frequent flecks of charcoal. This layer represented plough damage to the top of the Roman deposits. Under this was 031 which comprised mixed dark brown silty clay loam with lots of charcoal and small patches of yellow and (oxidised) red clay. This material was particularly dense towards the east side of the test pit and it would appear to be associated with the oven base found in TP11. Perhaps 031 is raked-out debris from the oven. It contained a number of Roman finds, including a reasonable quantity of metal work. Of particular note was the presence of slag which had not been found in TP11 and which may suggest a more industrial function for this area than simply for baking. 031 thinned gradually from 10cm deep in the eastern section before petering out towards the western third of the test pit. Conversely, the layer below this, 032, deeper at the west side, at 23cm, and tapering to 10cm in the eastern section. 032 was lighter than 031 but still a mid-brown silty clay loam. It had less charcoal in but contained small to large angular sandstones, with some flecks of yellow and burnt red clay. This formed the most substantial deposit in the test pit and was evident in all four sides. It sealed 033 which was quite different in character being mid-orange-brown sandy silt loam with some shale. This

was a maximum 7cm deep and covered a very compact thin layer 042 of small and medium sized angular shale and sandstone, with iron staining giving an orange-brown hue. Towards the south and west sides of the test pit, 042 sloped away quite sharply. On excavation it was found to overlie natural clay and was very similar to the material encountered in Trench 1 last year at the base of ditch F018 and elsewhere. It was felt that this material may have been deliberately laid and compacted, although it could be a natural product. It is possible that the base of TP36 is part of the same shallow ditch identified in Trench 1.



In TP37 the mid brown plough soil gradually turned to a darker and more silty composition as layer 034 which represented the top of the Roman levels. 034 also had more frequent flecks of charcoal and moderate angular sandstones and shale. A number of Roman finds came from the top of this layer where it merged with the base of the plough soil. 034 got progressively thicker towards the south, attaining a depth of 28cm in the southern section. Underneath this layer was a compact stone rich deposit 036 which formed the upper fill of a moderately well defined cut feature F035 which ran north to south (figure 3 and plate 2). By contrast, the other, basal fill 037, was almost stone free comprising a mottled light orange-brown sandy loam which came off onto natural shale bedrock. Only the western edge of F035 was visible and it clearly cut earlier deposits 038, 039 and 040. Although these deposits yielded no finds they were not natural and could be seen as an earlier phase of Roman activity at this spot, possibly representing fills of an earlier ditch that has been recut. F035 was a maximum of 45cm deep with a sharply cut western edge and flatfish base. Its direction is problematic but it may define the eastern edge of the settlement at this point, providing defence for the tongue of land incorporating the oven base seen in TP11 5m to the west. However, in such a small area of excavation it is impossible to be definitive; F035 could alternatively represent a large drain running out of the extra-mural settlement area or it could even be a boundary ditch denoting the beginnings of a field system. It is worth noting that F035 was not seen in TP35 which was 5m south of TP37, therefore this ditch either terminates before reaching TP35 or does not carry on in a straight line.

#### Trench 2

This trench was 1m wide and 5m long and linked TP34 to last season's TP11, in which the hearth/oven base was found, though this test pit was not re-excavated. It was hoped that, as TP34 was negative it represented an area outside the Roman settlement and therefore the boundary ditch, if it existed, would be located between this and the positive TP11.

Top soil was c 25cm deep in this trench with plough soil 002 being 35-40cm, giving a very considerable depth of overburden before Roman levels were reached. Part of a structure 043 was encountered at the

Plate 2 TP 37 showing cut of F035, looking north.



north edge of the trench (figure 4). It comprised varied sized sandstones showing evidence of intense heat, ie. fire reddened. The largest stone was 32cm square and this appears to have formed the edge of the structure, together with a smaller sandstone adjoining its west side. The stones seemed to be laid onto natural. They were surrounded by 044, a deposit of dark brown sandy loam rich in charcoal and with occasional flecks and small pieces of burnt red clay or daub. 043 is clearly the southern edge of the hearth/oven base seen in TP11.

It was soon evident, upon clearing the base of the plough soil, that there was no ditch in Trench 2. However, one or two other features were apparent (plate 3). Running south-south-west from the north-east corner of the trench was a narrow linear feature F045 which was 20cm wide. This was sealed by the plough soil and its mixed fill 046 was similar to 044. Its form was sinuous rather than straight edged. Excavation of a section showed the feature to be shallow at 8cm depth and with poorly defined edges (figure 4). It ran into an amorphous area of loose mid-brown sandy loam 047 about half way down the west side of the trench. 047 collapsed during excavation displaying voids resulting from animal activity. Therefore, although F045 runs



Plate 3 General view of Trench 2, looking north.



from the side of the hearth/oven base and may be associated with this, it appears more likely that it represents animal burrowing in this area, with charcoal deposits from the oven area washing down into it.

One further feature came from Trench 2. This was a post hole F048 *c* 1m from the southern edge of the trench. There was a single fill 049 which comprised mid brown sandy loam with small lenses of cream coloured clay. 049 was clearly distinguishable from the surrounding natural mid-orange-yellow clay loam. On excavation the feature was found to have a stepped, asymmetrical profile with steep sides and gently rounded concave base (figure 4). A large flat stone 22cm x 25cm and 5cm thick had been placed on edge as packing along the southern side of the hole. A smaller stone, also on edge, lay adjacent to the east. Although these stones clearly supported a post there was no physical evidence for a post pipe. Some disturbance of the ground to the western side of F048 may have been caused during removal of the post in antiquity. A Roman date for this feature is inferred by its being sealed by the plough soil and a fragment of melon bead coming from the very top of 049 where it diffused with the base of plough soil 002. The only other finds from the post hole fill were two nails of Roman type. Why the post hole is located here, very much on a slope and apparently well away from Roman occupation, is a mystery which cannot be solved in the confines of a 1m wide evaluation trench. Its size suggests, however, that it formed a major structural component, perhaps as part of a perimeter fence.

#### Trench 3

This was positioned to examine the deposits revealed in TP13 last year and interpreted as being material similar to upper ditch fills encountered during the fortlet excavations in the 1980s (plate 4). As TP13 had only been 1m square, it was not clear which axis the new trench should be orientated on. It was intended to excavate two 1m by 5m trenches at right angles to each other, orientated on the main compass points and with TP13 as the central hub. Rather than waste time digging through the considerable depth of top and plough soil across the full length of these two trenches, it was decided to dig away from TP13 in 1m square test pits until Roman levels were encountered and it was clear which trench would provide the most information on the archaeology in this area. Ultimately it was found that the south to north trench would best represent a section through archaeological deposits, but not before 3 x 1m square test pits had been excavated to the base of plough soil, the other was 2m from TP13 going westwards. This latter test pit, which was called TP13 W(est)2, is described as follows.

All test pits adjacent to TP13 revealed the same layer of mid purple-grey silty clay with 15% small patches and flecks of decayed orange sandstone and occasional flecks of charcoal as 050 immediately under the

Plate 4 Trench 3 during excavation, looking north.



plough soil. This was identical to the material noted in TP13 last year and identified as potential ditch fill. In order to define the edge of the feature containing 050, this layer was removed in TP13 (W)2, together with a mid- to dark yellow brown silty clay loam 051 underneath it which was also characteristic of ditch fill. It was noted that 050 contained several rounded cobble stones quite different to the commonly found angular gritstones and which would be appropriate with the upper surface of a Roman road construction. Under 051 was a layer, 057, of mid-brown sandy loam with frequent small to medium stones (many rounded). The layer sloped from north-east to south-west and linear gaps evident amongst the stones suggested deposits were orientated in the same direction (figure 5). The top of 057 was a remarkable 1m below ground surface and about 40cm under the base of the plough soil. This demonstrated the presence of a depression in this area that had been infilled therefore masking Roman features. Based on this information it was felt that a north to south axis for Trench 3 would cut across Roman features at roughly right-angles in this area and would therefore provide the most meaningful section.

Removal of 002 showed 050 to be *c* 20cm deep and to extend across the whole 5m length of Trench 3, sealing all Roman levels here (figure 5 and plate 5). 051 reached across most of the trench but died out 35cm from the northern edge where it partly hid a metalled surface, whereas to the south it became more stony before butting up at 75cm from the trench edge against further road metalling. 051 achieved a maximum depth of 22cm in the mid part of the trench where it sealed ditch fills. After removal of 051 we had then a possible road F054 covering *c* 1.3m of the northern side of the trench and extending beyond the trench edge. Similarly at the south end we had another road type surface F052 evident for 75cm before that too went beyond the



Plate 5 Layer 050 pre-excavation in Trench 3, looking south.

trench, but the middle part of the trench was occupied by a silty ditch type fill 057 which extended for c 2.4m. Finds from 051 showed it to be Roman in origin, with a good range of pottery types, tile and glass. The location of Trench 3 in the heart of the extra-mural area of occupation and fairly adjacent to the fort south gate made the occurrence of such finds unexceptional. What was unusual, though, was the discovery of a linear spread c 25cm wide and only 0.5cm deep comprising mid- to dark brown humus with a large patch of charcoal pieces at its western end. This material ran in a north-east to south-west direction and followed the line of other features in the trench. It occurred towards the base of 051 and appears to represent the decayed in situ remnants of a plank or beam that fell or was thrown, still smouldering onto the loamy material 057 which had filled in a roadside ditch. It is worth noting that this confirms the evidence found in Trench 1 last year of destruction of timber structures on the site by conflagration at the end of the site's occupation.

There was a disappointing number of finds from 057 with only two small body sherds of amphora being recovered. 057 was a maximum of 10cm deep in the middle of the trench where it covered roadside ditch F056. To the north 057 filled in against a slope running down from the edge of road F054 to the ditch; this slope appeared to be steeper than the natural ground surface and may have been emphasised to facilitate better surface water drainage into the ditch. To the south 057

petered out under 051 and here it overlay natural



Plate 6 Post-excavation features in Trench 3, looking north.

and also a post hole F058. The ditch was clearly a roadside drain comprising a gulley 50cm wide tapering to 20cm wide at its base and being 15cm deep. The bottom of the drain was 1.2m beneath current ground surface. The gulley contained gritty, water derived fills, namely the primary fill 084 of light to mid-grey silt with much grit, an intermediary fill 061 of mid-orange-brown sandy silt loam with some charcoal and again much grit, and the upper fill 060 which was distinguished by alternating bands of grey silt with frequent charcoal flecks and mid-orange-grey sand. 057 capped 060 and filled in the depression created by the drainage ditch. The ditch appears to have served road F054 to the north which occupies higher ground; both ran roughly in a north-north-east to south-south-west direction (plates 7 and 8). Road F052 in the southern part of the trench was founded on levelled ground with its edge over 1m away from the ditch. Stratigraphically, F052 appears to be later than ditch F056 as the latter is sealed by 057 which in turn is overlain by 051 which abutts the road.

It was quite surprising to uncover portions of two possible roads in Trench 3. The stratigraphic relationship just described suggests that the most northerly metalling was the earliest. This metalling consisted of densely packed small to medium rounded stones with occasional flatter, more angular, gritstones all set in mid-orange-brown sandy clay loam, with occasional patches of decayed orange sand-

Plate 7 Roadside ditch section in Trench 3, looking east.



stone. These stones formed a deposit only 15cm deep which seems very shallow for a major Roman road and it is possible that only the edge of the camber is visible in Trench 3, or that robbing has taken place. But the rounded stones were of a type used by Romans in the locality for providing a smooth upper surface to their roads. At 80cm beneath current ground surface this road was deeply buried, being sealed by 051 partly and wholly by 050. It seems likely that at this point the road sat in a slight depression which allowed it to survive after robbing. The slight angling of the road away from the fort defences explains why it was not encountered in Trench 1. However, it should be noted that no evidence has been found for this road elsewhere in test pits. If we identify this road remnant with the major highway which once ran up the valley, then its exact course is still uncertain; however, this new evidence suggests that it dropped down the valley side a little before approaching the southern gate at a slight angle and at a more even gradient rather than just running up close to and parallel with the fort southern defences. Clearly this provides a subject for future research.

Excavation through the metalling of road F054 revealed a curious feature which took the form of a narrow gulley F080 on the same alignment as the road edge, and apparently sealed under it (figure 5). The gulley was 35cm wide, tapering to 15cm at its base, 17cm deep and contained mixed bands of mid orange-brown gritty sandy-silt and mid-grey silts. Possible interpretations include:

- A roadside ditch, though it seems too narrow and shallow for this placed as it is very close to the road and at the top of slope rather than at its base.
- A slot for marking out the line of the road this seems the most plausible.
- A building slot predating the road or placed close up to its edge, though this is unlikely due to the steep slope to the south.

The confines of this evaluation trench restrict interpretation given that such a short length of the feature has been exposed.

In the southern part of Trench 3 a dense, compact deposit, 13cm deep, of small to medium rounded gritstones in a matrix of light to medium orange-brown sandy loam 053 came off onto natural yellow clay loam. It was recorded in section but not in plan. This is interpreted as being the remains of a road. It was sealed by 050 but appeared to abut 051 on its northern edge. The ground would appear to have been levelled prior to laying this road or track. The width of the road is unknown at this point as the southern edge was not revealed. It is possible that F052 is continued in Trench 4 as F062 where it is 2.6m wide. If this is the case



Plate 8 Post hole in Trench 3, pre-excavation.



then this road would probably be the principal service road through the area of extra-mural occupation in Daycroft Field.

Two other features of note occurred in Trench 3. Firstly, there was a circular post hole F058 which was only 22cm diameter and positioned between the roadside drain and possible road F052 (plate 8). When half sectioned (figure 5) the post hole was found to be 9cm deep with 75 degree angle sides. A large flat stone, 18cm across and 15cm deep, was laid on edge effectively filling the southern half of the feature and, together with a small stone laid against the northern edge, supporting a post which was a maximum of 10cm diameter. 60cm to the south of the post hole was a stake hole F082 which was evident as a circular patch of grey silty clay. Charcoal found in the base of this stake hole was removed for laboratory analysis.

The post hole F058 indicates the presence of a structure at this part of the site. It is noticeable that it is associated with levelling of the ground which may actually represent a building platform. If we accept a road interpretation for F052 then it is probable that the post hole belongs to a building predating the extra-mural occupation of this area. This theory is supported by the fact that F058 was sealed by 057. However, it is possible that F052 was not a road but a floor associated with the building. Again, only more extensive excavation could determine this.

#### Trench 4

This trench was positioned across TP29 opposite the south-east defences of the Roman fortlet (**plate 9**). In last season's evaluation this test pit had revealed part of a possible ditch therefore it was anticipated that an evaluation trench here might yield information on the character of the ditch and its relationship to the extra-mural settlement. Originally planned as a 5m by 1m slot, Trench 4 was extended a further 2m southwards in order to fully expose a road surface F062. Three main features were encountered: a rubble spread 066 in the northern part of the trench, a ditch F064 in the middle part, and a road or track F062 in the southern part (figure 6 and plate 10). Remarkably, no Roman finds came from this trench and therefore identification of Roman features and deposits relied on stratigraphic and typological data.

The deposit identified as 050 in Trench 3 continued into Trench 4 and sealed the ditch and road. 050 died out towards the top of a slope north of the ditch but continue south of here through to the southern edge of the trench. It overlay 065 in the middle of the trench and this layer comprised light yellow sandy silt loam covering both ditch fills and road surface. Indeed 065 could be seen as the final upper fill of ditch F064. The ditch itself was *c* 35cm deep by 90cm wide, ran east to west across the trench and appeared to serve as a roadside ditch for F062 which went right up to its southern edge. The north side of the ditch was

Plate 9 Trench 4 during excavation, looking east.





Plate 10 Road and ditch in Trench 4, looking north.

steeper than the south where the ground had been levelled to take the road and this provided a section profile akin to that seen in Trench 3. The steep cut of the ditch's north side softened towards the bottom to create a gently rounded base. 098 constituted the ditch's primary fill and this was clayey in nature with lots of shale fragments and occasional flecks of charcoal. 097 above this was a mixed layer of sandy silt with iron staining; it was overlain by two layers, 096 which comprised mid-grey clay which had evidently washed in from the north side against which it had formed, and 095 which appeared to be water borne thin bands of silt and sand. One more, upper, fill 094 occurred as light yellowbrown sandy silt with 30% small patches of light grey clay loam which were sealed by 065. In section it looked as though there may have been a recut with 094 and 095 being the fills of the latest more shallow ditch; however, the fills could equally have formed naturally. A 'drainpipe' sample of the ditch fills was taken for laboratory analysis by the Palaeoecological Research Unit.

To the south of ditch F064 was a deposit 063 of small to medium sized angular, flat stones forming a compact smooth surface interpreted as that of a road or track, the structure being 2.6m wide. The stones were set in light grey silty clay with much iron staining evident. F062 was revealed in plan but not excavated. It was noted that the density of stones decreased towards the ditch ie. in the northern third where the ground

dropped slightly towards the ditch. To the south the edge of the road was defined by the cut of another drainage ditch F093 which was not revealed across its whole width and was only excavated to the base of 050. This ditch appeared as a slight cut dipping more steeply than the hill slope. F062 may be the same road seen in the southern part of Trench 3 and, as already discussed, could have been a spinal access/service road within the extra-mural area. Where it went further east, beyond the edge of the settlement is not certain but it is clear that this road is not wide enough or substantial enough to be confused with that of a main highway.

Extending for 2.2m across the northern part of the trench was deposit 066. This comprised light to mid brown silty clay loam with 40% small to large angular fragments of shale. In terms of its position this deposit was similar to that of road F054 in Trench 3, ie. being immediately to the north of the roadside ditch bank. However, the composition of material was quite different. In 066 the shale was loose and unstructured and showed no signs of having been carefully laid. Also, there were no flat gritstones or rounded cobblestones which one might expect with remains of a road. 066 was sealed by plough soil and overlay natural 067; however, it also appeared to overlay 050 as it approached the drainage ditch. As 050 seals all the Roman levels it suggests that 067 was later than that period. One possible explanation can be found 10m to the north of Trench 4 where Drycroft Lane occurs. Drycroft Lane is actually a substantial ditch roughly following the southern ditch line of the Roman fort; it was probably cut in the 17th or 18th centuries to supply water to a nearby mill (Bruton 1908 p11). The cutting of this ditch would have created considerable spoil and 066 could be the shale upcast from the digging of Drycroft Lane.



One more feature of note came from Trench 4. This was the cut of a slot F091 occurring under 066, running east to west and appearing to peter out against west facing section of the trench, therefore not being evident in that section. The slot's fill 092 consisted of clean, loose mid-yellow-brown silty clay loam under a layer of small to medium patches of cream/light yellow sandy silty with moderate flecks of charcoal. Near the middle part of the feature this material was 25cm deep but only 10cm deep elsewhere. As F091 was only revealed on the last day of the excavation time did not permit a full investigation and its east edge was not defined as it went under the 0.5m section line left across 066. In form and position F091 was a little similar to gulley F080 under road F054 in Trench 3, but there were also big differences, such as F091 terminating just before the west facing section, the nature of the fill and also the irregular character of its base. It is possible that F091 may have been a rectangular post hole but whatever its function it is certainly archaeological, without finds, and belonging to an early phase of activity on the site.

#### Trench 5

This was positioned across TP28 which in 1995 had revealed part of what was interpreted as a ditch just at the top of a steep slope forming the southern edge of the triangle of Roman occupation in this area. At what was thought to be the base of the ditch there was a layer of charcoal overlying light grey silty clay. A stake hole of 8cm diameter and 10cm deep occurred at the northern edge of this grey silty clay layer.



Plate 11 Trench 5 during excavation, looking south-east.

In this year's evaluation, Trench 5 formed a 5m x 1m trench with TP28 as its mid-point. The trench was aligned north-west to south-east because this orientation provided a right angle across both the hill contour at this point and the anticipated line of the ditch found in TP28. The trench ran across a fairly steep slope of approximately 1:5 (plate 11).

The depth of plough soil 002 was most marked in the middle part of the trench where it attained a depth of just over half a metre (figure 7). In the northern part it was more shallow and overlay 070 which appeared to be an interface deposit, maximum 18cm deep, merging the base of the plough soil and the top of secure Roman levels. It only occupied the northernmost 2.6m of the trench. The first Roman find, a sherd of coarseware, came from 070, whereas 002 contained no Roman artifacts. Under 070 was a layer 071/073 which extended across the whole trench. Context number 073 was originally given to the northerly half of this deposit which contained 2 rim sherds of grey ware but was little different otherwise. 071 was mid brown silty clay loam with a little light grey clay, sandstone, shale and charcoal. Much more charcoal was evident in this deposit in the middle part of the trench. 071 sealed Roman occupation levels and was

probably formed immediately after abandonment of the site. Two fragments of possible quernstone came from 071 and could be related to unusual gritstone fragments recorded from last year (TP28).

Removal of 071 revealed deposits encountered in the base of the 'ditch' in TP28. In fact it was apparent that 071 and 070 had mistakenly been interpreted as upper ditch fills in Evaluation Stage 1 when they were now clearly seen to be much wider deposits. A shallow layer 076, only 4cm deep and 90cm, across covered the charcoal layer from TP28. 076 was friable dark grey-brown silty clay loam with 50% small shale fragments, many of which were burnt red. Under this was 072 a layer of dense charcoal 75cm across and 4cm deep. Of

considerable interest was a clearly defined vertical southern edge *c* 6cm deep shared by 076 and 072. Although charcoal patches continued south of this edge they were not of the same density as that of 072 from which they probably derived. It would appear that these two layers had come up against some obstacle to leave such an edge. Could this obstacle have been a fence? Or perhaps we are seeing the charred remains of the edge of a piece of timber burnt at the end of the site's occupation. Some of the burnt shale from 076 was embedded in the top of the charcoal and the two deposits seem closely linked together.

Under 072 was compact, sticky light grey silty clay 074 which was clearly the layer seen at the base of TP28. However, on excavation it became evident that 074 was not the primary fill of a ditch but the uppermost fill. It sealed a sequence of ditch fills: 077 friable mid grey-brown silty clay with occasional lenses of orange sand, 078 friable mid grey silty clay loam, 079 light to midgrey-brown silty clay with 20% lenses of orange sand, and primary fill 085 of loose orange sand, all these filling a ditch cut F090 (plates 12 and 13). The base of this ditch was 1.5m beneath current ground surface. In form it was similar to that in Trench 4, being 35cm deep and 90cm wide with a rounded base and fairly gently sloping sides, both these ditches were cut into smooth natural shale. As with the Trench 4 ditch, a 'drainpipe' section was taken for palaeo-environmental analysis.



Plate 12 Ditch post excavation in Trench 5, looking north-west.

The association of the charcoal deposit 072 with the ditch seems to be relevant. As we have seen elsewhere there was widespread burning at the end of the site's occupation and it is possible that 072 represents the burnt remains of a fence, indicated by the stake hole in TP28, which was constructed on the northern edge of the ditch. By the time the fence was consumed by fire the ditch had already silted up. To the north of the ditch and charcoal was a deposit 075 which comprised light grey silty clay loam with 30% patches of dark brown silty clay loam, 20% small fragments of shale and sandstone, and occasional flecks of charcoal. This material contained Roman finds including sherds of decorated Samian and rusticated ware and a nail. Its character suggests it derived from a building further up the slope and has washed down to this point as the slope here seems too steep to allow a structure. It was noted that the slope did become more gentle towards the northern section edge and right against the section was a potential feature 089 which was not exposed enough to excavate but which may be part of a building located further north. It is worth pointing out that TP27, which yielded potential occupation





Plate 13 Ditch in section of Trench 5, looking east.

deposits and a fine large piece of decorated Samian (see cover illustration), was only 8m to the north of Trench 5.

The alignment of ditch F090 was unexpected. Rather than follow the contour of the hill to demarcate the edge of Roman settlement, as was anticipated, it actually cut across the contour running in an east to west direction. This must throw doubt on its function as a defensive or boundary ditch marking the edge of Roman occupation as it encloses to the north part of a steep hillside in which building would have been most unlikely. The implications of this ditch alignment are discussed later.

The southern part of Trench 5 was not investigated fully with excavation stopping at 088, a thin layer of mid grey silty clay with 30% charcoal encountered immediately below 071. There were no Roman finds from deposits south of ditch F090.

#### Test Pits 40 and 41

The sterile area evident in the row of test pits 20-22 last year was further examined by test pitting in Evaluation Stage 2. Unfortunately there was only time to excavate two 1m square test pits, 40 and 41. These were positioned 5m either side of TP21, TP40 to the west and TP41 to the east.

TP40 had a thin plough soil only 13cm deep and containing 30% fragments of shale and 2 sherds of amphora. Under the plough soil was a shale layer comprising small to medium angular fragments of shale in loose silty clay loam, with occasional flecks of charcoal. In the test pit's south-west corner was a large flat gritstone which appeared to be deliberately laid. There was enough evidence, including finds, to suggest the presence of Roman stratigraphy (plate 14).

TP41 had a dark brown plough soil with moderate flecks of decayed orange sandstone and small to medium gritstones and occasional flecks of charcoal. A medieval pottery sherd came from near the top of this layer, with Roman pottery towards the base. It sealed a dark brown silty clay loam with frequent flecks charcoal. In the north-west corner occurred an orange-brown layer with coloured clay patches and charcoal which gave the impression that it would come right across the test pit (under the dark brown silty clay loam) and it seems similar to material to the north of the ditch in Trench 5. Clearly Roman levels survive here.

Roman deposits were encountered in both TP40 and 41. This rather suggests that the sterile line of TP20-22

represents only a narrow band of disturbed ground or that by chance these test pits have just missed Roman deposits.



Plate 14 TP40, looking north.

#### TANGS FIELD

#### Test Pits 100-121

Of the eleven test pits dug on a line running westwards from the south-west corner of the fort (plate 15), only two, TP100 and TP101, provided positive evidence for archaeological features. TP102 to TP110 proved to be negative with the plough soil layer becoming shallower westwards and further down Tangs Field (plate 16) (see Appendix for test pit descriptions). The only possible road remains occurred in TP100 where a thin deposit of angular gritstones forming a level surface was encountered. In TP101 features were





- Plate 16 TP 105, looking north.



Plate 17 TP101, looking north.

revealed at 60-70cm depth and these were interpreted as a slot, post pipe and stone packing for a post hole (plate 17). A dense concentration of angled gritstones in the south-west corner may have formed part of the packing for a post hole, whereas in the middle of the test pit a loose mottled deposit of cream coloured sandy loam with light grey-brown silty clay loam stood out from the natural mid orange-yellow clay loam and indicated a possible post pipe and slot (figure 8). These features were not excavated and any interpretation within the confines of a 1m square must be cautious. However, these features were at much greater depth than any other test pit along this line and the character of the material was different to any other test pit, except perhaps TP103 where there was a similar mottled deposit but thinner and featureless. There were no Roman finds in TP101 but the depth and character of the features suggest a Roman origin.

Evidence for the Roman road and settlement were equally elusive in the line of test pits, TP111 to TP117,



running north from TP101 and parallel with the western defences of the Roman fort (plate 18). Three test pits, TP111, TP116 and TP117 were located opposite and only about 40m from the western gateway and were disappointingly negative, producing no evidence for the road or any other archaeological features (plate 19). TP115, which was located 10m north of TP101, did yield some positive results, with a linear feature occupying the western third of the test pit. This feature, which ran north to south, was defined by a light brown silty clay loam fill against the natural mid-yellow-orange clay loam. It was only 5cm deep when excavated, with a flat base and vertical eastern edge. The western edge was not evident within the confines of the test pit. An iron nail head of Roman type came from the fill and it is therefore possible that this is a slot/gulley of Roman origin. TP115, 10m north of TP114 had a mottled creamy layer under the plough soil which may have constituted a Roman deposit, but it was not excavated.

The two lines of test pits informed us that there was but little Roman activity in Tangs Field with some (undated) evidence occurring adjacent to the south west corner of the Roman fort. The location of the road running into the west gate was still unconfirmed but perhaps hinted at in TP100. Therefore, further test pits were dug north of TP100 to try to verify the presence of a road. TP118 was excavated 10m east of TP113 and yielded no road evidence; however, in the south west corner there was a spread of mid-brown silty clay loam with charcoal that may constitute a feature's fill. TP119-121 were dug at 5m intervals east of TP115. TP119 proved to be sterile whereas TP120 and TP121 encountered dense stone layers.

#### Trench 10

Given the potential for a road here, the strip between these TP119 and TP121 was opened up to give a trench 1m wide by 11m long (Trench 10). Under *c* 20cm topsoil, which was quite compact and with a great deal of post medieval pottery and other finds, was a thin layer *c* 2-3cm of brown silty clay loam plough soil. This came off onto a very badly degraded and uneven stone surface which occupied 8m of the trench (figure 8 and plate 20). Its eastern edge was not determined as this would have meant going into the Scheduled area of the fort defences. To the west the stones gradually died out to leave 2m of natural mid-orange clay loam. There was no evidence for a gulley/drain here. The stone spread comprised two distinct materials: surviving only in patches as an upper surface were light to mid-grey angular gritstones. Elsewhere there was a smooth surfaced, compact layer of decayed and crushed orange sandstone. The surface was very uneven and in places hollows filled with plough soil were encountered. There were one or two places were narrow linear depressions could have been interpreted as wheel-rutting, and it is possible that the patches of overlying grey gritstones represent repair work to a worn surface. Unfortunately time constraints did





Plate 19 Sterile TP111, looking north.

Plate 20 Possible road remnants in Trench 10, looking south.

not allow a section to be cut through the deposit, though a narrow slot excavated on the last day did show that the stones were densely packed to a depth of at least 40cm.

As a Roman road has not been encountered elsewhere in Tangs Field during test pitting, this implies the poor stone surface may be a likely candidate. If it is, then it shows that the Romans simply took the quickest route into the west gate by running the road right alongside the defensive ditch. However, there are a few problems with this interpretation. At the south-west corner of the fort, just to the east of Trench 10, is a large hollow on the line of the Roman ditch, together with a smaller one just to the west. These either represents unrecorded old excavation trenches or, again unrecorded, quarrying activity. It is possible that these hollows have been partly backfilled and that the stone spread in Trench 10 is the top of rubble backfill. If it is a Roman road then the construction is unusual compared with excavated evidence elsewhere at the site.

There were, for instance, no rounded cobble stones evident, nor was there a road side ditch. Another factor was the lack of plough soil, whereas on other parts of the Roman site a considerable thickness sealed the Roman road surface. It is possible that the road has been previously revealed in an earlier archaeological excavation and not recorded at this point, with the surface being left to weather. If the stone spread in Trench 10 is not the Roman road, then we must accept that the road has been removed either for use elsewhere by local farmers, or during quarrying/excavating outside the south-west corner of the Roman fort.

# 6. Finds

#### FINDS REPORT

#### By Richard Clark, Leicester Museums Service

#### Introduction

A total of 592 sherds weighing 2.1kgs were recovered during the 1996 summer excavations at Castleshaw. Unlike the previous season, the vast bulk of the material was of post-medieval date. The assemblage has been summarised in table 1; the test pits have been subdivided by area as the majority of the identifiable Roman material came from Daycroft Field. It should be noted that no finds came from Trench 4.

#### Table 1: Summary of Roman Pottery

	Roman	Medieval	Post-Medieval	Unclassified
Trench 2 Trench 3 Trench 5	1/6 13/33 5/13	- -	39/64 16/14 12/39	8/120 22/362 –
Daycroft Field TPs	10/50	1?	67/85	20/285
Tangs Field TPs	-	-	202/555	4/6
Trench 10	1/8	-	171/454	1/1
Total	30/110	-	507/1211	55/774

#### Methodology

The material was examined in accordance with established methodology (Young 1980). The pottery being quantified by sherd count and weight, with rim diameters and proportions (%) recorded to enable calculation of estimated vessel equivalents (EVEs). Vessel forms were identified using the Ceramic Type Series described previously (Clark 1996). A copy of the type series forms part of the pottery record and is lodged with the site archive.

#### Discussion

The 1996 excavations produced a small quantity of Roman pottery, the bulk of which was recovered from Trench 3 and the test pits in Daycroft Field, notably TP36, 37, 40 and 41; indeed hardly any identifiable Roman ceramic material was recovered from Tangs Field, the exception being 4 fragments of possible Roman brick or tile and one sherd of amphora.

The assemblage can be broadly dated to the later 1st to mid-2nd century AD. Unfortunately, due to the limited quality and fragmentary nature of the pottery (few forms were identifiable) more precise dating should be regarded with caution. The presence of everted and bead rim jars in grey ware as well as the identification of rustication and rouletting as decorative motifs, suggests the assemblage dates from the late 1st to early 2nd century AD. A single BB1 jar rim probably represents the latest material, the form is unlikely to have arrived at Castleshaw prior to the AD120s. The assemblage appears largely contemporary with the known occupation of the fortlet at Castleshaw.
# 7. Environmental Analysis

# POLLEN ANALYSIS FROM DITCH FILLS

By Dr Barbara A. Brayshay, Palaeoecological Research Unit , Dept of Geography, University of Manchester.

#### Introduction

Sediments which have accumulated in ditches at an archaeological site have the potential to provide a stratified record of fossil plant and animal remains which, given suitable conditions for preservation can contribute information about the contemporary environmental setting and land use history of the site. However there are several prerequisites for the successful retrieval of fossil plant remains which need to be assessed before analysis can proceed. Firstly, ideal conditions for plant fossil preservation are acidic, anaerobic, waterlogged to prevent destruction and mixing by microbial activity. Secondly if the analysis aims to reconstruct environmental history over time the deposits need to be laid down in sequence and without disturbance Typical sedimentary environments used for pollen analysis include peat and lake deposits and material from archaeological sites which can meet these criteria. Sediments accumulating in ditches such as those exposed in Trenches 4 and 5 at Castleshaw are often waterlogged, stratified and have a coherent fossil record. However, even if the preservational state of the fossil record is good there remain a number of factors which need to be considered when interpreting the data derived from such situations. Most important is correlation between deposits and the archaeological phases. A possible problem at Castleshaw, a multi-phase roman site, is the potential for mixing and reworking of sediments either as a result of modifications to the fort during different phases of use or as a result of post abandonment disturbance by subsequent landscape changes and archaeological excavation. If the ditches had been re-cut during occupation then fills may have accumulated during the post-Roman period (after the site was abandoned) which would result in the sedimentary and pollen record not being contemporary with the Roman occupation. In this case artifactual evidence associated with the sediments suggested that the ditches (and the fills) were at least in part contemporary with occupation.

Of equal importance in the interpretation of environmental data derived from pollen analysis is a consideration of the source area represented by the fossil assemblage which includes wind-blown grains from the wider landscape together with more locally derived pollen from plants growing in the immediate vicinity of the site and those growing at the sampling site itself. As a general rule the relative input of each component tend to decrease with distance from the sampling point and the smaller sites tends to recruit pollen from nearby vegetation.

A preliminary assessment of the ditch fills was undertaken and this study found that sediment pH and particle size were within the range required for successful fossil pollen preservation and the preservational state and diversity of plant taxa represented in the record (a good indicator of loss) demonstrated that although a proportion of the assemblage was degraded, further analysis could prove worthwhile. With these consider- ations in mind it seems that the results of pollen analysis from the ditch deposits presented here, provides a 'snapshot' of the Roman landscape at the Castleshaw Fort which indicates that the fort was set in a relatively treeless landscape with open grassland or pasture as the dominant local vegetation type. Results of close interval sampling below a sand lens in Trench 4 suggest that there was some disturbance to vegetation and soils in the catchment which was followed by a period in which grassland vegetation declined and was replaced by acid moorland and scrub communities.

#### Aims of the study

The area around the Roman fort at Castleshaw has an intriguing archaeological background. Recent excavations on March Hill, just north of Castleshaw, have focused on Mesolithic hunter-gatherer sites (*c* 6-5,000 BP.) and palaeoecological studies associated with this period suggest that modification of the once wooded landscape was already underway during this period. However, little is known about landscape

history during later archaeological periods particularly in relation to the occupation of the area during the Roman period. The extensive blanket peats on Marsden and Castleshaw Moor provide an opportunity to examine in detail the regional vegetation record spanning most of the mid to late Holocene (c 7000 BP to present) which, when combined with analysis from archaeological deposits associated with ancient settlements, will have the potential to provide well resolved information about the locale of the fort. In this context results from the ditch deposits represents a first phase in a programme of palaeoecological investigations which aims to examine the vegetational history of the area through a nested series of off-site and on-site studies which contribute data from a variety of spatial and temporal scales. This programme includes a comparison of the off-site pollen and sedimentary records from deep peat deposits located away from the main areas of archaeological activity with those undertaken from the on site archaeological context. The off site record is here defined as data derived from naturally accumulating deposits such as the blanket peats which characterise the modern pedogenic and vegetational environment of the area. In contrast the on-site record is derived from cultural layers exposed by archaeological investigation. The use of these two sources of information in the reconstruction of early palaeoeconomy and environments aims to overcome some of the limitations of each type of data. An off-site pollen diagram tends to reflect the wider environmental context of an archaeological site and can determine fluctuations in vegetation such as woodland density and composition and the presence/extent of grassland, heaths and mires. One limitation with this type of data is a predominance of wind pollinated taxa in the pollen record which results in the obscuring of disturbance, cultivation and agricultural signals typically characterised by plants which are insect pollinated and therefore poorly dispersed from source. The on-site record can provide much more information about extra-local conditions, crop plants, weeds and plants gathered in the wild. An integrated on-site and off-site sampling strategy can therefore yield evidence which has finer resolution when attempting to reconstruct the prehistoric environment of a site and any environmental impacts resulting fromhuman activity.

# Methods - Sampling

Two 50 cm monoliths were retrieved from exposed ditch sections in Trenches 4 and 5. The section from Trench 4 was of particular interest because of its close proximity to the excavated section of Roman road. The sediments were wrapped, sealed in monolith tins and placed in cold storage (4°C) before analysis.

# Sediments.

Sediments from the ditches comprised organic silty clays overlain by a sandy silt/clay loam with a reduced organic fraction overlain by a plough soil and top soil.

# Trench 4

0-20 cm Top soil 20-38 cm Plough soil 38-80 cm Brown/grey sandy /silty clay 80-100 cm Dark Brown/grey silty clay

# Trench 5

0-20 cm Top soil (A horizon) 20-52 cm Plough soil (B horizon) 52-70 cm Grey/brown mottled sandy silt 70-74 cm Grey/brown mottled silty clay 74-81 cm Grey/brown mottled sandy silt 81-93 cm Orange/grey mottled silty clay 93-100 cm Grey mottled clay/silt All samples for pollen analysis were taken from sediments below the top soil and plough soil layers.

# Pollen analysis

Sub-samples were removed from the profile at 8cm and 4cm intervals across the profiles and in contiguous 1cm intervals below the sand lens in Trench 5. The samples were then prepared for pollen analysis using standard KOH digestion and acetolysis procedures (Faegri & Iversen 1989) with additional treatments of HF to remove silica and microseiving to remove fine and coarse residues. Pollen was counted using a Zeiss Axiolab microscope operating at x400 and x600 magnification. Identifications were made with reference to Moore et. al 1991, Punt 1976, Punt & Clarke 1980 and the University of Manchester Geography Department reference collection. Microscopic charcoal particles encountered during pollen counting were recorded and measured along their longest axis. The particles were divided provisionally into two particle size classes (>25µm and <25µm) to provide a distinction between 'larger' and 'smaller' fragments which were apparent in the preparations. The results of the pollen analysis were computerised using TILIA.2 and TILIA\*GRAPH 1.17 (Grimm 1991) which plotted the pollen percentage diagram. The diagrams were divided into local pollen assemblage zones (LPAZ) using CONSISS (Grimm 1987) which was used on land pollen taxa with greater than 2% in at least one sample level. The stratigraphically constrained cluster analysis used the Edward's and Cavalli-Sforza chord distance as the dissimilarity coefficient. Pollen and plant nomenclature follows Stace (1991).

# Results

The results of pollen analysis are summarised in tables 2 and 3 and presented as a summary pollen and spore percentage diagram (figures 9 and 10).

Lithology	Local Pollen Assemblage Zone	Depth below plough soil	Characterising pollen signature
Brown/Grey sandy silt	CT4/3	0-38 cms	Poaceae, Calluna, Pteridium
Sandy silt lens	CT4/2	38-40 cms	Poaceae, Cerealia, Calluna
Brown silty clay Grey/brown silty clay	CT4/1a	40-50 cms	Poaceae, Plantago, Rumex

# Table 2: Trench 4

# Table 3: Trench 5

Lithology	Local Pollen Assemblage Zone	Depth below plough soil	Characterising pollen signature
Brown/Grey sandy silt	CT5/1c	0-42 cms	Poaceae, Calluna, Pteridium
Grey/brown silty clay	CT5/1a	42-50 cms	Poaceae, Cyperaceae, Plantango

# Discussion

The basal pollen assemblage zones from both ditch sections suggest a landscape characterised by herb-rich grasslands with some woodland in which *Alnus* (alder) *Betula* (birch), *Corylus* (hazel) and to a lesser extent *Quercus* (oak), *Ilex* (holly) and *Ulmus* (elm) were present. Comparison with a section of the off-site record from Castleshaw Moor provisionally dated to the Roman period (Brayshay in prep.) supports the presence of woodland and heaths in the wider landscape together with a suite of herbaceous taxa which include

classic indicators of grassland such as *Plantago lanceolata* (ribwort plantain) and *Rumex acetosella* (sorrel). However the pollen assemblage from the ditches has a higher non-arboreal /arboreal pollen ratio than that from the peats suggesting that woodland was not immediately local to the site.

The herbaceous flora is divisible into groups of species which are associated with grassland plant communities, disturbed or ruderal habitats and wet / waterlogged situations. Grassland indicators include species of Poaceae (grasses) which contributed 40% total land pollen and Plantago lanceolata, Rumex, species of Ranunculaceae (buttercup family) and Caryophyllaceae (pinks) – plants which suggest herb-rich pasture (Behre, 1981) rather than cultivated crops. Plants associated with disturbed ground include Plantago media/major, (greater plantain), Artemisia (wormwood), species of Chenopodiaceae (fat hen) and Urtica (nettles) possibly growing as roadside verge communities or in areas of disturbed, open ground around the fort. Waterlogged / wetland plants include Cyperaceae (sedges), Filipendula (meadow sweet), Onagraceae (cf. Epilobium palustre - marsh willowherb) and Potomogeton (pondweed) probably growing in the waterlogged base of the ditch. Cultivation indicators are scarce with the exception of two Cerealia type grains (attributable to Triticum spp.) which occurred in one level from Trench 4 immediately below a sand band interpreted as a phase of erosion and in-washing in the catchment. The pollen spectra from this level (LPAZ CT4/2) is characterised by reductions in arboreal pollen and Poaceae together with peaks in Pteropsida (fern spores) and Lactuceae pollen and microscopic particulate charcoal. Previous studies of pollen spectra from archaeological deposits (Dimbleby 1985) exhibit similar over-representations of these taxa which have been interpreted as resulting from in-washed or degraded assemblages because both are particularly resistant to decay. This would suggest that some disturbance of soils in the vicinity of the fort had taken place, possibly as a result of cereal cultivation, which had resulted in a phase of erosion and in-washing of material into the Trench 4 ditch. These features were not so clearly recorded from the profile in Trench 5 possibly because pollen and spore preservation was poorer in this section or the profiles are time transgressive. The small peak in charcoal suggests that these vegetation and sedimentary changes may be associated with increased incidence of fire in the catchment; alternatively it may result from in-washing of charcoal incorporated in in-washed soils.

LPAZ CT4/3 and LPAZ CT5/3 correspond to sedimentary changes in the ditch fills. Pollen preservation and the diversity of the assemblages were poorer than in the basal layers. The pollen assemblages are similar, both reflecting a decrease in grassland together with corresponding increases in woodland and heath vegetation. The sediments appeared relatively uniform and have a range of potential sources. They may represent natural infilling of the ditches over time or intentional infilling either when the site was abandoned or at a later date. The vegetation changes recorded in these levels indicate subtle changes in vegetation cover, the landscape remained open but there appears to be some regeneration of woodland and spread of dry heathland in which *Calluna vulgaris* and *Pteridium aquilinum* (bracken) were present, both species are common today on the hillslopes around the fort and their expansion signals a shift towards acidification in the catchment soils. Possibly these species were able to spread into areas where cultivation had been abandoned.

### Plant Resources

The pollen analytical data suggests a number of plants which were available for use by people occupying the fort area. Some woodland was present, possibly as small stands of trees and scrub growing on uncleared areas of the hillslopes, cloughs and platauex above the valley. Species recorded include *Alnus* (alder), *Betula* (birch), *Quercus* (oak), *Ilex* (holly), *Ulmus* (elm) and *Salix* (willow). Woodland would have provided timber for firewood, peat deposits were also locally available and may have been cut for fuel.

Possibly any substantial timbers required for building would have had to be transported some distance to the site. *Salix* (willow) was available for basketmaking and fencing. Woodland food resources could have included hazelnuts and fruit from species of Rosaceae such as *Rubus fruticosa* (blackberry). Evidence for agricultural activity is limited, it may be possible to suggest that open grassland was maintained for pasture and the scarce cereal type pollen grains originate from some limited cereal cultivation. Other wild herbaceous plants such as *Urtica* (nettles) and *Chenopodiaceae* (fat hen) have been documented as potential food plants (Mabey 1996).

#### Summary

The palaeoenvironmental record retrieved from the two ditch sections represent three distinct phases. An initial phase possibly following ditch construction, the base of the ditches would have been at or around the water table and stratified infilling occurred resulting in good pollen preservation. A second phase most clearly defined in Trench 4 indicates some erosional in-wash of sandy sediment into the ditch possibly as a result of disturbance linked palynologicaly to small scale cereal cultivation.

These data provide proxy evidence for landscape modification possibly as a result of agricultural activity in the catchment leading to a switch towards woodland regeneration and the spread of heath and bracken possibly consequent upon a reduction in land use pressure around the site. There is no record of woodland clearance and the creation of open heath dominated landscapes prior to the construction of the road which have been noted in pollen profiles from Highmoor (Brayshay 1995) and northern Britain in association with Hadrians Wall (Barber et al 1994) which have suggested large scale land clearance activity during the Romano-British period. Subsequent phases of the project aim to place these snapshots of landscape history in a series of spatial and temporal studies of human impact on the Castleshaw area during the Roman period.

#### Charcoal Analysis

#### By Ivan Hradil

Material from the base of stakehole F082 in Trench 3 was found to have a very poor charcoal content of only about 2% by volume. The diameter of fragments was 0.3 to 0.1mm. Positive identification was very difficult; however, fragments of *Tracheids* were found and these cellular structures only occur in Coniferous spp, with a high probability that the stake was pine wood.

072 from Trench 5 was also analysed and this had a very high charcoal content of 80% by volume. It was possible to section 14 samples, of which 13 were oak and 1 was pine. It was noted that the oak had not burnt through entirely but was charred as a result of intensive scorching.



Figure 9

TRENCH 4 DITCH FILL

40



# 8. Discussion

The 1995-6 programme of evaluation outside the Roman fort and fortlet at Castleshaw has clearly demonstrated the existence of a substantial area of extra-mural activity, probably of early 2nd-century AD origin, occupying a triangular area of land adjacent to the fort's southern defences. It has also been shown that there was little or no occupation outside the western defences. Archaeological evidence from the evaluation is shown in figure 11 and can be summarised as follows.

# DAYCROFT FIELD

### Roads

A road surface of 2.6m width which was identified in Trench 4 may have continued into Trench 3, perhaps representing the main spinal service road within the extra-mural area running roughly parallel with the fortlet southern defences. Test Pit 17 also produced cobbling interpreted as a track and this either forms part of the above service road or is a track running up to meet that road. TP10 contained either a floor or road surface, if the latter then this could be a continuation of the service road but only if that road angled down the hill from Trench 3 in a south-west direction. Part of another road was also identified at the northern end of Trench 3 and this is interpreted as being remnants of the major highway that once ran along the south side of the Agricolan fort. This road has not been identified in any other test pits or trenches. One further possibility for a road in Daycroft Field was the negative feature in Trench 1 provisionally interpreted as a shallow ditch which may also have been picked up in TP36. This could in fact be a hollow-way running from the south-west corner of the fortlet down to the oven/hearth identified in TP11 and Trench 2.

### Ditches

Three roadside ditches were encountered. One was located in Trench 3 and appeared to serve the early fort phase highway, two others occurred in Trench 4 (TP29) and were associated with the service road. A possible shallow settlement boundary ditch was excavated in Trench 1 and may have continued south-eastwards to TP36. Trench 5 proved the existence of a ditch first seen at this point in TP28. However, rather than marking the edge of the settlement at the top of the steep slope, the ditch appeared to run across the hill slope from east to west. Part of a ditch was revealed and excavated in TP37 and this one seemed to be running out of the settlement area in a north to south direction. These two ditches, from TP37 and TP28, may have been field boundaries or property divisions. Trench 2 showed that this part of the occupation area, represented by the hearth/oven in TP11, was not enclosed by a ditch. Other possible ditches or substantial negative features were indicated by the character of deposits in TP6, 26, 30 and 31, but none of these test pits have been investigated further. Based on its character and location, TP31 may be a continuation of the southern roadside ditch in Trench 4.

# **Buildings and Structures**

By identifying occupation type deposits, such as those with concentrations of finds or charcoal flecking and burnt clay, it has been possible to suggest several areas where buildings were located in the extra-mural settlement and these are shown in figure 12. It is best to start with the most positive evidence which undoubtedly occurred in Trench 1 where a dwarf stone wall and associated post hole were revealed in the south-east corner of the trench. To the north of this was the evaluation slot excavated in 1994 which identified occupation deposits, and together with TP5 and TP9 to the east this represents a potential area for buildings of roughly 25 x 12m, perhaps lying along the north side of the service road seen in Trench 3 and bounded on the west side by the shallow ditch in Trench 1.

A second area of potential for buildings is represented by TP10, if the deposit here is interpreted as floor surface, and TP14. Further to the east is TP18 which yielded a stone capped drain and several artifacts suggestive of a building close by, and further east from this test pit is TP40 which also indicated occupation,

giving a potential area of perhaps 35m with at least 12m width and perhaps aligning with the southern edge of the service road.

The sterile line of TP20 to 21 has been shown to be quite narrow by the discovery of occupation material in TP40 and 41, indeed TP20 and 21 may by chance have just missed Roman deposits; however, it may not be coincidence that Samian ware was concentrated in a (third) area of occupation to the east of this sterile band. TP41, 24, 25, 27 (where the finely decorated Samian vessel originated – see cover illustration) and the northern part of Trench 5 all had deposits which seem to suggest a building in the vicinity, in an area of potential measuring roughly 25 x 12m. This building may have been for a higher status official and separated from others; certainly it lay at the most easterly part of the site, to the south of the service road and occupying the narrowest apex of the triangle of available level ground.

Sommer, in his study of military vici in Britain, has looked at the size of houses and found that their average dimensions were 6-21m by 3-7m (Sommer 1984, 61). This gives an idea of the potential size of buildings at the Daycroft Field site and it can be seen that each of the three main areas of potential for buildings can easily accommodate at least one building and perhaps more than one.

The evaluation revealed several individual features which indicate the presence of structures. Foremost amongst these was the hearth or oven base encountered in TP11 and the northern edge of Trench 2. It is not clear whether this formed a single structure or was one of a group. Several post holes have been found, with the one in Trench 3 most likely to have belonged to a building. Those in TP28 and Trench 2 are more likely to have been part of fence structures as they are both peripheral to the settlement area and located on considerable slopes. It is possible that the charcoal deposit in Trench 5, which covered the fills of the ditch, represents a fence that had been burnt *in situ*. A number of drains and gulleys have also come to light. Two stone-capped gulleys revealed in Trench 1 and TP18 clearly acted as drains. Gulleys or slots from TP1 and TP7 could be for drainage or structural purposes but given their location seemingly outside the western edge of the occupation area the former is favoured. Similarly, the purpose of the gulley under the road edge at the northern side of Trench 3 is uncertain as is that of the gulley/post hole found in the northern part of Trench 4. It is possible these two features were related to each other and marked the line of the Agricolan highway.

### TANGS FIELD

Deposits of archaeological interest were confined to an area adjacent to the south-west corner of the fort defences. Here a dense spread of stones was encountered across Trench 10 which could be interpreted as remains of a Roman road running alongside the ditch and connecting the fort west gate to the main highway. In the absence of any road evidence elsewhere in Tangs Field, despite extensive test pitting opposite the west gate, the stones in Trench 10 may also represent the diversion of the main highway around the back of the fortlet when the extra-mural settlement was established on the south side of the fortlet. Indeed, there could be two phases represented here, with the crushed sandstone surface being of fort date and patchy grey gritstone deposit above belonging to the fortlet phase. The stone spread appeared to continue into TP100 which also revealed layers of gritstone possibly for a drain. A large depression across the line of the fort ditch near the south-west corner may relate to (unrecorded) quarrying or excavation. If it is the former then there is a chance that the stone spread provided access to the quarry or was backfill material.

Other features of interest were confined to a possible slot in TP115 and post holes in TP101. There was no dating evidence from these test pits but in terms of depth and character the features could well be Roman. It is suggested that there was Roman activity in this area relating to the construction of the fort or perhaps representing structures beside the link road.

### The Main Highway

In the 1995, evaluation there was speculation regarding the true course of the main highway as it reaches the fort. The road is evident as a well preserved earthwork some 100m to the west of the fort and a similar distance to the east. A recent resistivity survey has positively identified the road at about 80m from the fort





on the west side (Locket & Winters 1996). This work shows the road still aiming for a point just south of the fort defences, yet the only evidence for the road in the evaluation area comes from Trench 3, whereas Trench 1 and the 1994 slots showed no evidence even though they might be expected to run across it. In conclusion it appears that when the Agricolan fort was in operation the road did indeed run outside the south gate but that in the fortlet phase when Daycroft Field was used for settlement the road was diverted round the north side of the fortlet and this was the loop road encountered by Bruton in 1907 (Bruton 1908, 21). It would appear that most of the highway metalling in the Daycroft Field settlement area must have been taken up and re-used elsewhere.

# Date/Phasing in Daycroft Field

With the exception of the road and its drainage ditch in the north half of Trench 3, and deposits in TP37 which were cut by a ditch, features and deposits appear to belong to one phase of occupation. Pottery suggests an early 2nd-century AD date for this extra-mural occupation. It is suggested that this activity took place during the second phase of building within the fortlet ie. around 120AD. At about this time the hypocaust was remodelled and extra space added to the suite of rooms around it, the capacity of the granary was increased by a quarter and the barrack block was re-built.

Stratigraphy is shallow and suggests a short length of occupation ending in deliberate(?) firing of the buildings and clearance of the site. In Trench 1 we have a destruction deposit which includes burnt daub from a nearby building together with much charcoal and a very mixed deposit including pottery sherds which are characterised by low average sherd weight and high brokenness all of which indicates clearance and levelling of building remains. Destruction by burning is evident elsewhere on the site with burnt timber remains evident above the roadside ditch fill in Trench 3, in the shallow ditch in Trench 1 and above the ditch fills in Trench 5. It is worth noting that inside the fortlet the excavators found that the most southerly *contubernium* of the last phase barrack block was burnt *in situ* with oxidised red clay and charcoal marking the line of sill beams (Redhead 1989, p41). We cannot be certain that the Romans deliberately fired their timber buildings when they abandoned the site - if the timber was in good condition this would be extremely wasteful. We cannot therefore rule out the possibility of accidental fire or destruction by enemy action.

#### Function

The evaluation has proved the existence of and defined the extent of extra-mural activity beside the fortlet's southern defences. However, although areas of buildings can be inferred it is impossible with current knowledge to define the shape and function of those buildings. The finds can be used to a certain extent, for instance they appear military in character and the concentration of Samian ware in one particular area may indicate a higher status building at that point, but the excavated areas and the finds assemblage are too small to be of much use. Despite this, there are some general observations which can be made on the character of the settlement.

It is clear from the available evidence that the extra-mural area was not well defended. Indeed it could be argued that it was not even enclosed. The evidence can be stretched two ways: on the one hand a case could be made for a rather ragged boundary or fence, partly ditched and running around the occupied area, on the other hand the problems of the orientation of ditches at Trench 5 and TP36 and the lack of a ditch at Trench 2 suggest that the area was not formally enclosed and certainly not defended in a military manner, ie. there was neither a deep defensive ditch nor a rampart. On current evidence a function as a military annexe is unlikely and that of military *vicus* much more reasonable.

A vicus was a civilian settlement adjacent to a Roman fort. Camp followers may have been the first settlers but the presence of soldiers and regular wages would have soon attracted a mixed population of soldiers' dependents, veterans, merchants, craftsmen and other service providers. In 1984 a study showed that only 36% of forts in Britain did not have military vici and it was suspected that this percentage would decrease with further research at the negative sites (Sommer 1984, 41-2). The author concluded 'that every fort was accompanied by a settlement of this sort' irrespective of altitude and therefore it is not surprising to find

such evidence at Castleshaw. Sommer identified 101 military *vici* in Britain but if all forts had *vici* this number would rise to 156.

What form might the *vicus* have taken? Sommer's study has identified several elements common to *vici* (Sommer 1984, 46-9). The most popular feature was the house which took a rectangular form and was often divided into commercial and domestic parts. The houses were individual structures separated by drains and narrow lanes. Additional to the houses, one might expect a bath house, *mansio* and temple, all of which were controlled by the military, and also a cemetery. Another common element was industry, such as metal working, pottery production, tanning and a whole host of other industries which leave much less archaeological evidence.

At Castleshaw the evaluation has identified several features related to the above, such as drains, wall foundations, post holes for buildings, and an oven or hearth base. But only a more intensive, open area research excavation could hope to properly identify the shape and function of buildings and whether there were industrial processing areas within the settlement. The bath house and cemetery have not yet been identified but are likely to exist. The remains of a temple and *mansio* may well lie undiscovered in the extra-mural area.

A further element present at some *vici* was agricultural practice. *Vici*, such as Brough (Dearne 1993, 160), have produced evidence of boundary ditches for allotments at the edge of the settlement suggesting small scale private cultivation. Summer has argued that the scale of agricultural activity in the upland *vici* was probably small and that field systems were not present, with the *vicus* population relying on secondary sources of food such as meat and grain (Sommer 1984, 36-8) But proper investigation has not been undertaken on this subject and this claim cannot be proved.

At Castleshaw the presence of two ditches in Daycroft Field which appear to run out of the settlement area and which may be allotment divisions or part of a field system presents new evidence for agricultural practice. Analysis of pollen from one of these ditches gives a rare picture of the Roman upland environment showing open pasture. The abandonment of the site is quite dramatically represented in the pollen record giving a clear indication that the Romans were managing and exploiting the landscape. Two grains of cereal pollen were identified but these are not enough on their own to postulate even localised cereal cultivation during the site's occupation.

The presence of a *vicus* at Castleshaw is quite acceptable given that its neighbouring forts at Manchester and Slack also had *vici*, as did Melandra further to the south. The one at Castleshaw seems to be on a much smaller scale than its neighbours, presumably due to its shorter length of occupation. However, we do not yet know the full extent of the Castleshaw *vicus*. We know that it occupied the remaining level ground outside the south defences, that it was not present on the west side, that it has not been investigated on the north side, and that it is probable there was extensive settlement on the flat east side where some features have been identified but systematic fieldwork has not been undertaken. If we accept a fortlet date for the *vicus* then it may partly have occupied the flat area left by the dismantled earlier fort. Earlier excavators such as Bruton, Rosser and Thompson may have missed evidence for later phase buildings in this area.

One problem with the Castleshaw site is that the evidence points towards an early second century date which suggests that the Agricolan auxiliary fort did not have a *vicus*. However, it must be remembered that the evaluation has only made a very limited investigation and that there is some pre-fortlet phase activity in Daycroft Field; perhaps several buildings did lie alongside the main highway in the late 1st century AD but their remains have been partly removed or obscured by later building work. We do not know the date of the remains east of the fort.

Could the fortlet, which was garrisoned by only about 50 soldiers, have supported a *vicus*? If the interpretation of the fortlet being the nerve centre of an auxiliary cohort with most of the troops outstationed is used (Walker 1989), then it would be feasible with troops coming and going and presumably receiving their pay from the headquarters in the base fortlet. However, if the commissary fortlet theory is used (Walker 1989) then perhaps we need to look at an alternative to the *vicus* definition. Daycroft Field may have been used for storage buildings, stabling and accommodation related to the multi-functional activities on site, for which there was clearly no longer enough room in the fortlet. We already have evidence that military standards of defence were compromised within the fortlet, for instance there was no *intervallum* road between the granary and the rampart, and perhaps it was felt that conditions were peaceful enough to make strong defence for the extra-mural area unnecessary.

In conclusion the evaluation has shown for the first time that there was extra-mural activity at Castleshaw south of the fortlet defences in Daycroft Field. There is also some evidence to suggest occupation to the east side. In terms of its poor defensive qualities and the possibility of allotments or building plots, the extra-mural area would appear to have been a *vicus* rather than an annexe. The settlement seems to have been of one short-lived phase in the early 2nd century AD, probably dating to the last phase of the fortlet. If this is the case then it is possible that the activity in Daycroft Field had a specialist function related to the unusual character of the fortlet. Only future investigation of the layout and nature of buildings at this site can reveal its true function.

### **Future Research**

The evaluation has added a new dimension to the archaeology of the Roman site at Castleshaw. It has thrown up a number of questions and suggestions that could be answered through the following research.

- An understanding of the character of buildings and other structures in Daycroft Field is vital to our interpretation of the function of both the extra-mural settlement (as a *vicus*?) and the fortlet. The only way to recover meaningful archaeological data would be to carry out a large scale open area excavation. This has major resource implications and would require considerable funding as well as Scheduled Monument Consent.
- 2) Evaluation of land beside Waters Clough should be undertaken to look for evidence of Roman activity here, including perhaps a bath house.
- 3) The line of the Roman road in the Castleshaw valley requires further research and recording. This would make suitable project work for students and should include earthwork and geophysical survey and perhaps an excavated section at an appropriate place. Test pitting could be used to confirm the line of the road from where it clearly survives near Cote Lane to where it encounters the extra-mural settlement. Some of the road towards Cote Lane appears to be exceptionally well preserved and may be worthy of scheduling.
- 4) Further investigation should be carried out on the possible road in Tangs Field beside the Roman ditch. A section needs to be cut through it to see if it is indeed Roman and whether there is more than one phase.
- 5) The extent and nature of extra-mural settlement beyond the east side of the forts is not known and requires evaluation. This would need Scheduled Monument Consent.
- 6) Similarly, evidence for the presence of fortlet phase extra-mural buildings on the site of the earlier Agricolan fort should be assessed, by re-examining previous excavation evidence and undertaking further evaluation or re-excavation of old excavation trenches. Scheduled Monument Consent would be required for any excavation works.
- Locating the Roman cemetery would be an extremely difficult exercise but is desirable to complete the picture of Roman occupation at Castleshaw.
- 8) The possibility of allotments or field systems should be investigated further. The line of the ditch encountered in Trench 5 could be traced through trial trenching, as could that in TP37. Further environmental analysis would be desirable.

9) Pollen analysis from two of the ditches has given us an insight into the local environment during and after the Roman occupation of Daycroft Field. This 'local' data will be put into a wider context through pollen coring of the blanket peats at Castleshaw Moor on the northern edge of the valley and at Dean Clough (the next valley north of Castleshaw). This package of data will trace human influence on the environment from the early Mesolithic period through to recent times. The level of impact of Roman settlement will hopefully be apparent in these pollen records. This work is currently underway (again kindly funded by North West Water Ltd) and the results will be available later this year.

#### Management of the Site

The scheduled area (shown in figure 1) should be extended to include Roman occupation in Daycroft Field. The current farming regime is sympathetic to the monument with the field being used as a hay meadow and for grazing. North West Water, the landowners, are committed to positive management of the fort complex, demonstrated by their generous funding of the current evaluation. Recently, they have also undertaken improvement work at the public car park off Waterworks Road. The car park has been made more visitor friendly, through the addition of better signposting and picnic facilities. Finger posts now mark the public footpath up to the fort. It is intended to make an interpretation panel, to be placed in the car park, to inform visitors about the Roman monument. The new discoveries could be referred to on this panel.

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The farmer, David Hurst, allowed the excavation on his pasture land.

Extra special thanks to Jayne once again for baking cakes and providing moral support.

# Appendix – Context and Test Pit Descriptions

#### Bold denotes Roman finds

### DAYCROFT FIELD

### TP32

clay lo <i>Finds</i> 001	antial layer of plough soil,	stones and shale. No Roman le ttery	down slope of hill. Natural of mid-yellow evels.
Ploug shale. <i>Finds</i> 001		tery	<i>Depth of plough soil 38cm</i> milar. Natural has only 5% sandstone and
Same <i>Finds</i> 001 002	eight 268.72 as TP33. No Roman levels. 3 sherds post medieval pot 16 sherds post medieval po 1 fragment of red tile 1 piece clay pipe stem		Depth of plough soil 40cm
Same Finds 001	<i>eight 269.16</i> as TP32 but plough soil les 2 sherds post medieval pot No finds	s thick. No Roman levels.	Depth of plough soil 30cm
TP36		D. (1. (),	D 11 ( 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

Top Height 268.74Depth of top soil 22cmDepth of plough soil 41cmIn section the plough soil thickens out east to west from 30cm to 40cm in depth. The plough soil sealed<br/>clearly identifiable archaeological horizons of Roman origin, comprising the following layers:

- 030 Mid- to dark brown silty clay loam with frequent flecks and occasional small to moderate angular sandstones and shale, maximum 5cm deep. This layer represents interface between plough soil and secure Roman deposit 031.
- 031 Mixed dark brown silty clay loam with frequent flecks charcoal and small patches/flecks of yellow clay and (oxidised) orange-red clay. These clay/daub inclusions appear sometimes as localised lenses within the layer.

- 032 Mid- to dark brown silty clay loam with moderate flecks of charcoal, small to large angular stones, flecks of yellow/cream and burnt red clay. Forms substantial deposit visible in all four sections of TP36.
- 033 Mid-orange-brown sandy silty loam with occasional flecks of charcoal and angular sandstones (maximum 8cm long) and shale. Very thin layer sloping away to west and south, mirroring compact natural on which it sat.
- 042 Very compacted layer of small and moderate sized angular shale with occasional medium stones, iron stained to give orange-brown hue. Slopes away to west and south. This layer is very thin and directly over natural clay. Appears to be compacted (through trampling?). Similar to material encountered in base of Trench 1 ditch F018 last year.

#### Finds

- 001 8 sherds post medieval pottery
- 002 No finds
- 030 2 sherds orange ware, 1 piece daub
- 031 1 flat piece lead
  - 1 sherd amphora?
  - 9 pieces daub (some oxidised red)
  - 4 fragments iron nails
  - 3 lumps unidentified iron
  - 3 pieces slag
  - 2 large pieces of charcoal
- 032 1 fragment pink tile 6 fragments iron nails 3 lumps unidentified iron 2 pieces bone
- 033 1 piece daub 1 iron nail 1 piece glass

#### **TP37**

Top Height 269.78Depth of top soil 23cmDepth of plough soil 31cmPlough soil contained occasional fragments of sandstone and shale, with occasional flecks of charcoal. Thissealed Roman levels including a moderately well defined linear cut F035 aligned north to south. Thefollowing layers were recorded:

- 034 Dark brown silty clay loam with frequent flecks charcoal and moderate angular sandstones and shale. North to south this layer wedges out to a maximum depth of 28cm visible in north section whereas only 10cm visible in south. The interface of this layer and plough soil 002 above yielded Roman material. 034 seals ditch F035.
- F035 Linear cut, running north to south.
- 036 Mid-grey-brown sandy loam with 50% small to medium angular sandstones and shale. Upper fill of cut F035 and very compact.
- 037 Mottled light orange-brown to mid brown sandy loam with occasional flecks of charcoal, small to medium angular sandstones and shale (maximum 5cm). Primary fill of F035.
- 038 Mottled, friable light to mid-brown sandy loam with very occasional flecks of charcoal and orangebrown iron staining. Cut by ditch F035.

- 039 Light to mid-grey sandy loam with frequent stone inclusions (maximum 12cm long) and occasional flecks of charcoal. Cut by ditch F035.
- 040 Mottled light brown sandy loam. Cut by ditch F035.
- 041 Shale bedrock with some blue-grey clay.

#### Finds

- 001 No finds
- 002 1 sherd post medieval pottery
- 034 1 base sherd grey ware
  - 3 small body sherds orange ware
  - 2 pieces pink tile or daub
  - 2 pieces cream daub
  - 2 lumps unidentified iron
  - 2 pieces bone
- 037 2 lumps unidentified iron
  - 1 broken chert blade (not retouched) (Mesolithic?)

#### **TP40**

Top Height 271.12Depth of top soil 16cmDepth of plough soil 13cmThin plough soil with 30% small fragments of shale. Came off onto shale layer comprising small to medium<br/>angular fragments of shale in loose silty clay loam, with occasional flecks of charcoal. In south west corner<br/>was a large flat gritstone which appear to be deliberately laid. Not excavated further but enough evidence,<br/>including finds, to suggest Roman levels have been encountered.

#### Finds

- 001 4 sherds post medieval pottery
  - 2 fragments of red tile
  - 3 pieces glass
  - 2 body sherds amphora
- 002 2 body sherds amphora
  - 1 small lump unidentified iron

#### TP41

Top Height 272.20

Depth of top soil 22cm

#### Depth of plough soil 19cm

Plough soil was quite dark brown with moderate flecks decayed orange sandstone and small to medium gritstones, occasional flecks charcoal. A medieval pottery sherd came from near top of this layer, with a Roman sherd from near the base. It came off onto dark brown silty clay loam with frequent flecks charcoal. In north west corner occurred an orange-brown layer with coloured clay patches and charcoal. Possible that this would come right across the test pit and it seems similar to material to north of ditch in Trench 5. *Finds* 

- 001 4 sherds post medieval pottery
  - 1 small fragment of red tile
  - 1 piece glass
  - 1 body sherd orange ware or tile
  - 1 lump iron
  - 2 pieces bone
- 002 1 body sherd medieval(?) pottery
  - 3 body sherds red ware (1 decorated)
    - 3 fragments of red tile
    - 2 fragments of iron nail

# Trench 2 Context Descriptions

043 Hearth/oven base.

044 Dark brown sandy loam with very high frequency of charcoal flecking with occasional flecks/small pieces red/burnt clay/daub. Formed as a result of activity around 043.

#### F045 Linear feature

- 046 Dark brown sandy loam with frequent charcoal inclusions, moderate small stones and angular shale. Fill of F045.
- 047 Loose mid-brown sandy loam with moderate stone/shale inclusions and occasional flecks of charcoal.
- F048 Post hole.
- 049 Mid-brown sandy loam with lenses of creamy white clay, moderate small to medium stones (maximum 11cm long). 2 stones positioned on edge on southern side. Fill of F048.

#### Finds

- 19 sherds post medieval pottery (2 rims)
  1 piece coal
  3 pieces clinker
  1 sherds light grey ware
  - 1 fragment of iron nail
  - 1 piece charcoal
- 002 14 sherds post medieval pottery 2 fragments of red tile
  - 5 pieces glass
  - 3 fragments of red tile
  - 4 pieces burnt daub
  - 4 fragments of iron nails
  - 1 piece glass
- 046 6 sherds post medieval pottery
  - 2 pieces glass
  - 1 small fragment of red tile
  - 2 iron nails
  - 1 piece glass
- 049 2 iron nails

### Trench 3 Context Descriptions

- 050 Mid-purple-grey silty clay loam 15% small patches and flecks of decayed orange sandstone, moderate small to medium angular gritstones, very occasional medium round gritstones, occasional flecks of charcoal. Overlies Roman levels in depression. Also present in Trench 4.
- 051 Mid- to dark yellow-brown silty clay loam with 10% small to medium gritstones, very occasional flecks of charcoal. Layer filling in depression created by roadside ditch.

F052 Road.

053 Deposit of densely concentrated small to medium rounded gritstones in matrix of light to midorange-brown sandy loam, with frequent gritstones and occasional flecks of decayed orange sandstone. Make-up of road F052. F054 Road.

055 Dense concentration of 60% small to medium rounded stones, with occasional larger, flat angular stones, in a matrix of light to mid-orange-brown sandy clay loam with occasional flecks and patches of decayed orange sandstone. Make up of road F052.

F056 Roadside ditch.

057 Mid-brown sandy loam, with frequent grit (2-8mm), occasional flecks of charcoal, frequent small to medium stones (many rounded) especially in upper levels of layer. Upper fill of drainage ditch F056.

F058 Post hole.

- 059 Mid-brown silty clay loam, occasional flecks charcoal, very occasional small pebbles, with one large and one small stone both on edge as packing. Fill of post hole F058.
- 060 Mixed bands of mid-grey silt wit frequent flecks of charcoal, mid orange grey sandy silt with moderate flecks of charcoal. Fill of F056.
- 061 Mid-orange-brown sandy silt loam with moderate flecks of charcoal, frequent grit (2-10mm), moderate small to medium stones. Fill of F056.

F080 Gulley.

- 080 Mixed bands of: mid-orange-brown and grey sandy silt with frequent grit (2-5mm) and occasional small to medium stones, light to mid-grey silt. Fill of F080.
- F082 Stake hole.
- 083 Mid-grey silty clay with some charcoal at base. Fill of F082.
- 084 Light to mid-grey silt with frequent grit. Primary fill of F056.

Finds

001	13 sherds post medieval pottery	
	1 piece opaque glass	
	4 pieces clinker	
002	3 sherd post medieval pottery	
	3 sherds Samian ware	
	1 body sherd grey ware	

- 1 body sherd orange ware
- 1 body sherd red ware
- 1 fragment red tile
- 1 bronze pin or scapula?
- 1 fragment iron nail
- 050 1 piece possible whetstone 1 fragment possible carved gritstone 8 fragments red tile
- 051 **2 body sherds white ware** 
  - 2 body sherds orange ware
  - 1 body sherd grey-orange ware
  - 1 body sherd amphora
  - 1 rim sherd black burnished ware
  - 9 fragments red tile
  - 1 piece glass

- 055 1 small fragment red tile
- 057 2 body sherds amphora?
- 081 3 tiny fragments red tile
- 083 Charcoal from base

Trench 4 Context Descriptions

F062 Road.

- 063 Small to medium angular, flat stones forming road surface of F062. Stones set in matrix of light grey silty clay loam with much iron staining.
- F064 Roadside ditch.
- 065 Light yellow-brown sandy silt loam with occasional flecks of decayed orange sandstones. Seals fills of roadside ditch F064.
- 066 Loose deposit of light to mid-brown silty clay loam with 40% small to large angular fragments of shale.
- 067 Mottled layer of light cream sandy silt with 25% small patches iron staining and 15% small fragments of shale. Natural weathered clay.
- 068 Not assigned.
- 069 Not assigned.
- F091 Slot/Post hole?
- 092 Clean, loose mid-yellow-brown silty clay loam under a layer of small to medium patches of cream/ light yellow sandy silt with moderate flecks of charcoal. Fill of F091.
- F093 Roadside ditch?
- 094 Light yellow brown sandy silt with 30% small patches of light grey clay loam with occasional flecks of decayed orange sandstone. Upper fill of roadside ditch F064.
- 095 Alternating thin bands of clean light grey silt or light yellow-brown sand. Fill of F064.
- 096 Mid-grey clay with 15% small patches of deep orange iron staining, occasional flecks of charcoal. Fill of F064.
- 097 Mixed layer of mid-grey-brown sandy silt with 30% iron staining and occasional flecks of charcoal.
- 098 Mid-orange yellow clay with 25% small fragments shale and occasional flecks of charcoal. Primary fill of roadside ditch F064.

### Finds

002 1 piece glass

### **Trench 5 Context Descriptions**

- 070 Friable light to mid-red-brown sandy silt loam with occasional small sandstone and shale fragments, and charcoal flecks. Disturbed layer at based of plough soil.
- 071 Mid-brown silty clay loam with occasional light grey silty clay with small to medium patches of small

sandstone and shale fragments, occasional flecks of charcoal. Layer sealing Roman occupation levels and formed immediately after site's abandonment.

- 072 Layer of dense charcoal formed over top fill of ditch F090.
- 073 Same as 071.
- 074 Compact sticky light grey silty clay representing top fill of ditch F090.
- 075 Friable light grey silty clay loam with 30% small to large patches of dark brown silty clay loam, 20% small shale and sandstone fragments, occasional flecks of charcoal. Deposit occurring north of ditch F090.
- 076 Friable dark grey-brown silty clay loam with 50% small shale fragments (many burnt red), occasional small sandstones and gritstone fragments, occasional flecks of charcoal. Directly over and related to 072.
- 077 Mid-grey-brown silty clay with occasional lenses of orange sand. Fill of ditch F090.
- 078 Mid-grey silty clay loam. Fill of F090.
- 079 Light to mid-grey-brown silty clay with 20% medium lenses of orange sand (average 5mm thick). Fill of F090.
- 085 Loose orange sand. Primary fill of ditch F090.
- 086 Light orange-brown silty clay loam. Fill of F090.
- 087 Light grey-cream silty loam with occasional fragments of shale. On north lip of ditch F090.
- 088 Compact mid-grey silty clay with 30% flecks of charcoal and occasional small fragments of sandstone. Thin layer south of ditch F090.
- 089 Mid- to light grey silty clay loam with 20% small fragments of shale, occasional flecks of charcoal. Part of deposit right against north edge of trench. May be a fill of a feature (not excavated).

F090 Ditch.

### Finds

- 001 6 sherds post medieval pottery
- 002 6 sherds post medieval pottery (1 rim)
- 070 1 body sherd coarseware
- 071 2 pieces gritstone (quern?)
- 073 2 rim sherds grey ware
- 075 1 body sherd decorated Samian ware 1 body sherd rusticated ware 1 iron nail head

### THE TANGS FIELD

### TP 100

Top Height 266.43

Depth of top soil 17cm

Depth of plough soil 9cm

Shallow top soil with frequent small fragments of sandstone and coal and quite compact. Shallow plough soil layer of mid-brown silty clay loam with frequent small fragments of sandstone also quite compact. This came off onto a *c* 10cm deep layer of small to medium angular sandstones (maximum 12cm long) in a matrix of plough soil type material. A test hole was dug in the south-west corner and revealed a lower layer of

clean mid-yellow-orange gritty sand of *c* 10cm depth which in turn overlay a darker grey-yellow gritty sand which appeared to fill a linear depression bounded to the east by natural bedrock and to the west by coursed blocky stone (3 courses deep). This may represent a field drain or roadside drain or could just be a natural fissure in the bedrock.

Finds

001 2 sherds post medieval pottery

- 1 piece glass
- 1 piece glass waste or slag
- 002 1 rim sherd post medieval pottery

#### TP 101

### Top Height 265.70

#### Depth of top soil 23cm

#### Depth of plough soil 26cm

Occasional flecks/small pieces coal and charcoal in plough soil which came off onto mottled deposit of 30% small to medium patches light yellow/cream sandy silt loam with 30% small to medium patches midorange-brown silty clay loam and 20% small to medium patches mid-brown-grey clay loam with moderate flecks of charcoal. This was found on excavation to be 25cm deep and sealed archaeological features. In the south west corner of the test pit was a concentration of stones, many of which were pitched and could be interpreted as packing for a post hole. Running from the south-east corner towards the north west corner of the test pit was a linear feature terminating in a circular area of loosed material with a stone (12cm long) on edge on its east side. The fill of the slot was mottled, comprising light brown silty clay loam with 25% small patches light yellow/white/cream silty clay, two concentrations of small to medium stones (some pitched) to east and south, and moderate flecks of charcoal. A possible post pipe was evident as a loose fill similar to the slot fill but totally stone free. On either side of this feature was natural mid-orange-yellow silty clay loam with frequent small to medium gritstones.

Unfortunately, no dating material came from the top of these features which were not excavated or the layer above. However, given their depth and character, it is certainly possible that these features could belong to the Roman period of activity.

Finds

- 001 2 pieces coal
- 002 3 sherds post medieval pottery
  - 1 fragment of tile
  - 1 piece coal

### TP 102

Top Height 264.79

Depth of top soil 22cm

#### Depth of plough soil 15cm

Plough soil came off onto natural mid-yellow-brown clay loam with 50% small to medium fragments shale, occasional medium angular gritstones. This layer was sondaged in SW corner to depth of 24cm when bedrock of shale encountered. No Roman levels.

#### Finds

- 001 6 sherds post medieval pottery
  - 1 large iron nail
  - 1 piece post medieval dark green bottle glass
  - 1 fragment of red tile
  - 2 pieces clay pipe stems
  - 1 piece slag
- 002 2 sherds post medieval pottery
  - 1 fragment cream tile/brick (unknown date)
  - 2 pieces clay pipe (1 stem, 1 bowl)

### **TP103**

 Top Height 263.91
 Depth of top soil 22cm
 Depth of plough soil 8cm

 Natural mid-yellow clay loam with 30% small fragments of shale encountered beneath a shallow plough soil layer. No Roman levels.
 Finds

- 001 4 sherds post medieval pottery (incl. 1 base, 1 rim)
  - 1 piece glass
  - 2 pieces clay pipe stems
  - 1 piece clinker
- 002 No finds

# **TP 104**

#### Depth of plough soil 25cm Top Height 263.00 Depth of top soil 25cm Plough soil came off onto mottled layer of 40% small to medium patches light cream/white silty clay with 40% small to medium patches light brown silty clay loam, moderate small fragments shale, occasional flecks of charcoal. The character of this material is similar to that in TP101 and the greater depth of plough soil here suggests this material may be an archaeological deposit; however, there are no finds or characteristics to indicate its origin. A sondage in the south west corner found bedrock (shale) at 8cm depth. Finds

- 1 early post medieval bronze button 001
  - 9 sherds post medieval pottery (4 rims, 1 handle)
  - 1 piece glass waste or slag
- 002 No finds

# **TP105**

Depth of plough soil 10cm Depth of top soil 20cm Top Height 261.94 Natural of mid-yellow clay loam with 50% fragments of shale. No Roman levels. Finds

- 001 1 piece translucent brown flint blade (not retouced) 11 sherds post medieval pottery (1 rim) 5 fragments tile (3 possibly Roman)
- 002 8 sherds post medieval pottery (1 rim)
  - 1 fragment tile (possibly Roman)

# **TP 106**

Depth of top soil 15cm Depth of plough soil 10cm Top Height 260.78 Natural of mid-yellow clay loam with 40% large patches mid brown loam, occasional small to medium patches light yellow/cream silty clay, very occasional small to medium angular gritstones. No Roman levels.

Finds

- 001 6 sherds post medieval pottery (2 base, 1 rim)
  - 2 pieces clear glass
  - 1 fragment of tile
  - 1 piece clay pipe stem
- 002 1 piece clay pipe stem

# **TP107**

#### Top Height 259.81 Depth of top soil 19cm Depth of plough soil 5cm Characterised by shallowness of plough soil. Natural of mid-yellow silty clay loam with moderate small to medium sandstones. Some evidence for root disturbance in the form of small patches of humic black soil. No Roman levels.

# Finds

- 001 4 sherds post medieval pottery (1 rim)
  - 1 piece bone
- 002 No finds

# **TP108**

Top Height 258.99 Depth of top soil 17cm Same as TP107. No Roman levels. Finds

Depth of plough soil 4cm

- 001 5 sherds post medieval pottery (1 rim) 1 fragment of cream tile (Roman) 1 piece clinker
- 002 3 sherds post medieval pottery

#### **TP109**

Top Height 258.35Depth of top soil 20cmDepth of plough soil 8cmNatural of mid-yellow clay loam with 30% small fragments of shale. No Roman levels.Finds

- 001 5 sherds post medieval pottery
  - 1 piece glass slag/waste 2 pieces clay pipe stem
  - 1 piece bone
- 002 No finds

# **TP110**

Top Height 257.71Depth of top soil 16cmDepth of plough soil 4cmSame as for TP109 but with occasional small to medium rounded gritstones. No Roman levels.Finds

001 6 sherds post medieval pottery (2 rims)

002 No finds

# **TP111**

Top Height 266.76Depth of top soil 21cmSame as TP113. No Roman levels.Finds0012 sherds post medieval pottery<br/>2 pieces glass (1 Roman worked?)<br/>1 piece clay pipe stem

- 3 pieces of slag
- 002 5 sherds post-medieval pottery 1 piece of slag

# **TP112**

Top Height 266.81Depth of top soil 20cmDepth of plough soil 10cmThe base of 001 diffuses into 002 which is only shallow here. There seems to be much root activity. Plough<br/>soil comes off onto mid-grey-yellow silty clay loam with 40% small fragments shale, moderate small to grey<br/>gritstones. This layer was overdug by c 5cm to check if it was natural and indeed it became more and more<br/>shaley with depth inferring that it is natural sub-soil. No Roman levels.

001 2 sherds post medieval pottery

002 No finds

# **TP113**

Top Height 266.86 Depth of top soil 20cm

Plough soil was quite mixed with much dark grey humus in small patches representing root activity. 002 came off onto mid-yellow-orange clay loam with 30% small fragments shale, 15% small sandstone, occasional flecks of charcoal. This was a thin layer overlying natural which occurred as mid-yellow clay loam and 50% shale. No Roman levels.

Finds

- 001 8 sherds post medieval pottery (1 rim) 3 pieces glass
  - 2 pieces clay pipe bowl

002 No finds

# Depth of plough soil 6cm

Depth of plough soil 13cm

### **TP114**

#### Top Height 266.68

Depth of plough soil 16cm Depth of top soil 20cm Plough soil overlay a mixed layer of mid-cream-orange silty clay loam with moderate small to medium sandstones, moderate dark grey patches silty clay loam (root activity), moderate medium to large patches mid-grey-brown clay loam, occasional small patches light cream sandy silt. This layer was not investigated further but could be an archaeological deposit.

- Finds
- 1 sherd post medieval pottery 001
  - 1 piece charcoal
- 002 5 sherds post medieval pottery
  - 1 piece glass
  - 2 fragments of tile
  - 1 piece clinker

#### **TP115**

#### Depth of top soil 23cm

#### Depth of plough soil 16cm

Depth of plough soil 13cm

Depth of plough soil 13cm

Top Height 266.37 Removal of plough soil revealed natural yellow-orange clay loam in 2/3 of the test pit, on its eastern side, but also a possible feature against the east side of the test pit. The feature was filled with light to mid silty clay loam with 15% small patches light brown or cream or white sandy silt, occasional flecks decayed orange sandstone, very occasional flecks charcoal, very occasional small sandstones. The feature appeared to be part of a pit or gulley with its west side not visible but the eastern edge clearly defined against the natural at 36cm across the test pit. On excavation it was found to be only 5cm deep, with a fairly flat base and near vertical edge. May be slot for timber building.

Finds

- 14 sherds post medieval pottery (2 rim) 001
  - 1 fragment of tile
  - 2 pieces clinker
- 002 No finds Fill of slot beneath 002 1 iron nail head (Roman?)

### **TP116**

Depth of top soil 21cm Top Height 266.61 Same as TP113. No Roman levels. Finds

- 001 5 sherds post medieval pottery 4 pieces iron hoop (post medieval?)
- 002 7 sherds post medieval pottery (1 rim) 2 pieces glass (1waste) 2 fragments of tile (1 Roman) 1 piece clinker

### **TP117**

Top Height 266.73 Depth of top soil 20cm Same as TP113. No Roman levels. Finds 3 sherds post medieval pottery (1 rim) 001 002 No finds

### **TP118**

Depth of top soil 25cm Depth of plough soil 25cm Top Height 267.81 Deeper top and plough soil than in other test pits in this area. 002 came off onto natural mid-yellow-orange clay loam. In south west corner was a spread of light to mid-brown silty clay loam with 20% small to medium sandstones with 2 large pieces of charcoal. This may be a feature.

#### 62

#### Finds

- 001 15 sherds post medieval pottery (4 rim, 1 base)
  - 2 fragments iron nails
  - 1 iron hook
  - 2 pieces clay pipe stem
  - 1 piece slag
- 002 No finds

#### **TP119**

 Top Height 266.79
 Depth of top soil 19cm
 Depth of plough soil 8cm

 Shallow 002 comes off into natural mid-orange clay loam with much humic mottling from root activity, and moderate small sandstones. No Roman levels.
 Top International Statement Sta

# Finds

- 001 14 sherds post medieval pottery (1 rim)
- 002 12 sherds post medieval pottery
  - 2 fragments of tile
  - 2 pieces clay pipe stem
  - 1 piece glass

### **TP120**

Top Height 267.04Depth of top soil 18cmDepth of plough soil 5cmVery thin topsoil covered a dense concentration of stones which were investigated and recorded as part ofTrench 10.Finds

#### Finas

- 001 11 sherds post medieval pottery (1 rim)
  - 1 fragment of tile
  - 1 piece glass
  - 5 pieces coal
- 002 2 sherds post medieval pottery

### **TP121**

Top Height 267.29Depth of top soil 18cmDepth of plough soil 5cmSame as TP120.Finds00111 sherds post medieval pottery0028 sherds post medieval pottery (3 rims)

- 1 pottery waster
- 2 fragments of tile
- 1 piece glass
- 2 pieces coal
- 1 piece clinker

### Trench 10

No contexts assigned but see main text for description of stony deposits under 002. Finds

001/ 171 sherds post medieval pottery (23 rims, 2 bases, 2 handles)

- 002 6 fragments of tile
  - 14 pieces of glass
  - 5 pieces of coal
  - 9 pieces of clay pipe stem
  - 1 piece clinker
  - 1 sherd amphora