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## **Southampton Archaeology Unit**

Final Report 959

### **A Late Iron Age — Early Roman site at Old Park Farm, Waterlooville**

WINCM:AY354

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Client: Taylor Wimpey



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## **A Late Iron Age — Early Roman site at Old Park Farm, Waterlooville**

By JI Russel MIFA

Site code	WINCM AY 354
Archaeology Unit report	959
Ordnance Survey grid reference	467000 110400 (Centre)
Planning permission reference number	05/00500/OUT

### **1. Summary**

An archaeological excavation was carried out at Old Park Farm, Waterlooville at Ordnance Survey grid reference 467000 110400 between April and November 2008 in advance of a 38.31ha mixed development by Taylor Wimpey plc. The excavation involved the stripping of 29,647sq m of grassland in areas where geophysical survey and evaluation trenches had located archaeology.

The centre of the site revealed a small farmstead marked by a complex Late Iron Age—early Romano-British ditch system, cut into the underlying London Clay. The earliest phase was marked by a scatter of pits and two ditches possibly forming a funnel shaped entrance into an enclosure just outside the excavated area. The next phase, mid-1<sup>st</sup> century AD, was marked by a single curvilinear ditch with evidence for a structure inside a small enclosure, together with some waterholes. This was replaced with a sub-circular enclosure placed fairly symmetrically over the earlier curvilinear ditch. The ditches may have formed a defence around the settlement, delineated fields or stock enclosures, or functioned as drains to keep the central area of the settlement dry. A number of large deep pits seem to have functioned as waterholes, as they contained little evidence for the deposition of cess or domestic rubbish. Most of the artifacts recovered were found in the ditches, which showed evidence of fairly rapid silting, and some re-cutting. One shallow pit within the enclosure had been filled with the smashed and burnt fragments of two querns and a Southern Spanish amphora; it may have been a ritual feature. In the south part of the site a stream had created a gravel plain which was a focus for activities which resulted in large amounts of burnt flint being tipped into natural hollows in the gravel, it was perhaps used for cooking.

The focus of the settlement then shifted slightly north where the ditches and waterholes of a sub-rectangular enclosure showed evidence of occupation into the 2<sup>nd</sup> century AD, although the ditches may have originally been contemporary with the sub-circular enclosure. The ditches of both enclosures were filled by the mid-2<sup>nd</sup> century, the upper levels containing a number of artifact-rich assemblages marked by large amounts of pottery and quern fragments. A few fragments of slag suggest blacksmithing took place during the later phases of the site.

Preservation of organic material was poor, with only animal teeth enamel surviving but the site produced much pottery covering the period 40-200AD, together with greensand querns and a few loom weights. There were a few fragments of bottle glass and a glass wave bead, and a few fragments of iron. There were no objects of copper alloy or coins of any sort. The pottery was almost exclusively local with Rowland's Castle Ware dominating the assemblage. Non-local British wares formed 0.1% of the

pottery assemblage by sherd count and imports formed 2.4% of the assemblage suggesting the farmstead was situated towards the lower end of the social scale.

After the enclosure ditches had finally silted up settlement seems to have ceased but later, perhaps in the late Roman period, a large deep waterhole was dug at the lowest point of the site on the crossing point of two early ditches. It was provided with a flint-cobbled surround which would have prevented stock sinking into the mud. A second waterhole, perhaps for use by the stock herders, was dug nearby.

During the medieval period the area became heavily wooded and formed part of the Forest of Bere. This was cleared in the 19<sup>th</sup> century and the area was subject to a programme of field drainage to try and bring it back into agricultural use.

## **2. Introduction**

2.1 As part of the West of Waterlooville Major Development Area (MDA) George Wimpey UK Ltd submitted plans for the development of Old Park Farm, Waterlooville in the northern part of the MDA, adjacent to the B2150 Hambledon Road and the Brambles Business Park (fig 1). The proposed scheme consisted of the development of land for residential (450 units); live/work (24 units); employment (10 ha including B1, B2 and B8); mixed use including retail, food and drink, financial/professional and health (2.46 ha); open space/recreational areas (17.18ha) and the construction of two accesses from Hambledon Road.

2.2 The MDA fell partly within Winchester District and partly within Havant Borough and the Winchester District Historic Environment Team Archaeologist and the Hampshire County Council Historic Environment Team (in their role as advisors to Havant Borough Council) were involved at an early stage.

2.3 As part of the Environmental Statement a desk-based study was undertaken to identify known heritage features within the site and a 2km radius surrounding it. The only upstanding heritage features were a number of hedgerows that could be seen on the 1842 tithe map. These were to be partially removed during the development but the impact was to be mitigated by new planting.

2.4 A programme of archaeological evaluation in the form of geophysical survey (2004) and trial trenching (2005) was agreed with the Archaeological Officers at Hampshire County Council (HCC) and Winchester City Council (WCC). The evaluation revealed six Romano-British or probable Romano-British ditches, two modern ditches, two undated ditches, two undated postholes, three undated shallow pits, an area with patches of burnt flint and two palaeochannels.

2.5 As part of the application Taylor Wimpey recognised that the archaeological remains might be affected by construction activities for the mixed use development and landmark buildings, intensive planting for the public open space and construction of the access road, and agreed to mitigate the impact of the development via a programme of archaeological work. The proposed mitigation strategy consisted of preservation by record of known archaeological remains which would be affected by certain areas of the development.

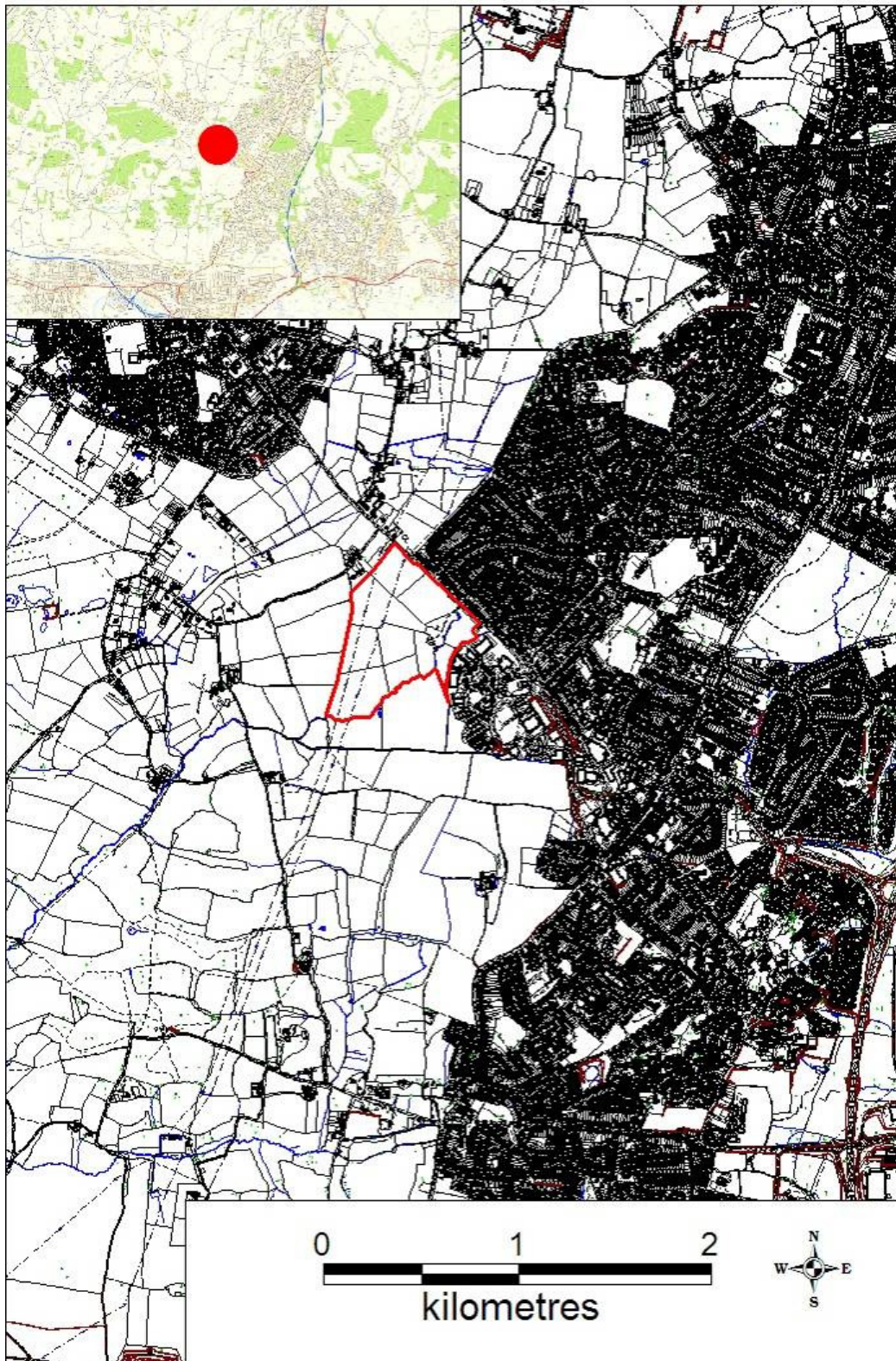


Figure 1: Site location.

2.6 Outline planning permission (05/00500/OUT) was granted in January 2008 which included an archaeological planning condition (number 32) which stated *“Unless otherwise agreed in writing by the local planning authority, no phase of development shall commence until the applicant has undertaken the implementation of a programme of archaeological work in accordance with a written scheme of investigation which has been submitted by the applicant and approved by the Local Planning Authority in consultation with Hampshire County Council.”*

2.7 Taylor Wimpey commissioned the Archaeology Unit of Southampton City Council to undertake a programme of archaeological mitigation excavation in the form of a ‘strip and map and record’ exercise comprising three large trenches (identified as Areas A-C) (fig 4) (Taylor Wimpey 2008). Work commenced on 21/04/08.

2.8 The excavation was directed by J Russel MIFA. Site supervisors were G Dall, B Shuttleworth, G Thompson MPhil and E MacDonald MA. Specialist work was carried out on the artifacts by: Dr M Allen (environmental remains and soils), R Broadley (glass), MF Garner BA MIfA (worked flint), S Hamilton-Dyer (animal bone), Dr AD Russel MIfA (pottery, ceramics, ironwork).

### **3. Geology & Topography**

3.1 The site is bounded by the B2150 to the north-east, housing and an industrial estate to the east and farmland to the west and south. The Old Park Farm stream flows through the southeast of the site.

3.2 The site generally slopes gently to the south. The height above sea level varied from 44m above Ordnance Datum at the north to 31m OD at the south, with a distinct area of slightly raised ground in the north-west corner of the development area. The fields were generally divided by hawthorn and blackthorn hedges. Two lines of electricity pylons crossed the site from north to south along its western side, and there were a number of large oak trees which curtailed the areas excavated.

3.3 The underlying geology was London Clay with superficial deposits of Head. Full analysis of the soil profiles on the site was carried out and is presented in Section 8.1 below

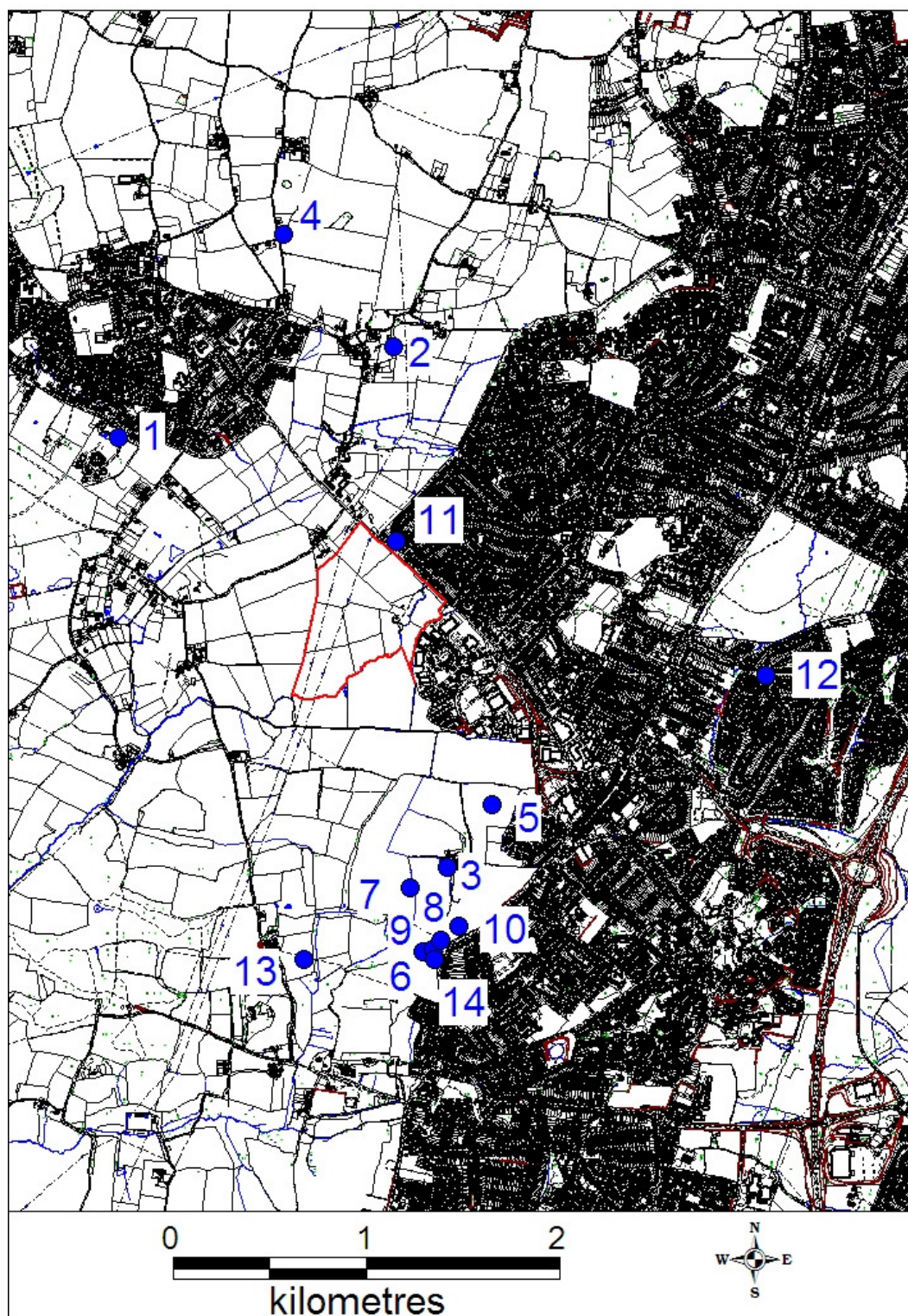
### **4. Archaeological & Historical Background**

4.1 The area of the site lay within the medieval Forest of Bere, until recently heavily wooded, and evidence of ancient settlement is uncommon. A search was made of the Hampshire County Council Archaeology and Historic Building Record and the Winchester City Council Historic Environment Record for all medieval and earlier sites within 2km of the Old Park Farm site. This yielded 16 sites, shown in Figure 2. These sites were as follows:

1 HER 1786 SU 6569 1122

A sandstone quern stone and New Forest ware jars were found at a brickworks in Denmead.





**Figure 2: Archaeological sites in the vicinity of the Old Park Farm site.**

2 HER 1831 SU 6712 1169

A Neolithic axe was found at Anmore.

3 HER 4376 SU 674 090

It has been claimed that Plant Farm has medieval origins and may have been the location of a former Grange of Southwick Priory, but recent excavations around Plant Farm have found little evidence for a medieval origin, the nearest medieval evidence being a sand quarry 500m south of the farm (No 9).

4 HER 5751 SU 6655 1228

Finds from Saltbox Barn, Denmead. The finds included a probable mesolithic tranchet axe (Thames Pick) and a few sherds of medieval pottery.

5 HER 7634 SU 67632 09320

Possible prehistoric ditch terminus, 345m NNW of Plant Farm. It contained large amounts of burnt flint, suggesting a prehistoric date.

6 HER 7636 SU 67269 08557

Middle-Late Iron Age domestic settlement, 250m north of Purbrook Gardens. Middle to Late Iron Age settlement activity concentrated on a sub-square ditched enclosure. The enclosure is probably an area of domestic settlement, and was sub-square in shape (41m east-west, 47m north-south) with a central apex on its south side. An outer ditch was identified on the western and northern sides of the enclosure, forming a western access to a northern external ditched area. Artefactual evidence suggests that the outer ditch may have been constructed earlier than the inner enclosure ditch. In Trench 469, the inner enclosure ditch and outer ditch were c.4.3m apart. Artefacts recovered from the ditches included Middle Iron Age saucepan pots, Late Iron Age bead-rimmed ceramics, undiagnostic prehistoric flint-tempered ceramics, charcoal, burnt flint, fired clay, and briquetage.

7 HER 7638 SU 6720 0892

Late Iron Age/Roman rectangular enclosure and associated settlement features, west and south-west of Plant Farm. In Area C (Zone 1), some 300m west of Plant Farm, two ditches contained significant amounts of charcoal, burnt flint, fired clay and Late Iron Age/Roman pottery. Such large amounts of material can be seen as evidence of a settlement in the immediate vicinity. The ditches meet, perhaps forming a south-western corner of a small enclosure that was close to a farmstead or dwelling. In Area C (Zone 2), 280m south-west of Plant Farm, a number of trenches contained archaeological features comprising small ditches, shallow pits and hearths. One of the hearths and the majority of the other features were dated to the Late Iron Age/Roman period. Again the density of finds and domestic refuse indicates a close proximity to settlement. Located at the northern end of Area D (Zone 3), some 120m south-west of Plant Farm, a series of large ditches, dated by ceramics to the Late Iron Age /Roman period, appear to define a rectangular enclosure. Ditch 32506, aligned south-west to north-east, was 2.42m wide, 1.19m deep, with steeply sloping sides and a flat base. A further large ditch 32604 was 3.4m wide, 1.5m deep, and was aligned south-west to north-east. Ditch 32704 was 2.4m wide, 1.40m deep, and was aligned north-south. It was steep-sided and regular, with a distinctive channel at the base, a profile often associated with Roman defensive ditches. Small quantities of Late Iron Age/Roman ceramics were recovered from some of these ditches. Further ditches, hearths/pits and tree-throws were located within the area, produced varying quantities of ceramics, charcoal, burnt flint, as well as fired clay and some vitrified material.

8 HER 7640 SU 6737 0863

Late Iron Age/Roman ditches, southern end of Area D (Zone 4), some 410m south of Plant Farm. Although many of these features were undated, Ditch 30404 (0.98m wide, 0.45m deep) produced small amounts of Late Iron Age/Roman ceramics. Ditch terminus 30503 (1.0m wide, 0.38m deep and aligned NNW-to SSE) contained one fill which produced ash, charcoal, fired clay and very large quantities of Late Iron Age/Roman pottery. At the southern tip of Area D (Zone 5), 460m south of Plant Farm, ditch 35104 was 2.03m wide, 0.71m deep, and was aligned approximately north-south. Small quantities of ceramic building material and Late Iron Age/Roman pottery were recovered from the top fill.

9 HER 7641 SU 6733 0858

Medieval sand quarry. A large, roughly sub-circular pit with steep stepped sides and a flat base was revealed c. 500m south of Plant Farm. The pit was 4.85m long, 2.21m wide and 1.85m deep and roughly sub-circular, with steep stepped sides and a flat base. The fills of the pit produced moderate quantities of animal bone, burnt flint, nails, slate, mortar, fired clay, an iron pin and pottery of 14th-15th century date; the upper fills contained large dump deposits of flint nodules. The underlying geology suggests that the pit may have been a sand quarry. Two large post holes, also of medieval date were also located, one containing a post-pad of sandstone.

10 HER 7642 SU 6746 0874

Romano-British sub-circular enclosure and related features, south east of Plant Farm. In Area J (Zone 11), 300m south-east of Plant Farm, evidence of Romano-British activity was concentrated at the southern part of the area, where the land was highest. It was centred on a probable sub-circular enclosure, some 80m in diameter, and defined by a number of enclosure ditches. Other associated features include pits, postholes and a hearth. In Area K (Zone 12), 280m south of Plant Farm, further Romano-British features interpreted as drainage ditches and field boundaries may be related to the enclosure.

11. HCC 26444 GR 67120 10690

A Neolithic axe head, flaked with a polished edge, recovered from a back garden.

12. HCC 26470 GR 68918 09994

A Neolithic axe of blue-grey stone (sandstone or dolerite) with ground point found in Highfield Avenue.

13. HCC 57128 GR 66666 08535

A prehistoric oval enclosure found during geophysics survey.

14. HCC 57131 GR 67330 08531

Enclosures found during geophysics survey.

4.2 An archaeological evaluation of the area was carried out in the form of geophysical survey (2004) and trial trenching (2005) by Wessex Archaeology. In total forty-six trial trenches were excavated representing 0.73% of the site (fig 3). The evaluation revealed six Romano-British or probable Romano-British ditches, two modern ditches, two undated ditches, two undated postholes, three undated shallow pits, an area with patches of burnt flint and two palaeochannels. The Romano-British features were concentrated on slightly higher ground at the north-west of the Site. The natural sequence of deposits was a thin ploughsoil over subsoil on silty clay or flint gravel.



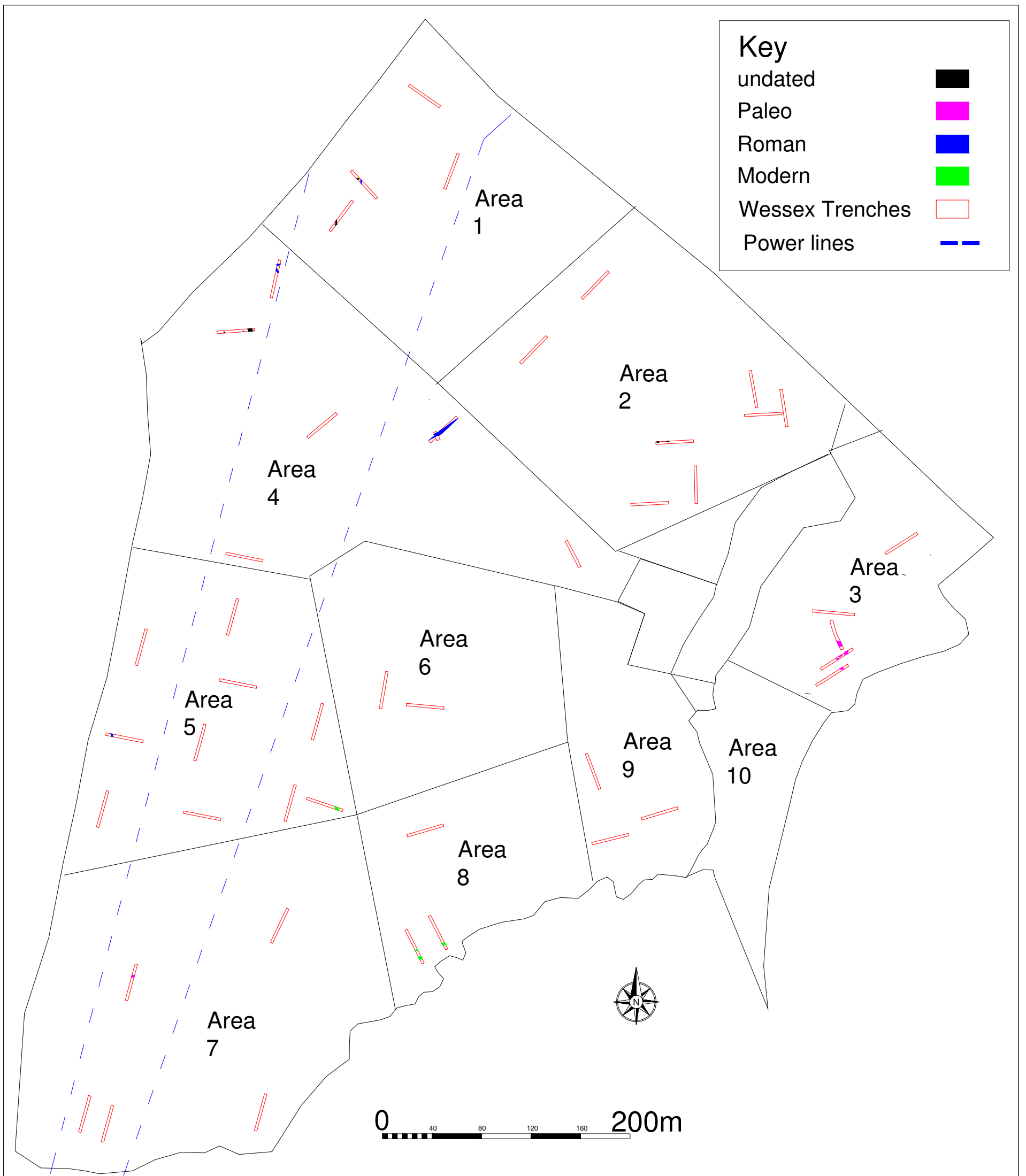


Figure 3: Plan of the site showing the Wessex Archaeology evaluation trenches.

## **5. Aims of the investigation and research agenda**

5.1 The main aims of the excavation and the research agenda were set out in the Written Scheme of Investigation (2008) as approved by Winchester City Council and were as follows:

To determine the extent, condition, nature, character, quality, and date of any archaeological remains encountered, as dictated by current best practice. The preceding evaluation has indicated the presence of remnants of a field system, some elements probably Roman, some undated, and it is the intention of this investigation to expose the extent of the ditches therein where development would necessitate their removal.

To this end, the investigation will consist of a programme of archaeological fieldwork comprising a 'strip and map' excavation concentrated around the area of the Roman and undated ditches.

In general the aims of the investigation were to:

Record the nature of the main stratigraphic units encountered in terms of their physical composition and their archaeological formation (primary deposits, secondary deposits etc);

Record the overall presence and survival of structural remains relating to the main periods of occupation revealed;

Record the overall presence and survival of the main kinds of artefactual evidence (including pottery, brick, tile, stone, glass, metal, bone, small finds, industrial residues etc.), and collect representative samples;

Record the overall presence and survival of the main kinds of ecofactual and environmental evidence (including animal bone, human bone, plant remains, pollen, charcoal, mollusca, soils etc), and collect representative samples

The specific aim of the investigation was to fully characterise and date the ditches and features exposed in the evaluation phase and to place them within the landscape.

### **5.2 The Research Agenda**

5.2.1 The evaluation of the Site had shown that the most likely periods to be represented were the late Iron Age and the early Roman. The Solent-Thames Archaeological Research Framework provided a framework for Berkshire, Buckinghamshire, Oxfordshire, Hampshire and the Isle of Wight. For the county of Hampshire Period-Based Assessment Reports existed for the Palaeolithic, the Upper Palaeolithic and Mesolithic, the Neolithic and Early Bronze Age, Roman, Early Medieval, Medieval and the Post-Medieval.

5.2.2 Research topics in the Roman Period-Based Assessment Report (Massey 2006) that the Old Park Farm site were thought to be able to were:

Inheritance

- Understanding the rural Late Iron Age to Roman transition in terms of continuity of settlement pattern.
- Clarifying the role played by unenclosed settlement within the processes of later Iron Age and Romano-British societal change.

The Role of Material Culture

- Understanding the processes of social change and acculturation during the later Iron Age, and for the emergence of new identities and behaviours.

Chronology

- Understanding of the chronology and ranking of rural settlement forms, and the implications of spatially significant patterns of contemporaneity.

Landscape and Land Use

- Providing information on changing patterns of landscape use, cropping regimes, and agricultural systems through extensive sampling of palaeoenvironmental data from small-scale archaeological interventions.
- Investigation and sampling of sites on clay soils to ascertain how intensively these areas were exploited and provide an indication of the complementary economic relationships between different physiographic regions. i.e. was woodland resource exploitation more economically important than agriculture on the clay lands?
- To investigate the evidence for different land-use patterns in the later Iron Age and Roman periods, based on topography, soil type, distance from urban centres etc. i.e. evidence for extensive ranching activity.
- To assess the evidence for economic specialisms within the villa landscape and the possible extent of villa estates.

Social Organisation

- The targeting of rural settlement forms to further understand the implications of differentials in materiality (i.e. presence of imports, fine wares etc) for understanding social rank and regional patterns of social differentiation.
- To assess the material evidence from villa and non-villa rural settlement as basis for understanding social hierarchy and its spatial expression.

Settlement

- To enhance understanding of the differential chronologies of Iron Age settlement forms and how these may relate to soil type, topography and established evidence for changes in climatic conditions.
- To establish estimates for the numbers and extent of unenclosed rural settlements in the later Iron Age and Roman periods.

- To enhance understanding of the intra-settlement character and economic role of enclosure complex settlements in the later Iron Age and early Romano-British periods, and their relationships to *oppida*.

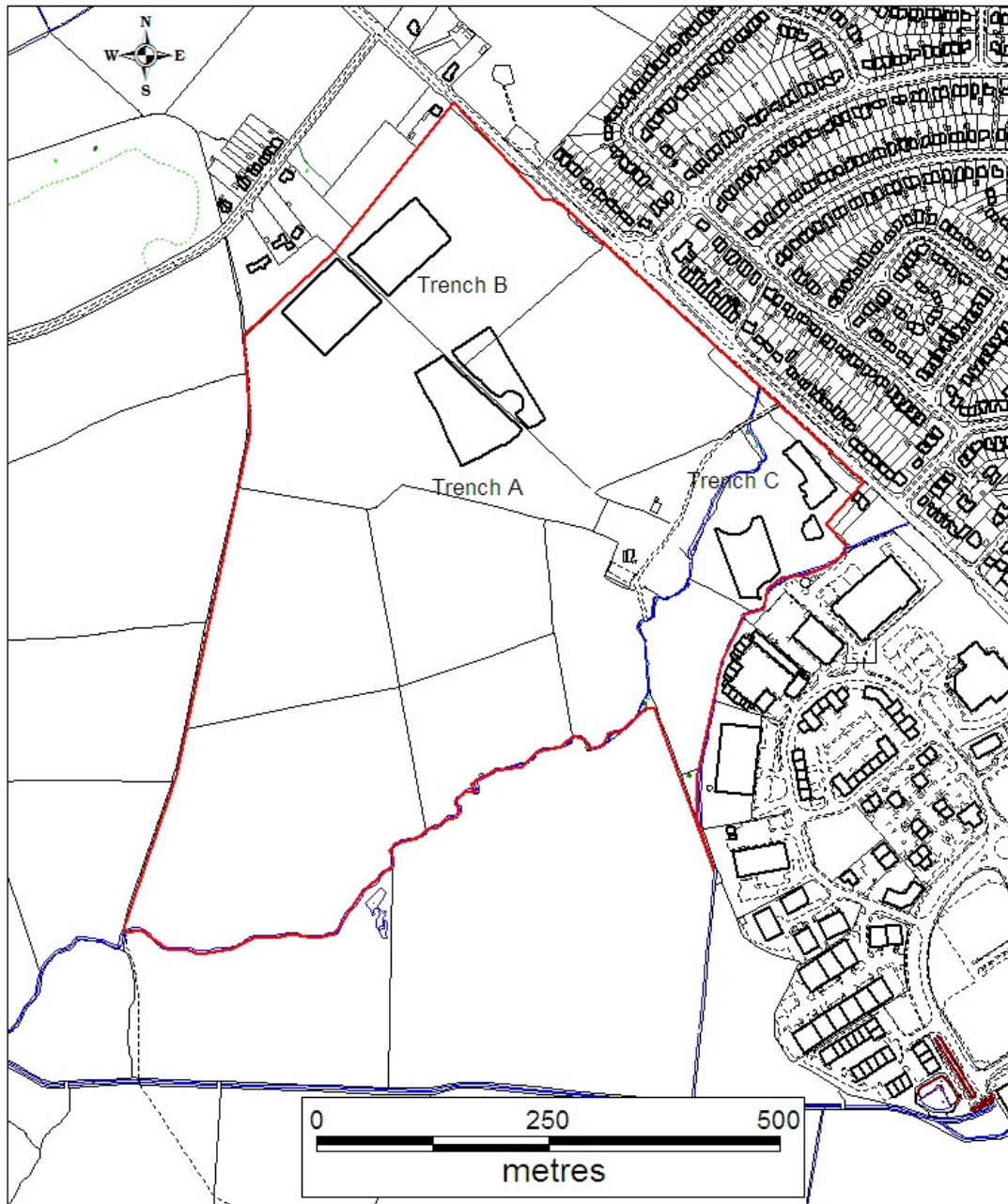
### Material Culture

- To enhance understanding of the rapid development of *archaeologically visible* material culture in the later Iron Age, and its role in articulating social relationships, identities and patterns of acculturation
- To investigate the role of Roman material culture within the broader processes of Romanisation, and the evidence for culture change in early Roman Hampshire.
- To enhance understanding of discrepant material culture patterning between urban and rural sites and between villa and non-villa sites, and its implications for socio-economic relationships and for the persistence of non-Roman tastes and patterns of behaviour.
- To enhance understanding of regional distinctiveness of aspects of material culture patterning in the later Iron Age and Roman periods, and its possible implications for “tribal” or *civitas* identity.

5.2.3 It was considered that providing data to progress most of these research topics would principally depend on the collection of well-preserved and well-dated assemblages of artifacts and ecofacts.

## **6. Excavation methodology**

6.1 The position of the three trenches is shown in Figure 4. Trench A was 11,290sq m, with an unexcavated tree protection zone running diagonally across it. Trench B was 12,670sq m in size, also with an unexcavated tree protection zone running across it. Trench C consisted of three trenches totalling 5687 sq m; only the western trench of the three contained archaeological evidence and the other two trenches were sterile and will not be reported on further.



**Figure 4: The site outlined in red showing the location of the three trenches A, B, and C.**

6.2 The excavation method consisted of stripping off the top soil and plough soil until archaeology or the natural was revealed. All machining was carried out by experienced operators using large tracked excavators with wide toothless buckets. Some 150mm of topsoil was removed and stockpiled for re-use. The plough soil beneath was carefully stripped off in spits, each of some 20mm, until archaeological features were revealed. The machining was carried out under constant archaeological supervision. The exposed archaeological and natural features were cleaned and planned, all features being located to the OS grid using GPS. Spray paint was used to mark the features. At the request of the Local Planning Authority as soon as an area had been stripped it was subject to a metal detector survey with a Laser Scout and all metalwork

was removed from features. Individual features and their fills were allocated context numbers and photographic and written records were made.

6.3 It was agreed with the Local Planning Authority that a sufficient number of the revealed archaeological features were to be excavated. The minimum percentage of each type of feature was:

<b>Feature Type</b>	<b>Minimum sample percentage</b>
Stake-hole	100%
Post-hole or pit (less than 1.5m)	50%
Pit (greater than 1.5m)	25%
Linear (less than 5m)	20%
Linear (greater than 5m)	10%
Funerary	100%

6.4 No deposits were to be entirely removed unless this was either unavoidable, required as part of the above sampling strategy or agreed to by HCC/WCC and the Client (SCC WSI 3/6/08).

6.5 All archaeological features were hand-excavated. All records were made using the Southampton Archaeological Unit recording system. Soil colours were recorded using Munsell Soil Colour Charts, 1988 edition.

6.6 Environmental samples of soils and archaeological deposits were taken as advised by Dr M Allen, the Environmental Co-ordinator for the site, who visited the site once the trenches had been stripped and advised on the recovery of samples and inspected the buried soils and sediments.

6.7 Prior to the excavation the site had been used as pasture which was apparently prone to becoming seasonally waterlogged during wetter weather. Prior to this use the area had been ploughed, and the presence of blocked tubular clay land drains suggests the area had been ploughed for at least a century, removing and disturbing the upper parts of archaeological features. Prior to the ploughing the area had probably been wooded and there was some disturbance of archaeological features by tree-throws and roots.

6.8 Geo-archaeological analysis of the soil profiles showed that all the archaeological features were essentially truncated, not only physically by ploughing, but by biotic reworking and soil forming processes that had altered the soil structure and the fills of the features to a depth of c.400mm (see Section 8.1 below). These changes meant it was difficult to ascertain which feature cut which in some circumstances.

6.9 The weather during the excavation ranged from periods of heavy rain to long periods of drought, the former caused flooding of the trenches, the latter caused the London Clay to shrink and crack, exhibiting deep fissures. This meant that some of the smaller shallower features identified after initial stripping became obscured either from flooding or from drying out and were lost during re-cleaning.

6.10 Despite the plough damage and the weathering problems the confidence level attached to the excavation is high. The large stripped areas revealed a palimpsest of features (fig 5, 6, & 7) that can be divided into 10 phases of activity. .

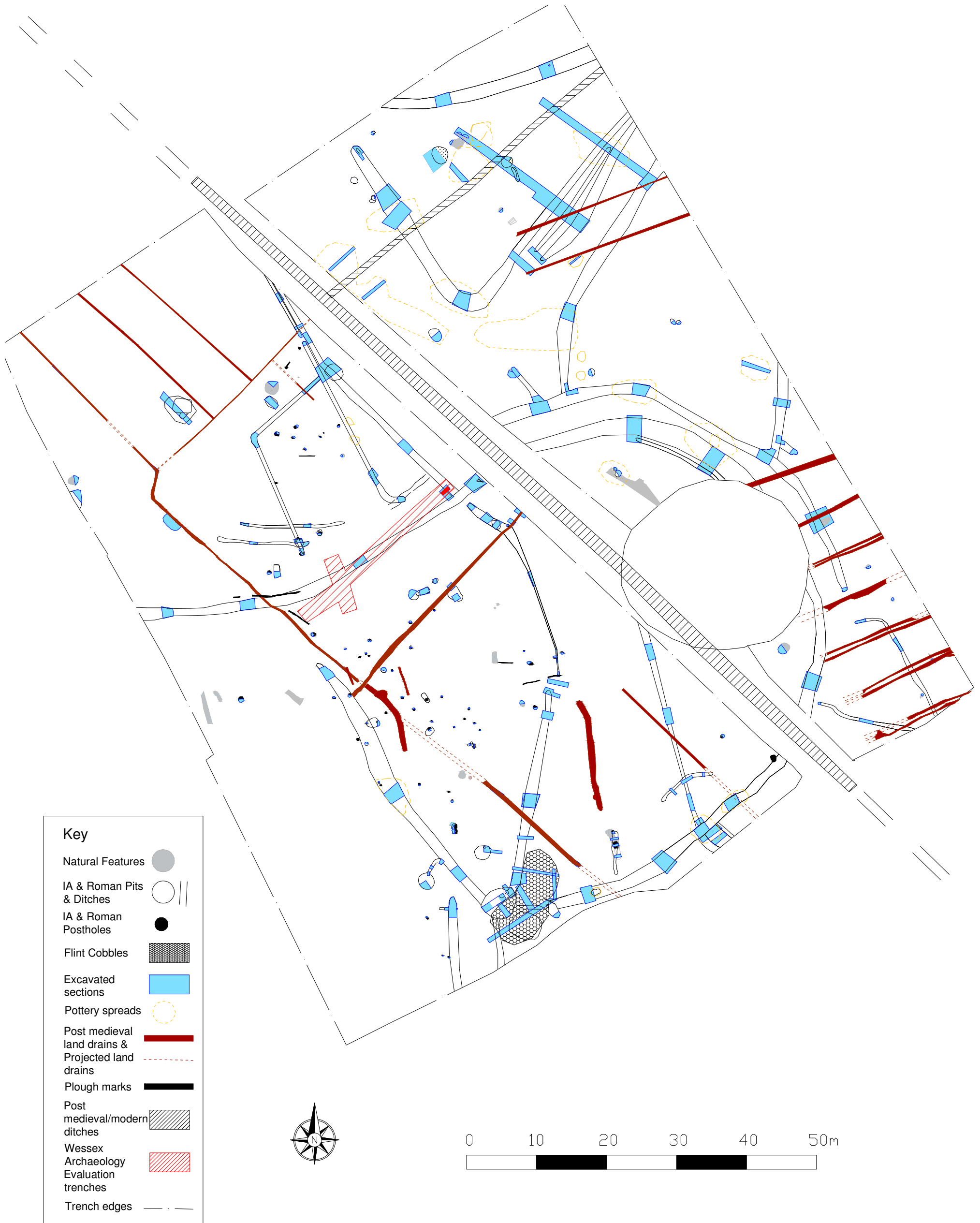


Figure 5: Plan of Trench A showing all natural & archaeological features, artifact spreads, excavated sections and evaluation trenches

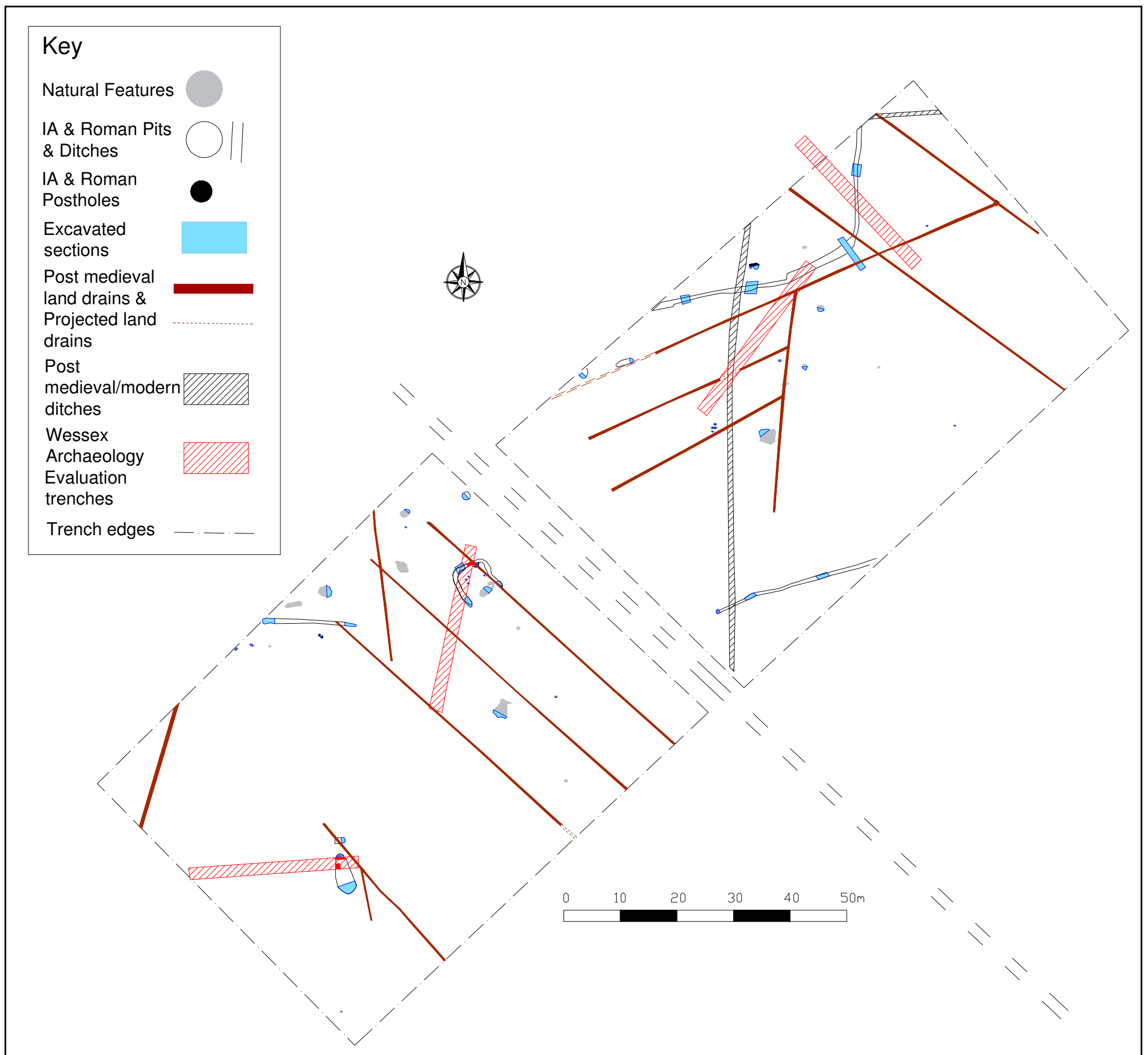


Figure 6: Plan of Trench B showing all natural & archaeological features, excavated sections and evaluation trenches



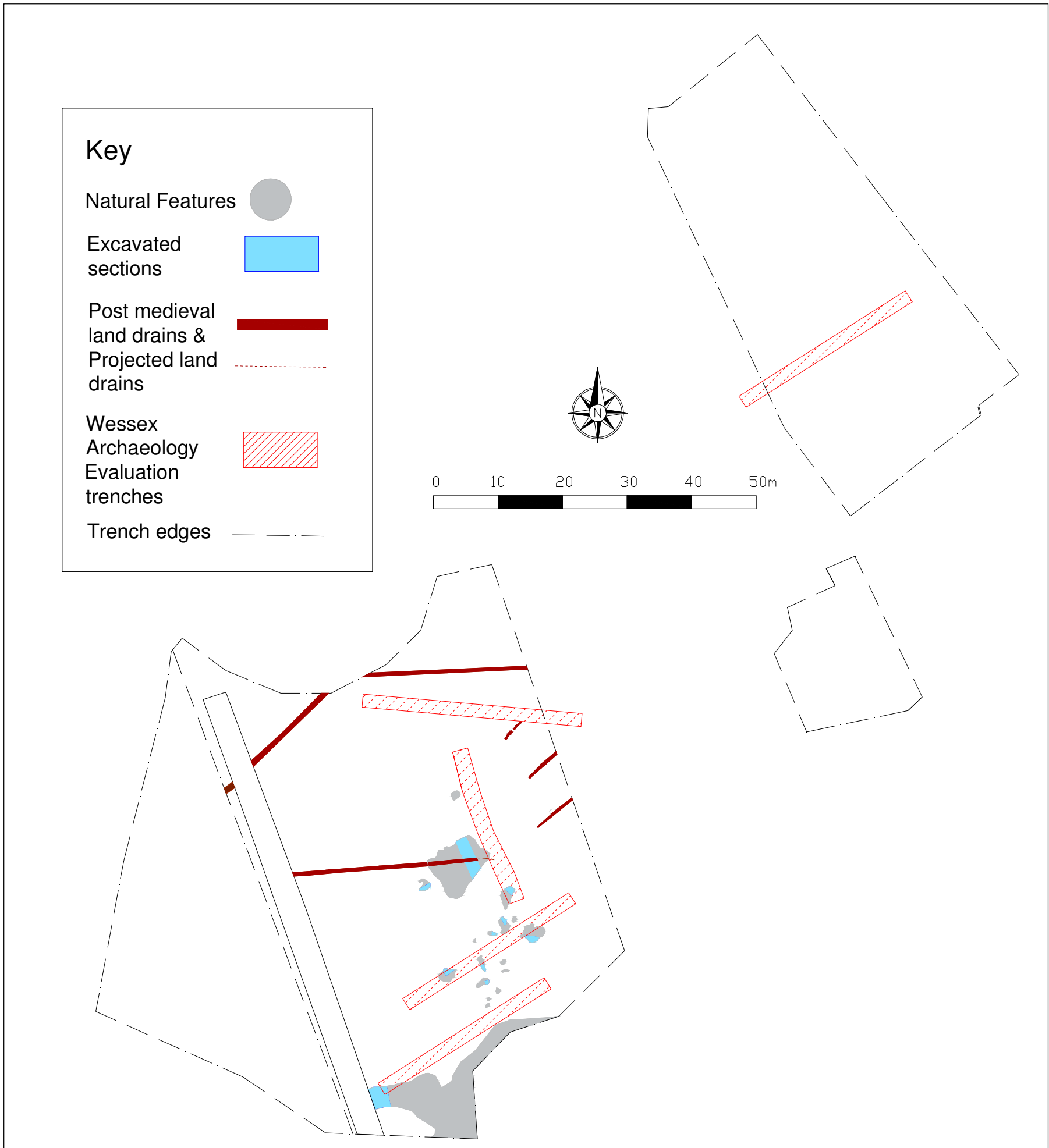


Figure 7: Plan of Trench C showing all features and excavated sections.

## 7. Results

The site has been divided into 10 phases of activity as follows:

Phase	Description	Definition	Date	Report Section
1	Natural			7.1
2	Mesolithic to Late Iron Age		7000BC-AD40	7.2
3	Romano-British 1	Pre-enclosure activity	AD40-AD75	7.3
4	Romano-British 2	Sub-circular enclosure	AD75-AD110	7.4
5	Romano-British 3	Sub-rectangular enclosure	AD75-AD150	7.5
6	Romano-British 4	Activity at north end of site	AD40-AD150	7.6
7	Romano-British 5	Abandonment	AD150	7.7
8	Romano-British 6	Waterhole	AD150+	7.8
9	Post-Roman		AD400-AD1750	7.9
10	Early modern	Agricultural improvements	AD1750-AD1900	7.10

These will be discussed below in phase order.

### 7.1 Phase 1: Natural deposits

#### *Natural layers*

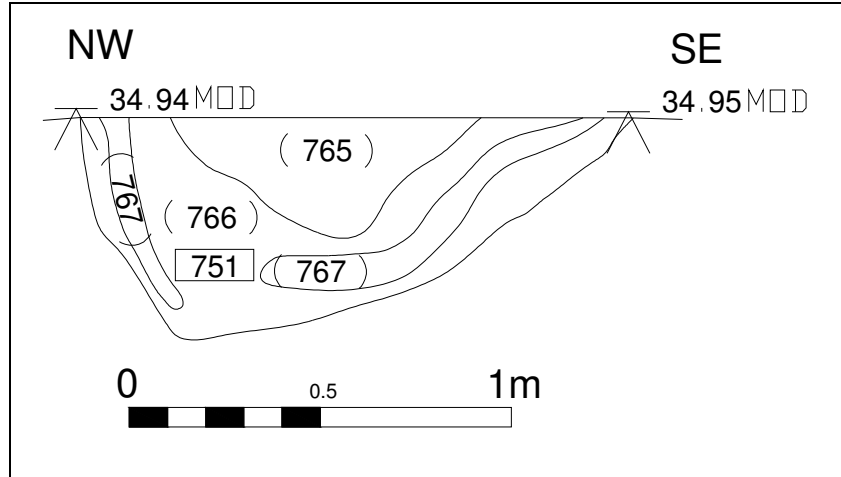
7.1.1 The natural was London Clay in trenches A and B. Its upper surface was weathered and gleyed and varied in colour from pinkish grey through yellow to reddish brown; at greater depth it was a bright orange-brown (See Section 8.1 for Geoarchaeological Report). Remnants of flinty Head deposits were found in the north part of Trench A. Contexts 3, 333, 396, 469, 470 and 698 were allocated to the natural in Trenches A and B. In Trench C the natural, context 310, was gravel in a matrix of strong brown silty clay. Geologically this was a level deposit of Head that lay over the London Clay, between two braids of the Old Park Farm stream at the south boundary of the development.

#### *Natural features (figures 9, 10, & 11)*

7.1.2 Trenches A, B, and C contained a number of natural features that were interpreted as having been caused by tree roots or animal disturbance. They were [10], [22], [71], [77], [171], [173], [200], [273], [334], [500], [525], [531], [533], [537], [539], [543], [544], [547], [549], [553], [574], [597], [835], [849], [851], [854], [865], [867], [870], [897], [920], and [928] (full details are in the archive).

7.1.3 Thirteen tree-throws, where a falling tree had torn a hole in the ground, were identified across the site [233], [338], [442], [545], [574], [582], [751], [775], [778], [822], [881], and [906], [926]. Most were un-dateable but some had disturbed Roman features showing there was a period of woodland regeneration in the post-Roman period. Tree-

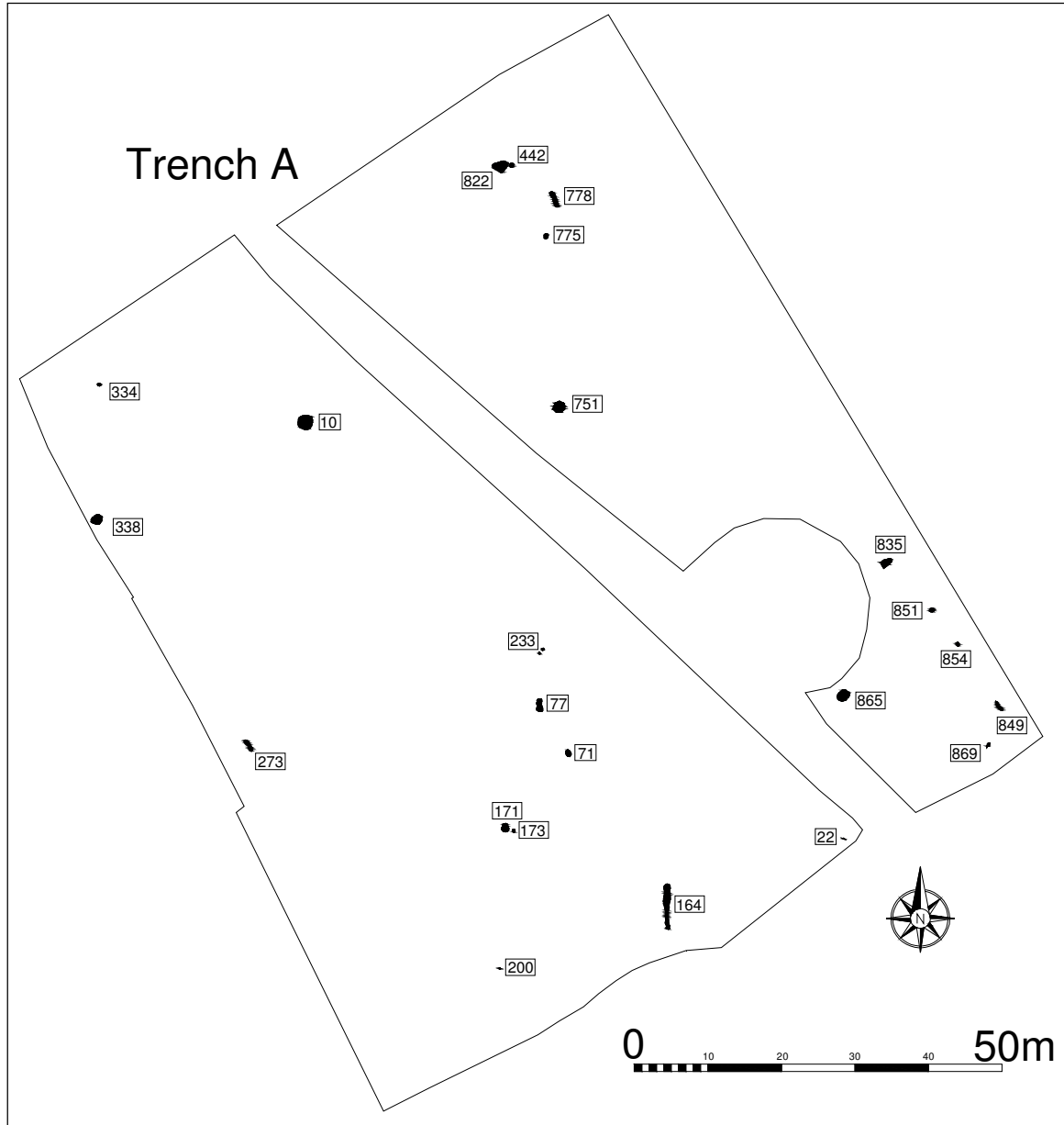
throw [751] was a typical example (fig 8). It had disturbed a 1<sup>st</sup> century Roman feature, ditch [392]. The tree-throw was sub-circular in plan 1.5m in diameter and 0.60m deep. Its south-east edge was gently sloping to where it met the north-west edge which was almost vertical. It contained three fills. Fill (766) at the bottom was a dark brown sandy silt loam which contained lenses of (767), a yellowish brown silty clay loam. Above this was (765), a brownish yellow sandy clay.



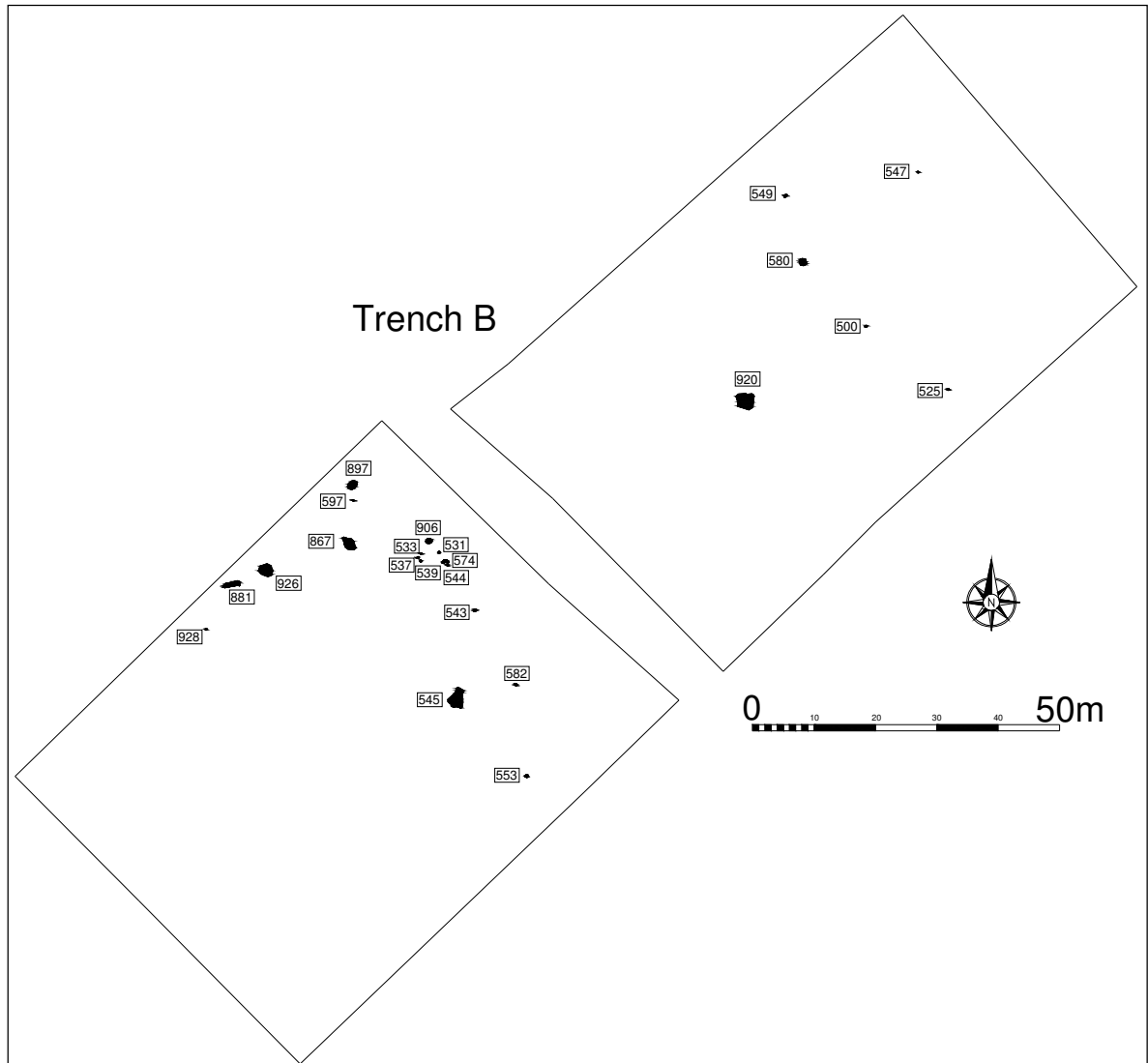
**Figure 8: Section 391 through tree-throw 751.**

7.1.4 The tree-throw fills contained a number of artifacts derived from ditch [392]. There was a fragment of greensand quern, eight sherds of Rowland's Castle Ware, six sherds in fabric Quartz 1, six sherds of Late Iron Age flint-tempered ware, and one sherd of Southern Atrebatian Overlap Ware.

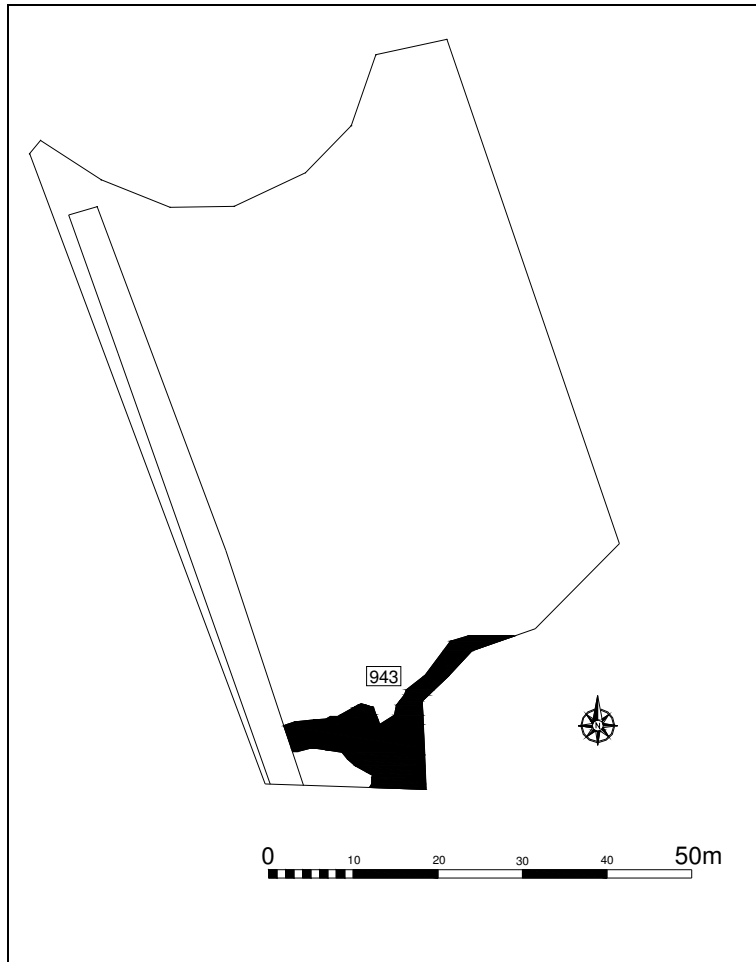
7.1.5 At the southern end of Trench C trench a meander of the present day stream channel [943], fill (944), was evident as a silty area within the gravel. It contained modern finds. Along the western edge of Trench C a sondage 72m long by 3.8m wide by 1.5m deep was excavated by machine to check for the presence of the palaeochannels recorded in the evaluation. None were present, but the trench did reveal solifluction features and ice wedges in the Head deposits. A deep silt-filled fissure [164] in the lower part of Trench A was probably of a similar nature.



**Figure 9: Phase 1 natural features in Trench A.**



**Figure 10: Phase 1 natural features in Trench B.**



**Figure 11: Phase 1 natural Features in Trench C.**

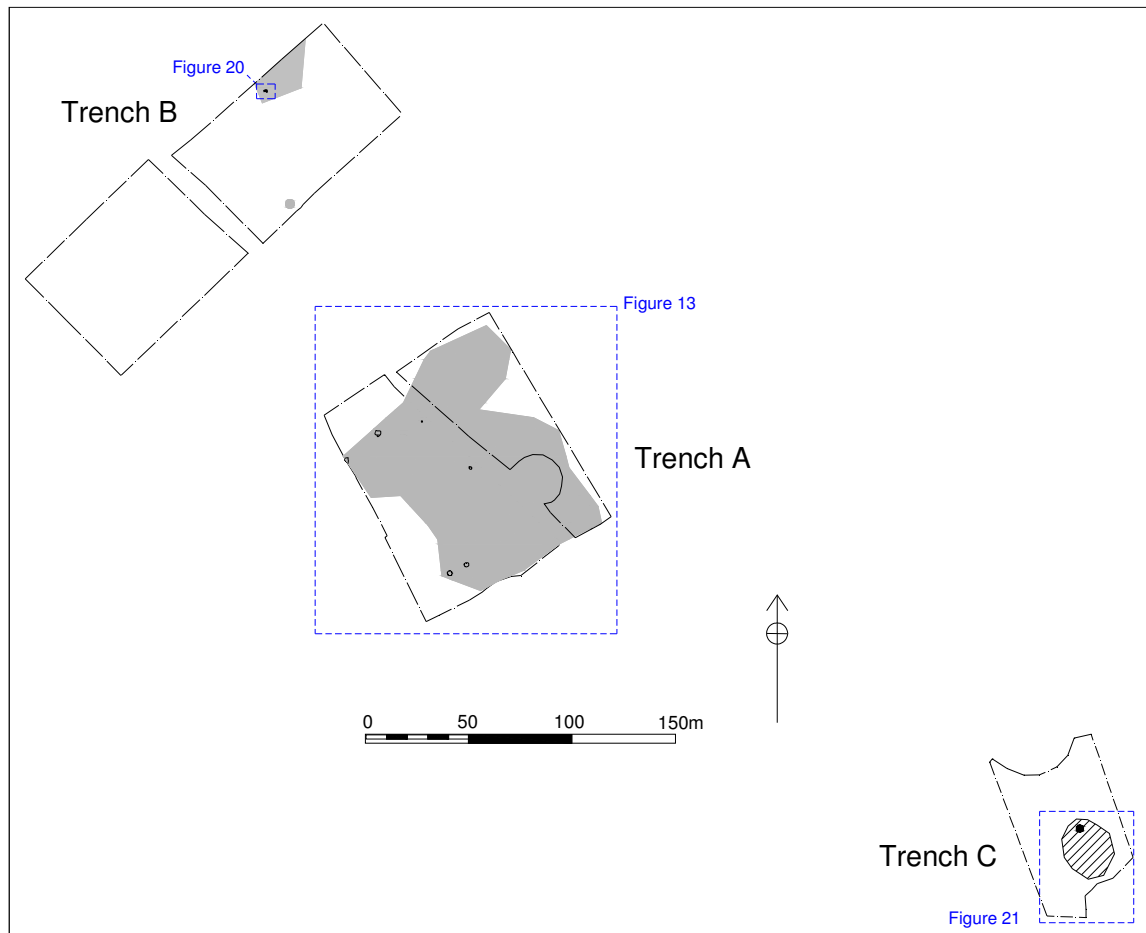
## 7.2. Phase 2: Mesolithic to Late Iron Age 7000BC AD40

### Pre-Late Iron Age

7.2.1 Early prehistoric activity was evidenced by flint flakes and tools, mostly recovered as residual finds in Roman features. Three microliths, four scrapers, four flake tools, eleven cores and eighty-one flakes point to activity in the Mesolithic, Neolithic, and later prehistory (see Section 8.4).

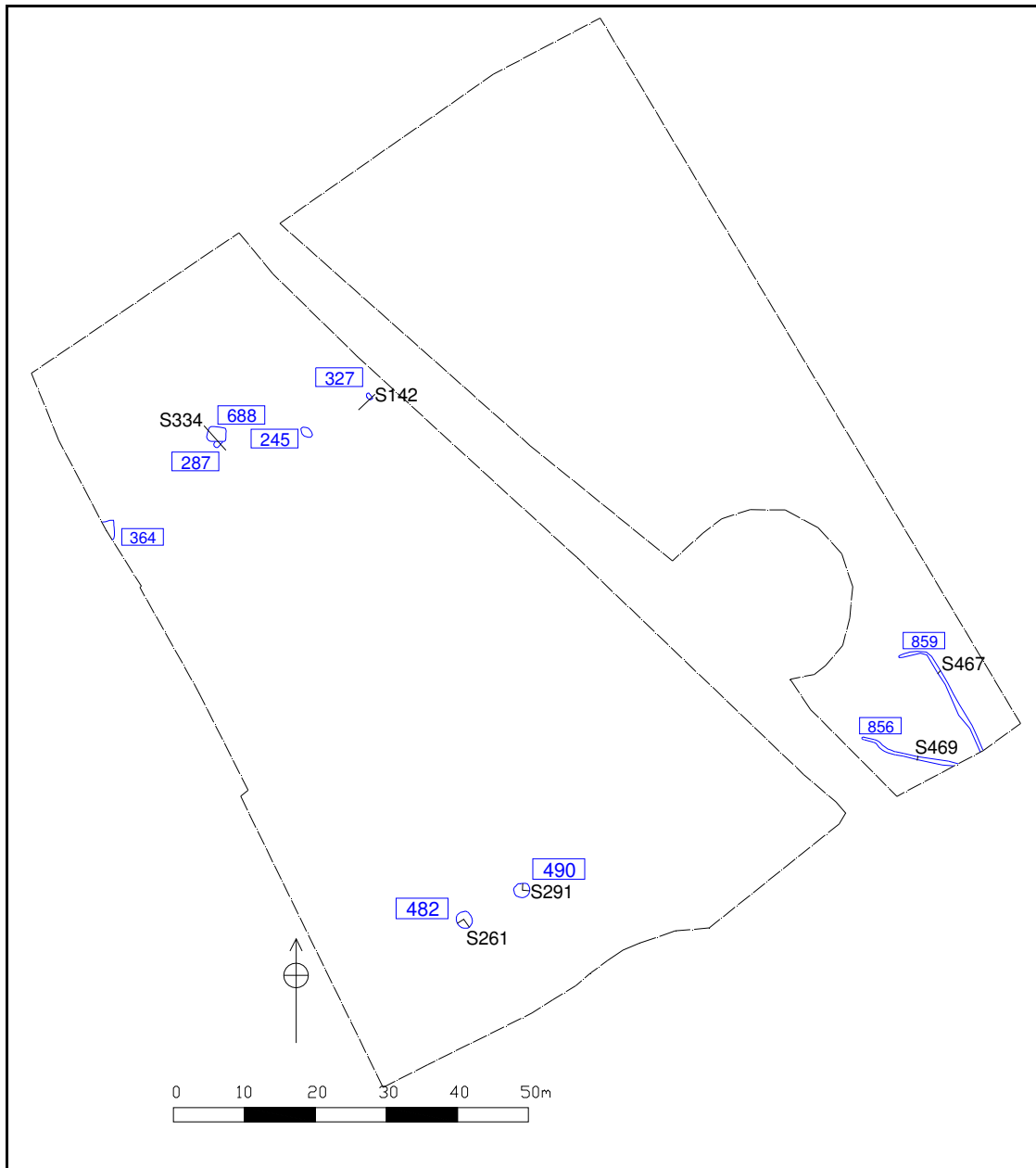
### Late Iron Age

7.2.2 Eleven Late Iron Age features consisting of two ditches and nine pits were found in Trenches A and B, with another twelve features in Trench C marking an area of possible cooking activity. The two ditches in Trench A possibly formed the entrance to a small enclosure that lay just outside the trench. Four of the larger pits have been interpreted as waterholes. Late Iron Age chalk-tempered and flint-tempered pottery was also found as residual material in many of the Romano-British features, and the spread of material may give a better representation of the extent of the Late Iron Age activity than the dated features alone (Fig 12).



**Figure 12: Location of Phase 2 Late Iron Age ditches, Late Iron Age features (shown as black dots), Late Iron Age pottery distribution (grey areas), and location of Late Iron Age ‘cooking’ area (hatched). Location of figures 13, 20 and 21 in blue.**

**Trench A**



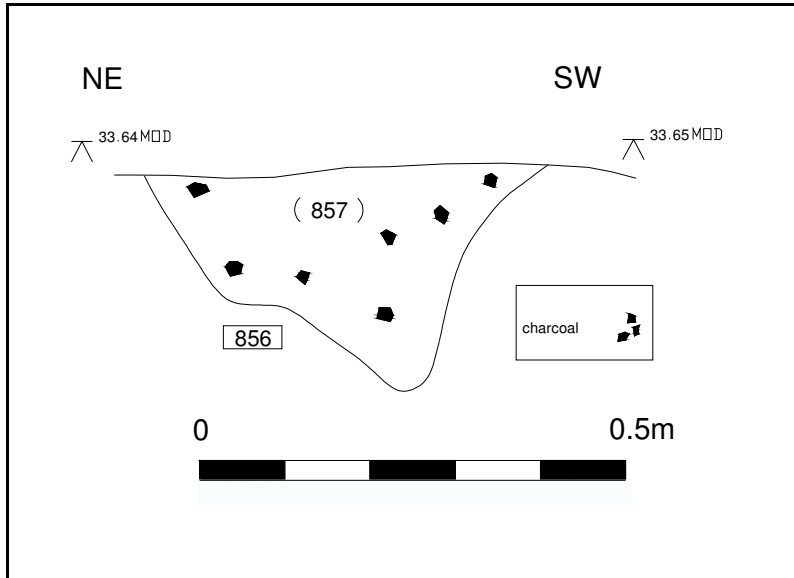
**Figure 13: Phase 2 Late Iron Age features in Trench A.**

*Ditch 856 (figs 13 & 14)*

7.2.3 Two ditches in the south-east corner of Trench A may have formed an antennae-shaped entrance to a small enclosure lying to the south of the trench. Ditch 856 was in the south-east corner of the site. It terminated only 0.67m from enclosure ditch 386 and they probably met originally. Its profile at the south end was 0.48m wide and 0.25m deep with an irregular base and sloping sides widening and flattening out further north before narrowing down to 0.30m wide with a 0.26m deep pointed base. It contained two fills, (857/878) a grey silty clay with occasional charcoal flecks and (879) a grey sandy clay found only in the terminus. Fill (857) produced five burnt flints, a flint flake,



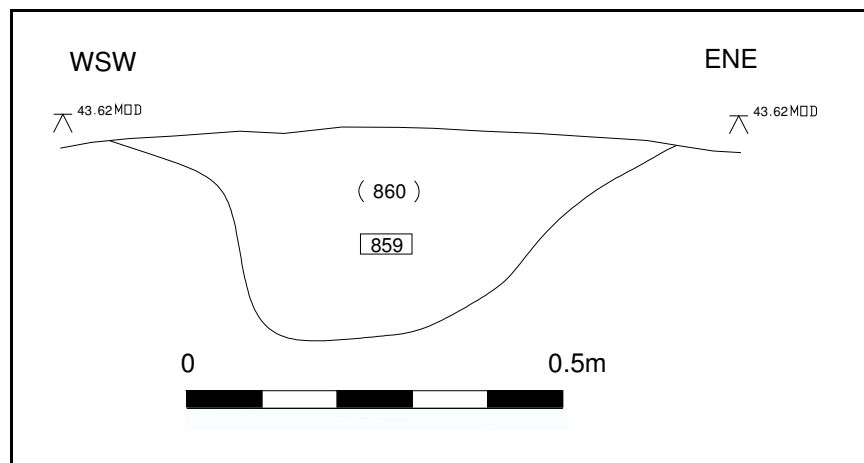
eight sherds of Rowland's Castle Ware, four sherds of Late Iron Age flint tempered ware, and one sherd of Quartz 1.



**Figure 14: Section 469 through ditch 856.**

*Ditch 859 (figs 13 & 15)*

7.2.4 Ditch [859/862] was 0.96m wide at its widest where it was steep-sided, flat bottomed and 0.37m deep. At its terminal it was 0.47m wide with a round base and 0.15m deep. It was filled by two primary fills (861) light brownish grey silty clay with few charcoal flecks which produced six burnt flints, and (864) a brown silty clay with no finds. The ditch then filled with (860), grey silty clay with occasional charcoal, and (863) a yellowish brown silty clay with very few charcoal flecks. These secondary fills produced nine burnt flints and a core, three small fragments of ceramic, probably from a loom weight, six sherds of Southern Atrebatian Overlap Ware, five sherds of Quartz 1, and one sherd of Late Iron Age chalk-tempered ware.



**Figure 15: Section 467 through ditch 859.**

*Waterholes 287/688 (figs 13 & 16)*

7.2.5 Waterholes [287] and [688] were very similar to each other, each containing large amounts of clean re-deposited natural London Clay, with the only evidence of human

activity being a thin deposit of charcoal at the south side. Waterhole [287] was sub-rectangular and steep sided. It measured 0.73m by 0.85m (at least) and 0.70m deep. Its bottom fill (672) was a very light grey silt loam, above which lay (671) a black charcoal layer. The uppermost fill was (288) a brownish yellow silty clay. Waterhole [287] had been mostly removed by a later feature of a similar nature [688]. It was sub-rectangular and steep-sided. It measured 2.63m by 2.00m and was at least 1.28m deep, but its base could not be reached. It contained five fills. The primary fill was (693) a yellow brown silt loam which lay beneath (692) a black very silty clay. Above 692 was (691) another yellow brown silt loam which lay below (690) a light grey silt loam which in turn was beneath (689) a brownish yellow silt loam.

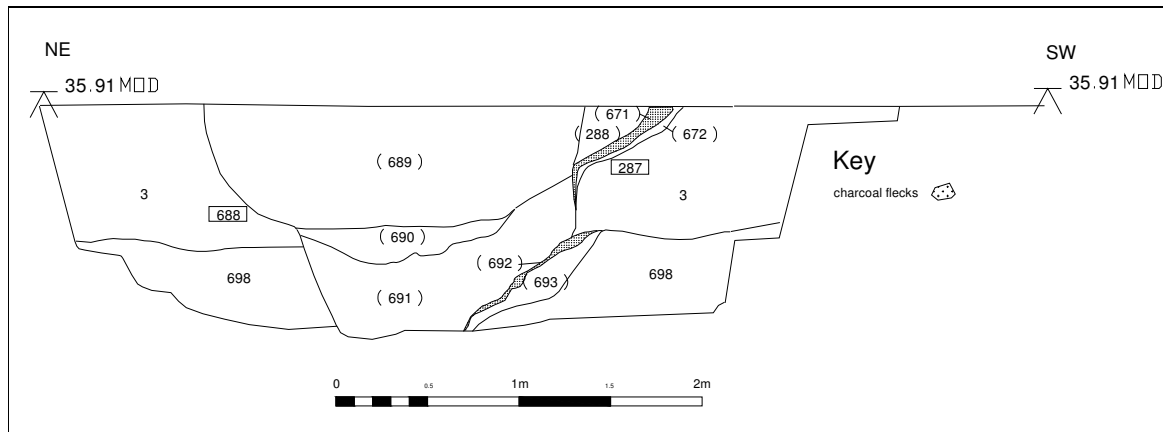


Figure 16: Section through waterhole 287/688.

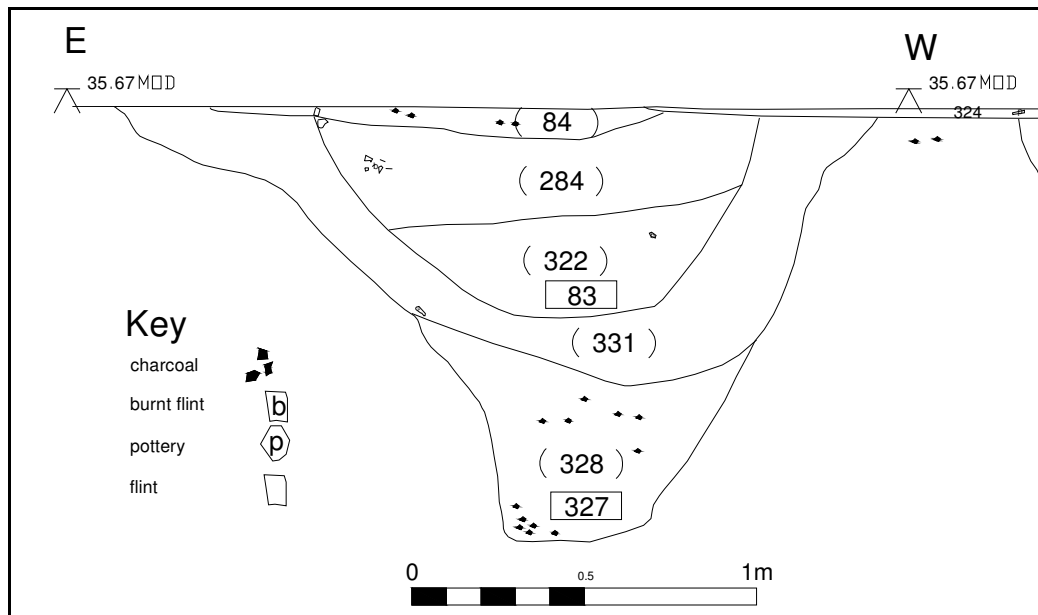


Figure 17: Section 142 through Late Iron Age waterhole 327 cut by later Roman ditch 83.

*Waterhole 327 (figs 13 & 17)*

7.2.6 Waterhole 327 was cut by ditch 83. It was 2.2m in diameter and 1.27m deep with steeply sloping sides to a flat base. The primary fill was (328) a light yellow brown, silty clay with a few charcoal flecks containing three sherds of Late Iron Age flint-tempered pottery, three sherds of Quartz 1 pottery, and 11 fragments of burnt flint. The upper fill was (331) a dark grey silty clay containing two sherds of Rowland's Castle Ware and two burnt flints, so may have finally filled in during the early Roman period.

*Pit 245 (fig 13)*

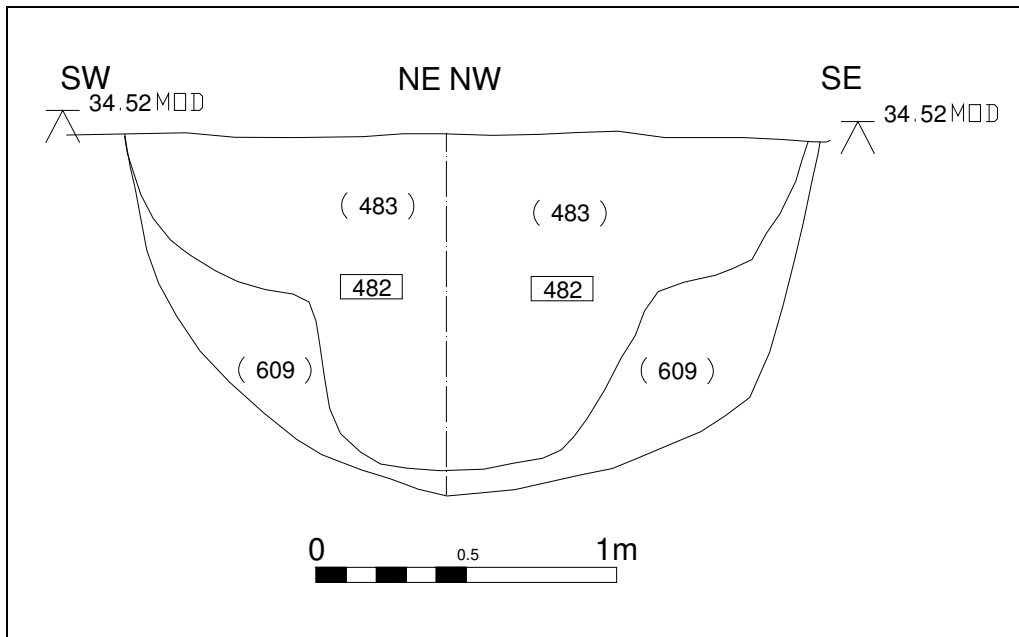
7.2.7 Feature 245 was an oval shallow scoop, measuring 1.7m by 1.2m by a depth of 0.14m. Its fill was yellow brown silty clay with charcoal and burnt flint (246).

*Pit 364 (fig 13)*

7.2.8 Feature 364 was a sub-rectangular feature on the western edge of Trench A. It measured 2.65m by 1.17m by a depth of 0.07m. It contained fill 365, a yellow brown silty clay containing charcoal and burnt flint. It produced 11 sherds of Late Iron Age flint-tempered pottery.

*Pit 482 (figs 13 & 18)*

7.2.9 Pit 482 was bowl-shaped with a rounded base, 2.35m in diameter and 1.2m deep. It contained two fills, 609, a yellow brown clay with two burnt flints, and 483, a pinkish grey clay which contained 50 fragments of burnt flint, one sherd of Late Iron Age flint-tempered pottery and three sherds of Quartz 1. A 40 litre soil sample from 483 produced a few fragments of charcoal.



**Figure 18: Section 261 through pit 482.**

*Pit 490 (figs 13 & 19)*

7.2.10 Pit 490 was roughly circular with a diameter of 2.22m and depth of 0.92m. Its north edge was vertical and its east edge was steeply sloping to an uneven base. A quadrant was removed (Plate 1). The pit contained three fills. The primary fill (608), a silty clay loam with charcoal, contained burnt flint and burnt clay, a fragment of greensand quern and nine sherds of Late Iron Age flint-tempered pottery. The upper

fill (493), a dark grey brown clay loam with charcoal, contained seven fragments of loomweight, burnt flint, three sherds of Quartz 1, two sherds of chalk-tempered ware, and one sherd of Late Iron Age flint-tempered ware. The top fill was (491), a dark yellow brown clay loam with charcoal that contained burnt clay, burnt flint, 13 sherds of Quartz 1 and one sherd of Late Iron Age flint-tempered ware.

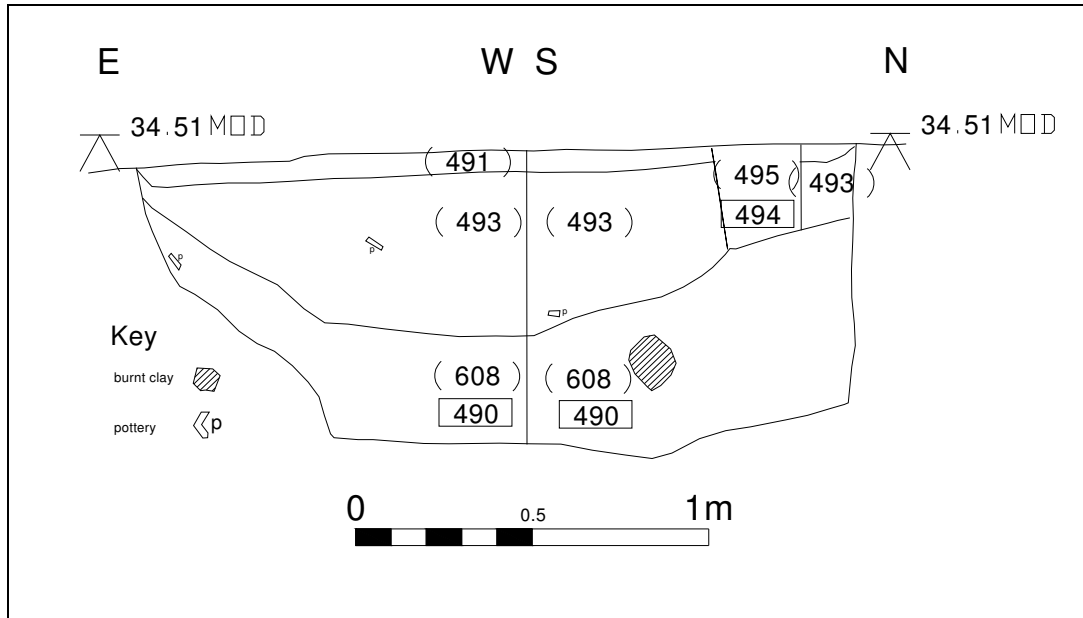


Figure 19: Section 291 through quadrant of pit 490.



Plate 1. Pit 490 with excavated quadrant.

**Trench B**

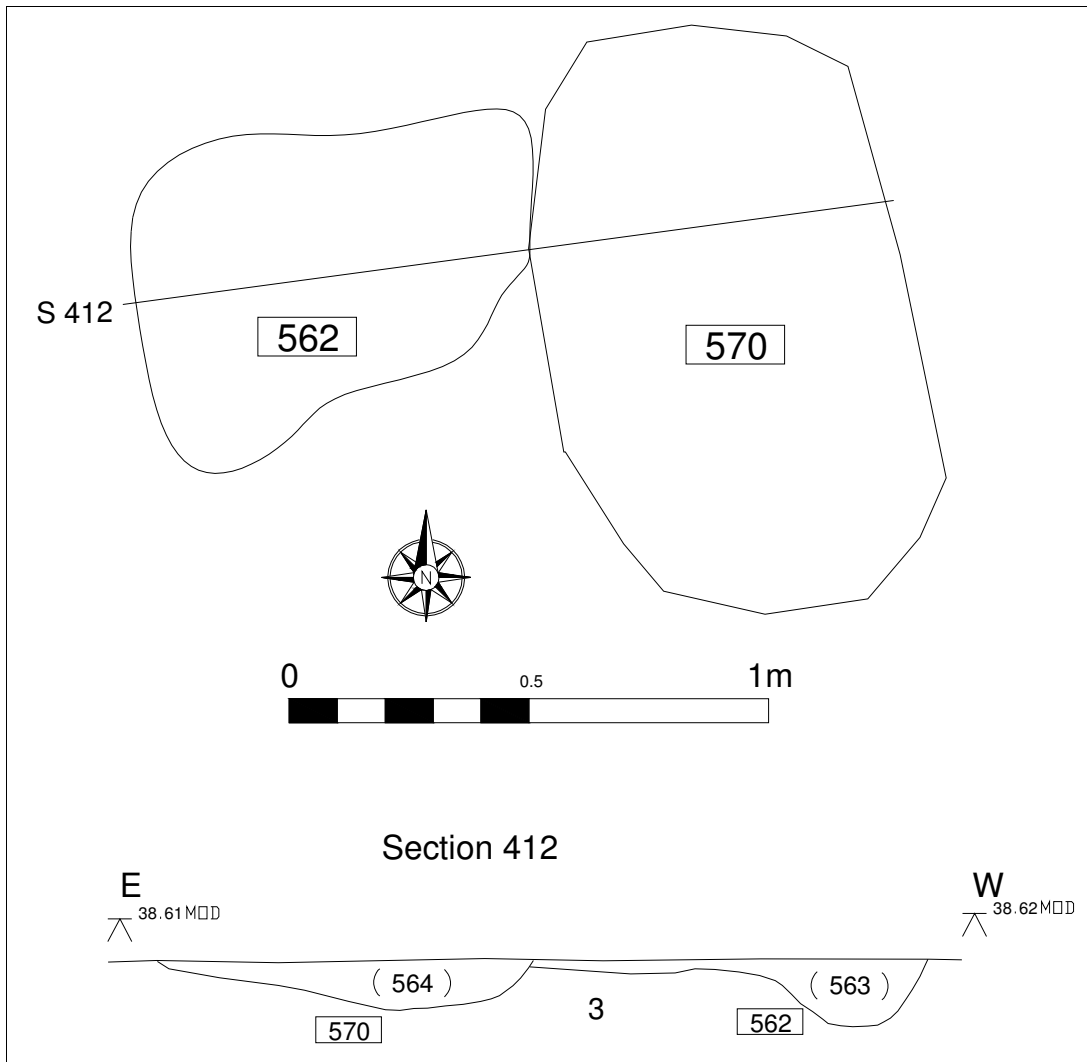
7.2.11 There were two small shallow features within the area of Late Iron Age pottery distribution in Trench B (fig 12). One contained a sherd of Late Iron Age flint-tempered ware.

*Pit 562 (fig 20)*

7.2.12 Pit 562 was an irregular pit 0.80m by 0.80m by 0.15m deep, which contained fill (563), a grey brown clay loam containing burnt flint, daub and abundant charcoal and two sherds of Late Iron Age flint-tempered ware. It was cut by pit 570.

*Pit 570 (fig 20)*

7.2.13 Pit 570 cut 562. It was oval in shape measuring 1.32m by 0.77m by 0.12m deep. It contained fill (564), a dark brown clay loam containing burnt flint, daub and charcoal.



**Figure 20: Plan of pits 562 and 570.**



## **Trench C**

7.2.14 The southern part of Trench C contained numerous amorphous areas of dark silty soil (Plate 2 & fig 21) amongst the flint-rich Head deposits. The largest feature [289] has been interpreted as a waterhole. The smaller features were originally considered to be of natural origin, and excavation showed them to have uncertain edges and bases (figs 21 & 22), and they seemed to be areas where the dark silty soil in the valley bottom had filtered down into the gravelly Head deposits; some might have been tree-throws or root disturbances. Examination of the features showed that a number contained burnt flints. The amounts of burnt flint were large and often reduced to small fragments; feature 302 for instance produced 3,793g of burnt flint, reduced to 9,465 pieces. The absence of pottery makes dating this phase of activity difficult but the use of 'pot-boilers' is generally considered to be a prehistoric method of cooking, and the lack of Rowland's Castle Ware, found in large quantities in features of Roman date elsewhere on the site, suggests it predates the Roman phase of occupation.

7.2.15 The natural-looking features with burnt flint were: [293] fills (294) and (295), [296] fills (297) (400) and (401); [298] fill (299); [300] fill (301); [302] fill (303); [305] fill (409); [306] fill (307); [402] fill (403), [404] fill (405) and [408] fills (406) (292) and (407). Traditionally burnt flints have been interpreted as 'pot-boilers', caused by using flints to transfer stored heat to water for cooking, although other interpretations have been suggested. The cooking probably did not take place in the features that were found, but it is possible the waste burnt flint was placed in the boggy areas to firm up the ground. Soil samples from 292, 303, 400 and 403 produced small amounts of charcoal. Feature [308] fill 309, did not contain burnt flint but did produce a large fragment of burnt greensand quern.



**Plate 2 Feature 296, a dark silty area with burnt flint, before excavation, surrounded by the flint gravel Head deposit which overlies the London Clay in this area.**

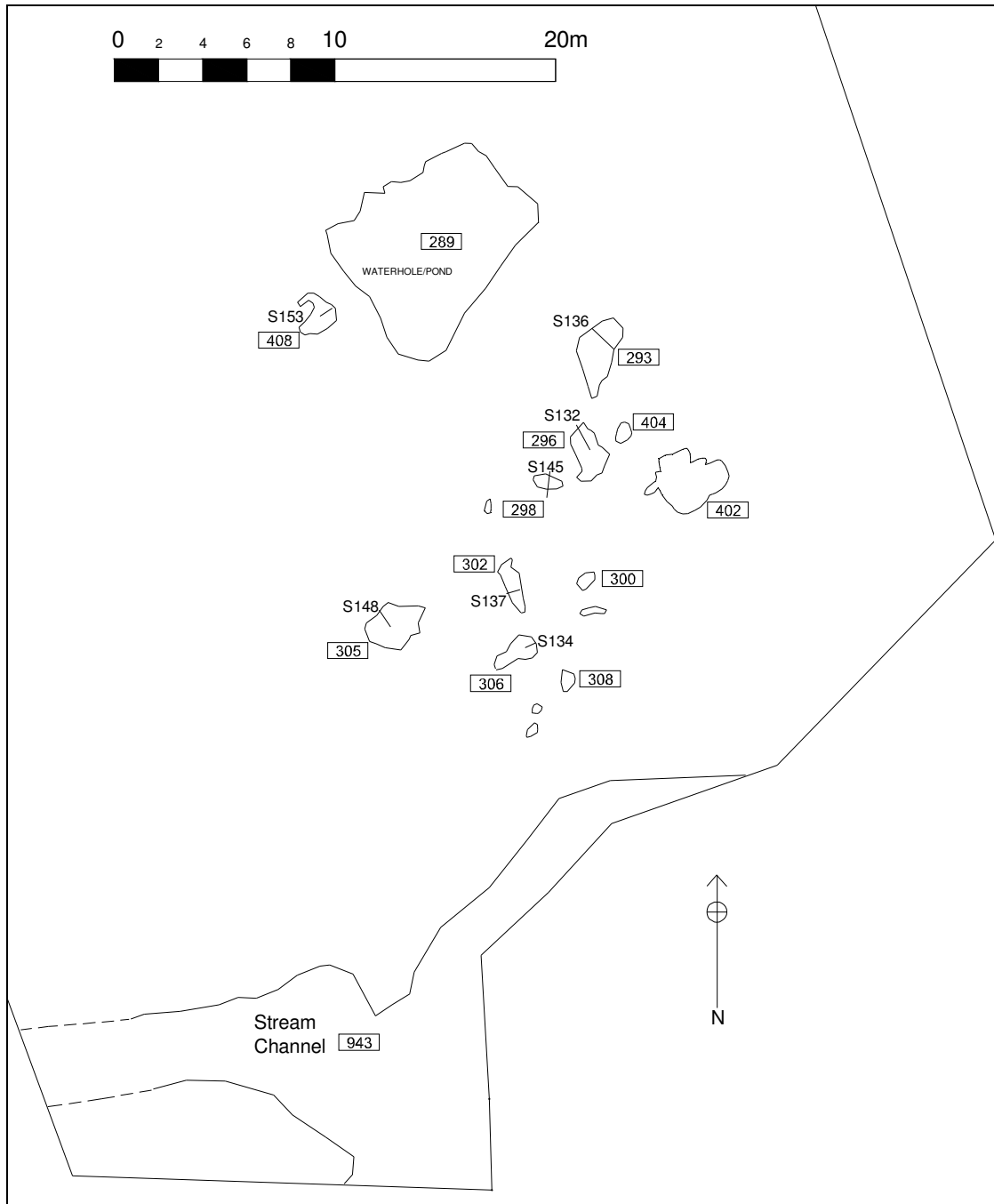


Figure 21: Plan of natural features in Trench C with Phase 2 Late Iron Age fills.

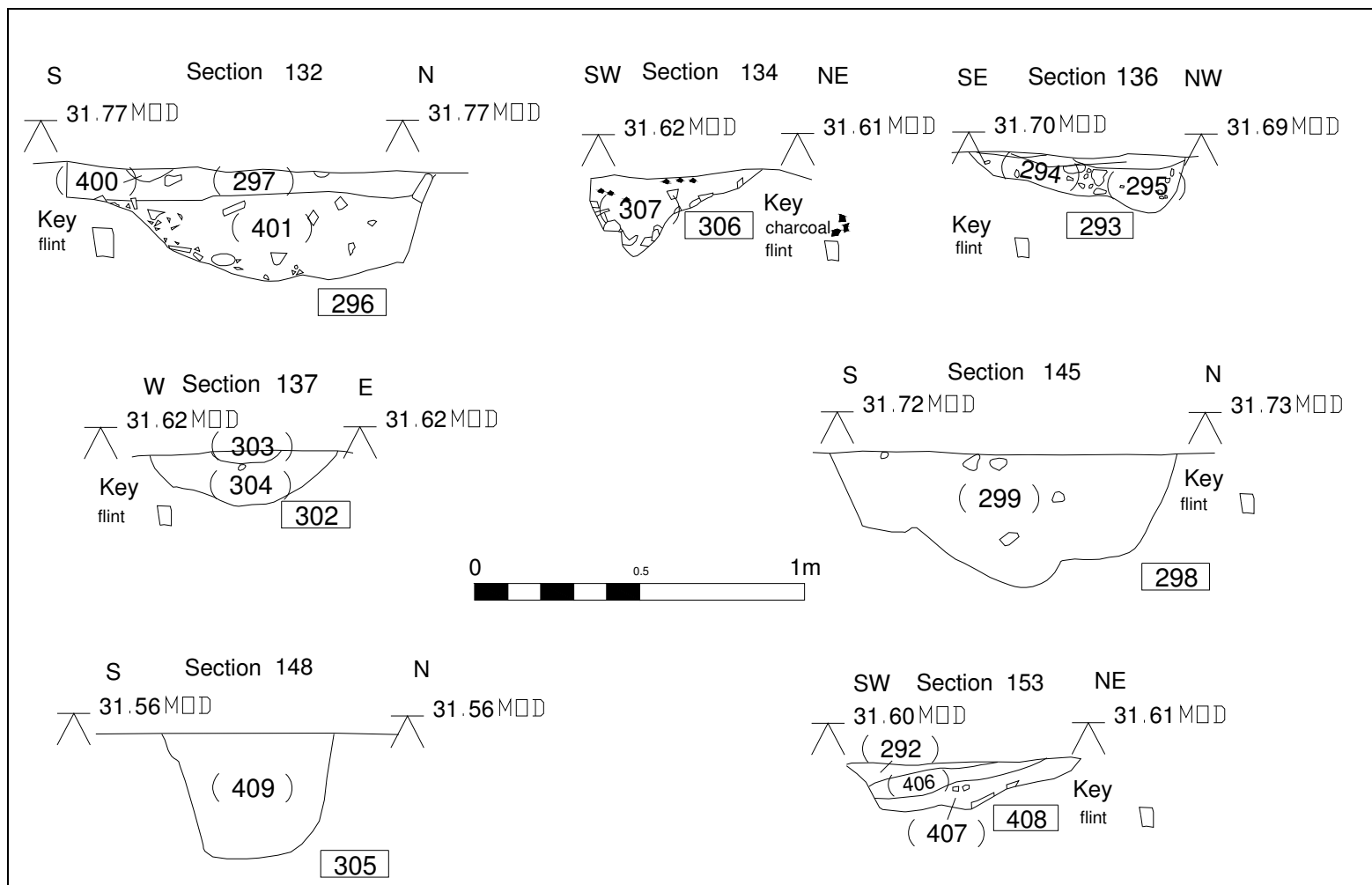


Figure 22: Sections through a selection of features in Trench C.



7.2.16 In the centre of Trench C one of the evaluation trenches had located a feature interpreted as a palaeochannel. Once a larger area was stripped it proved to be a sub-rectangular feature, [289], which has been re-interpreted as a waterhole. It measured 9.05m by 7.9m by 1.5m deep. It contained two fills of silty dark soil (290) and (291), both containing burnt flint. After 700mm of silt had built up in the waterhole a deposit of burnt flint was tipped in, containing 50 sherds of Rowland's Castle Ware, suggesting the waterhole remained open into the Roman period and that the pot-boiler method of heating water continued to be used.

### **7.3 Phase 3: Romano-British 1, pre-enclosure activity: AD c.40-75**

7.3.1 The Romano-British period of activity has been divided into 6 phases. The overall plan of the six phases are shown of figures 23 and 24 and discussed in Sections 7.3 to 7.8.

Phase	Description	Definition	Date	Report Section
3	Romano-British 1	Pre-enclosure activity	AD40-AD75	7.3
4	Romano-British 2	Sub-circular enclosure	AD75-AD110	7.4
5	Romano-British 3	Sub-rectangular enclosure	AD75-150	7.5
6	Romano-British 4	Activity at north end of site	AD40-AD150	7.6
7	Romano-British 5	Abandonment	AD150	7.7
8	Romano-British 6	Waterhole	AD150+	7.8

7.3.2 The first phase of Romano-British activity (Romano-British 1) was marked by ditches, a pit and eight postholes (fig 25) that preceded the construction of a large sub-circular enclosure in Phase 4. The ditches suggest a division of the landscape not seen in earlier periods. Ditches [83], [64], and [54/654] formed a north-south, sinuous interrupted ditch system that ran through Trench A. A sinuous north-south ditch [35/33] lay to the east of the interrupted ditch. The two north-south ditches formed a funnel at an angle of 30 degrees. Ditch [235] formed an enclosure to the west of the interrupted ditch; it may have served to divert ground water around a building evidenced by the postholes of Group 0.

#### *Ditch 83 (fig 25 & 26)*

7.3.3 Ditch [83] had steeply sloping sides and a rounded or flat base profile and varied from 1.37m wide to 0.77m wide and from 0.44m deep to 0.72m deep. It cut feature [327] of the Late Iron Age phase, and was cut by later sub-circular enclosure ditches [79/386/31/40] and [89/91] of Phase 4. The primary fill was numbered (284), (370), and (658), all yellow brown silty clay loams with charcoal. It contained 52 sherds of Quartz 1, 37 sherds of Late Iron Age flint-tempered wares (including a bead rim jar and larger storage jars), 13 sherds of Southern Atrebatian Overlap Ware and 18 sherds of Rowland's Castle Ware. Other finds consisted of burnt flint, a small fragment of a greensand quern and one fragment of a loomweight. The upper fill was (84), (322), (323), and (657), all grey to brownish yellow silty clays with charcoal (a soil sample

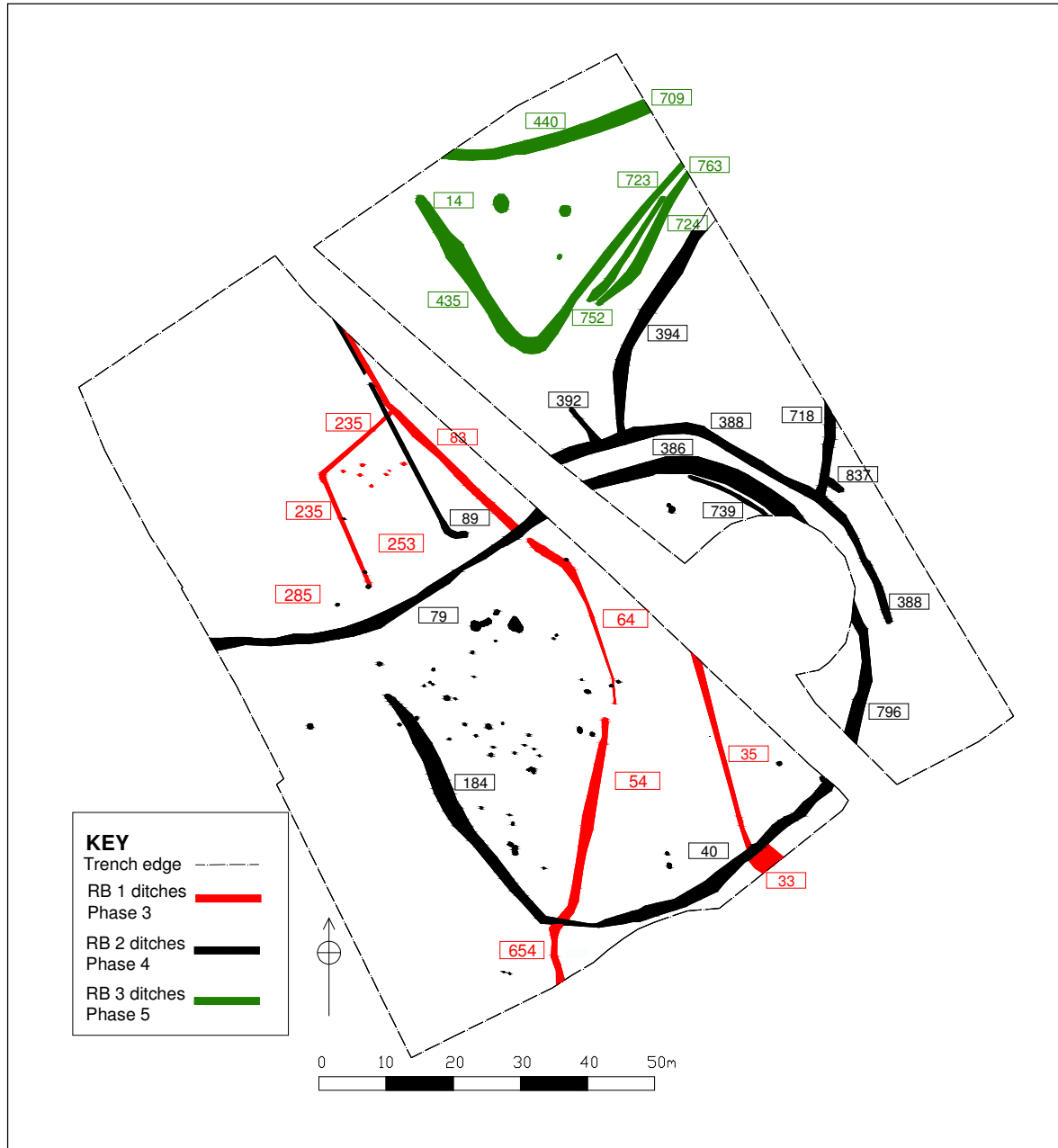


Figure 23: Plan of early Roman phases in Trench A.

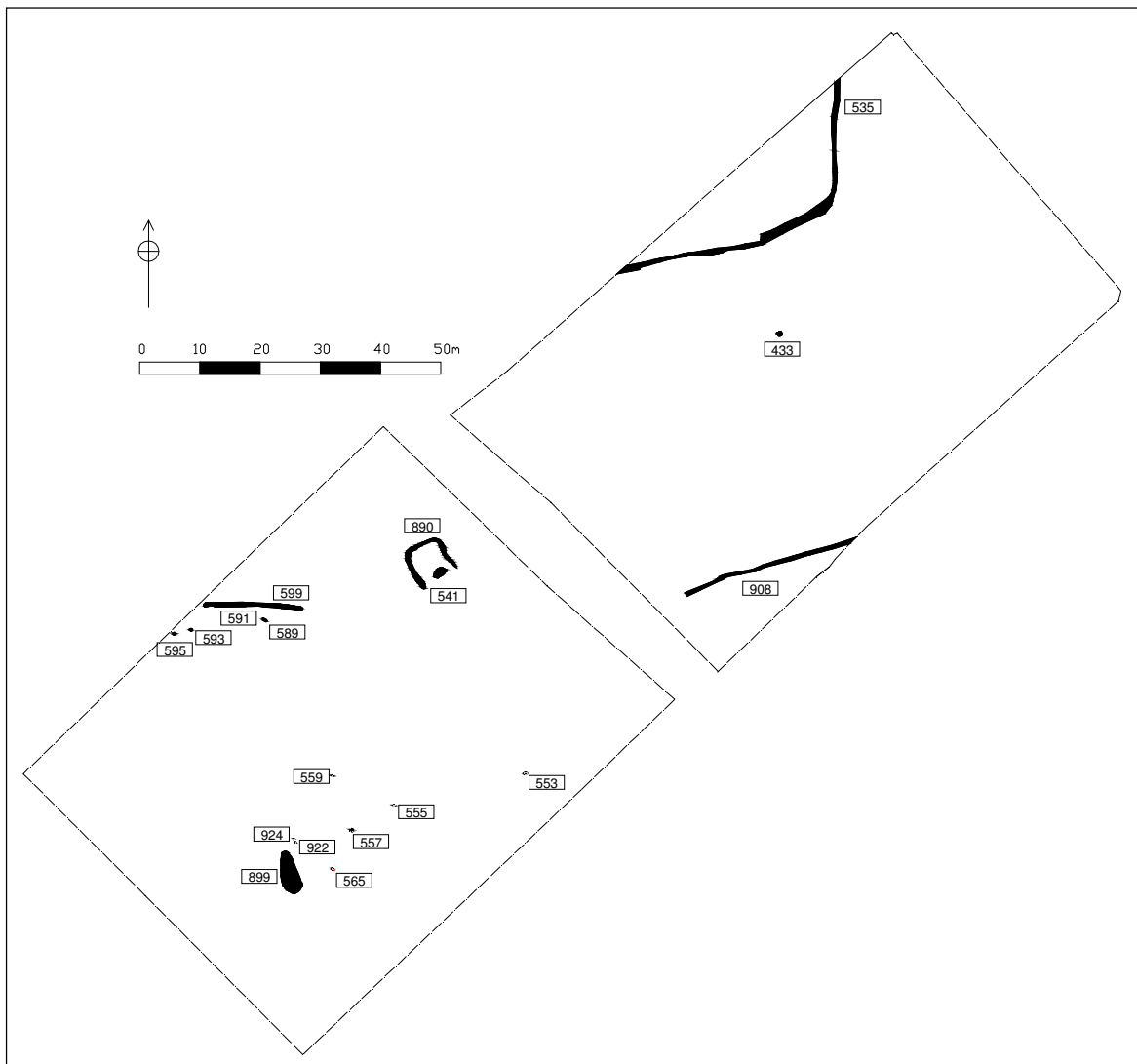
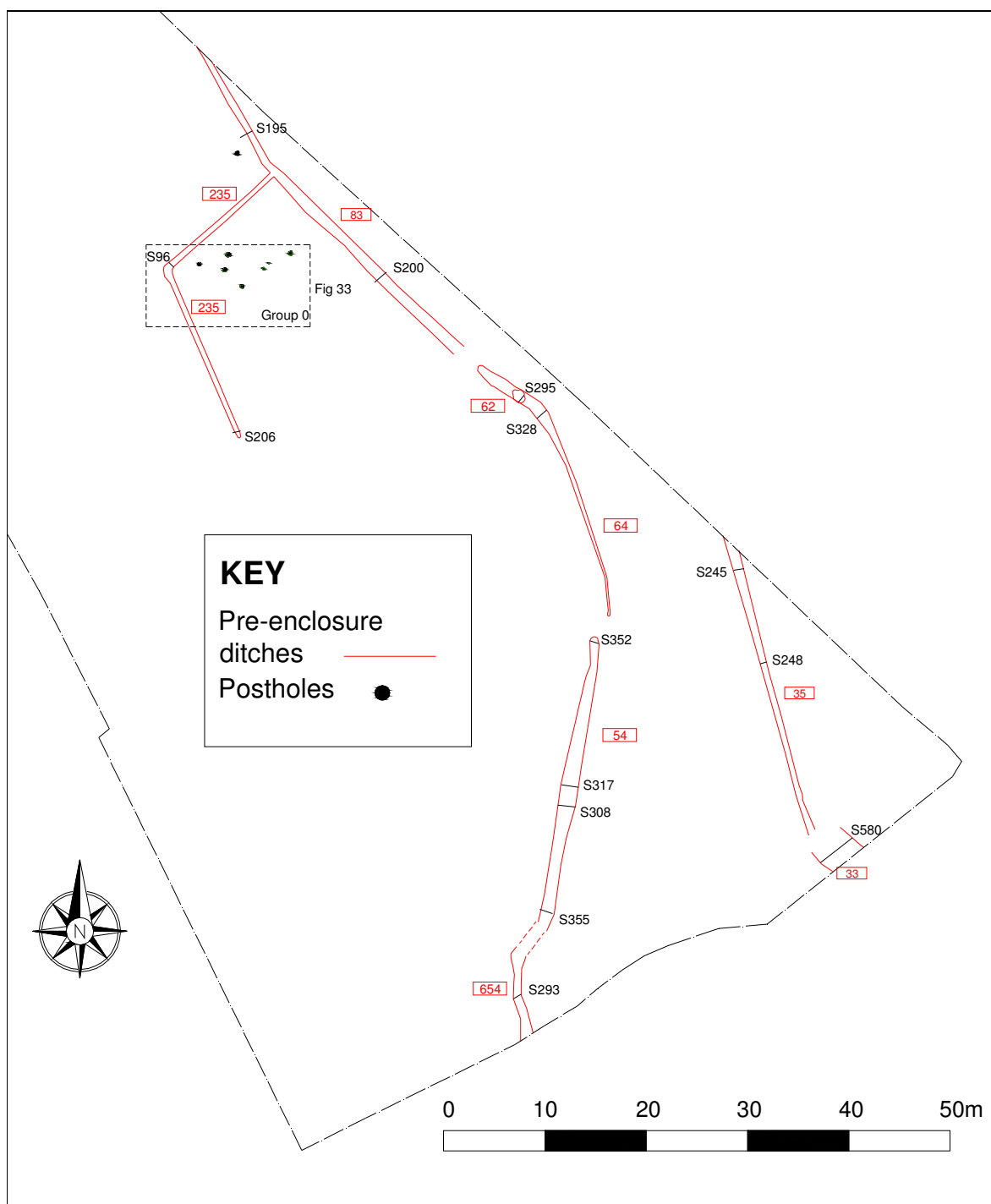
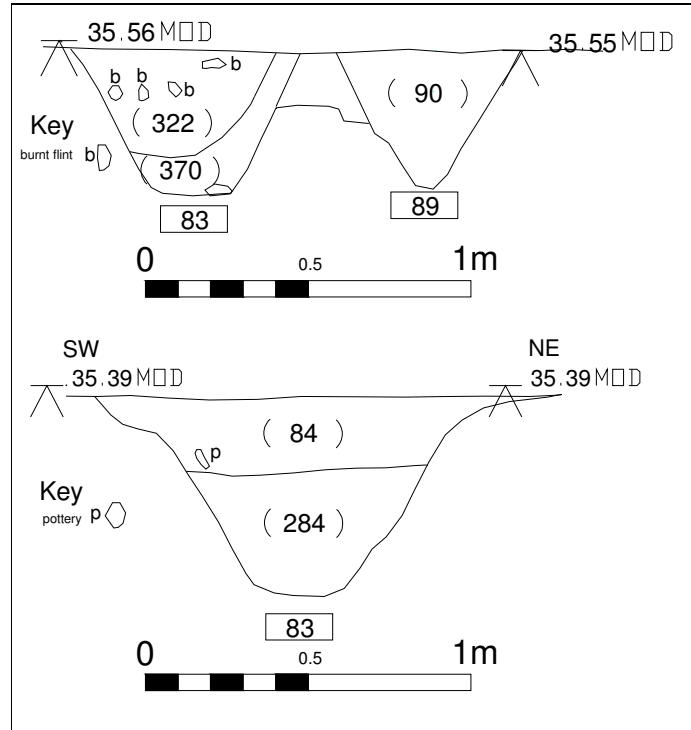


Figure 24: Plan of early Roman Phase 6 Romano British 4 features in Trench B.



**Figure 25: Phase 3 Romano-British 1 ditches, associated Group 0 postholes, and pit 62.**

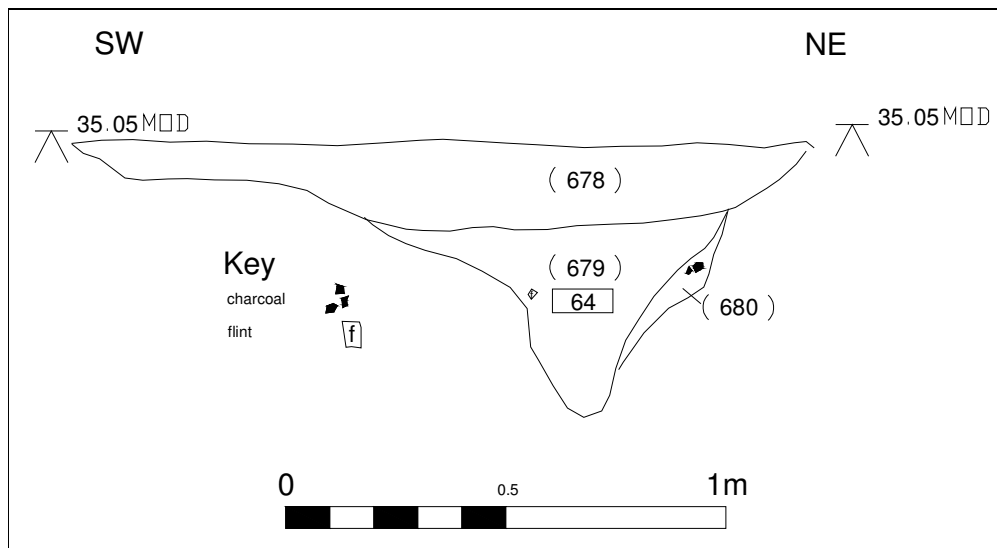
produced a small amount of charcoal). It contained a similar suite of pottery to the lower fills with 114 sherds of Quartz 1 (including necked and everted-rim jars), 34 sherds of Late Iron Age flint-tempered wares (including a bead rim jar), 25 sherds of Rowland's Castle Ware, and three sherds of Southern Atrebatian Overlap Ware. In addition there was a single sherd from an oxidised flagon. Other finds consisted of burnt flint, burnt clay, fragments of animal teeth, a small fragment of iron, and three fragments of a greensand quernstone.



**Figure 26: Sections 195 and 200 through ditches 83 & 89.**

*Ditch 64 (figs 25 & 27)*

7.3.4 Ditch [64] ran from its north terminal for 7m in a south-easterly direction starting at a width of 0.83m and widening to 1.26m. It then angled to a more southerly direction where it continued for another 18.4m narrowing to 0.18m wide. It then turned again to run south for 3.8m whereupon it terminated. At its deepest it was 0.61m deep (Plate 3). In profile at the north it was shallow and rounded, developing a flat bottom as it widened and then becoming 'v'-shaped as narrowed and ran south. The primary fill was (680) a light brown silty clay caused by erosion of the side of the ditch. It contained no finds. The ditch had been filled variously by (65) a grey brown clay loam with charcoal flecks, (181) a lens of burnt flints, (471) a light grey to pale yellow clay loam with very few charcoal flecks, (679) a grey brown silty clay, and (727) a yellowish brown clay loam. These fills contained nine sherds of Late Iron Age flint-tempered pottery, nine sherds of Late Iron Age chalk-tempered pottery, two sherds of Quartz 1, one sherd of Rowland's Castle Ware and 53 fragments of burnt flint. A 40 litre soil sample from 65 produced a small amount of charcoal. The final fill was (667/678), a pale brown silt loam. It was found only at the north end of the ditch and contained a single sherd of Rowland's Castle Ware.



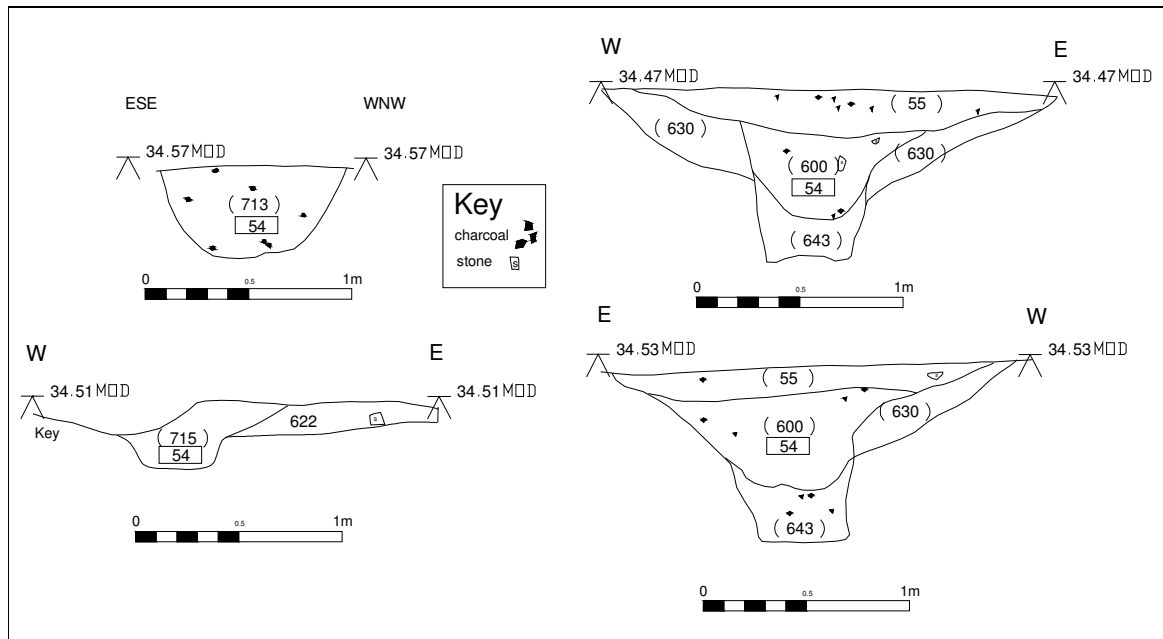
**Figure 27: Section 328 through ditch 64.**



**Plate 3. Excavated section of ditch 64.**

*Ditch 54/620/654 (fig 25 & 28)*

7.3.5 Ditch [54] ran for roughly north-south for 28.9m where it had been removed by later waterhole [476] after which it continued as ditch [654]. At its north end it was 0.90m wide by 0.45m deep with a rounded profile. Further to the south the ditch widened and deepened to a width of 2.22m and was 0.82m deep, with steeply sloping sides and a flat base (Plate 4). At this point there is evidence that the sides of the ditch had slumped and it been re-cut. To the south of the slumped area the ditch became shallower.



**Figure 28: Sections (clockwise from top left) 352, 317, 308, 355 through ditch 54.**

7.3.6 The primary deposit was slumped fill (630) a yellow brown sandy clay with very few charcoal flecks; it contained no finds. The fills of the main phase of filling were, from the bottom: (643) a light brownish grey sandy clay with common charcoal flecks and chunks and (600/673) a light brownish grey sandy clay with many charcoal flecks. Finds consisted of loomweight fragments, burnt flint, 13 sherds of Late Iron Age flint-tempered pottery, 11 sherds of Rowland's Castle Ware, and four sherds of Quartz 1. The upper fills (55/621) a greyish brown clay, contained burnt flint and burnt clay, 11 small fragments of Roman brick, a fragment of greensand quern, a fragment of Old Red Sandstone whetstone, 47 sherds of Rowland's Castle Ware, 28 sherds of Southern Atrebatian Overlap Ware, 17 sherds of Late Iron Age flint-tempered pottery, and three sherds of Quartz 1.

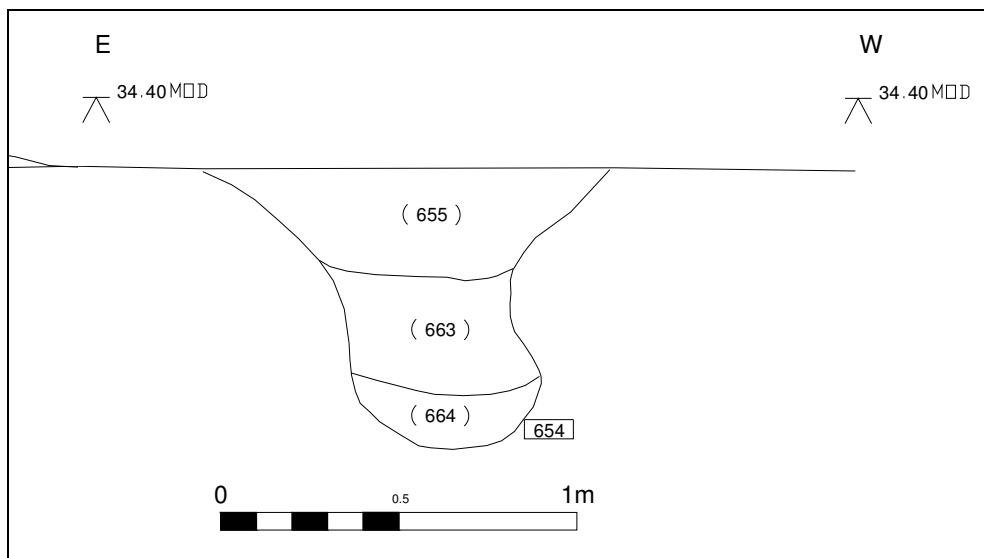
7.3.7 Single fills were encountered at both the north terminal of the ditch and at its southern extent. They were at the north (713), a weak red, sandy clay with occasional charcoal flecks that contained three sherds of Rowland's Castle Ware and one sherd of fabric Quartz 1, and at the south (715), a dark brown clay loam with charcoal, containing much burnt flint, 20 sherds of Rowland's Castle Ware, 16 sherds of Quartz 1, two sherds of Southern Atrebatian Overlap Ware, and a sherd of an oxidised flagon (FOX).

7.3.8 The ditch probably began silting up in the mid-1<sup>st</sup> century AD, with the final fills being somewhat later, reflected in the higher proportion of Rowland's Castle Ware.



**Plate 4. Excavated length of ditch 54, showing section 308.**

7.3.9 Ditch [654] (figs 25 & 29) was the southernmost part of ditch [54]. It was 1.15m wide at the surface but narrowed at a depth of 0.34m to 0.50m wide. Below this it was almost vertical sided to a rounded base at a depth of 0.79m. The undercut west edge rounded base probably was due to standing water disaggregating the sides. It contained three fills, all having charcoal flecks. Fill (664) at the base was a brownish yellow silty clay containing one sherd of Rowland's Castle Ware, above it was (663), a reddish yellow sandy clay with one sherd of Quartz 1. The top fill, (655), was a yellow silty clay with 57 sherds of Quartz 1, six sherds of Rowland's Castle Ware, and three sherds of oxidised flagon (FOX). Other finds from this feature consisted of burnt clay and burnt flint.

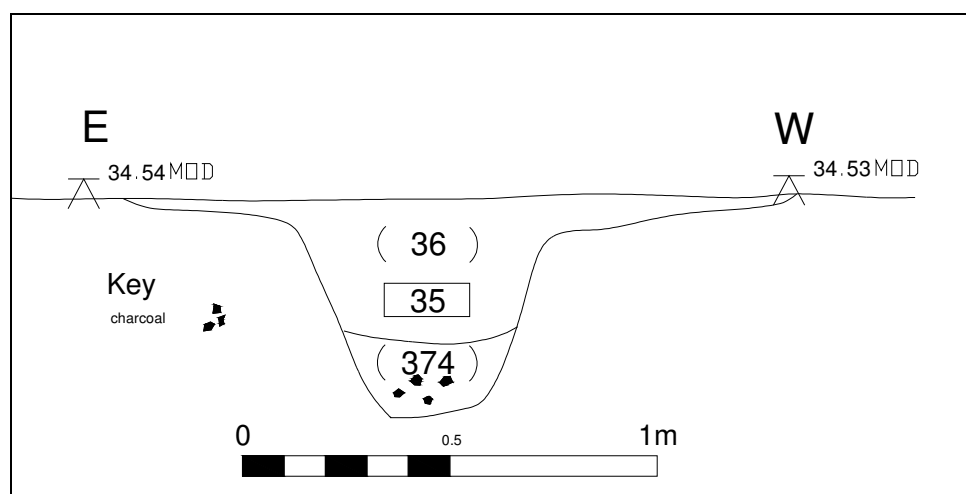


**Figure 29: Section 293 through ditch 654.**

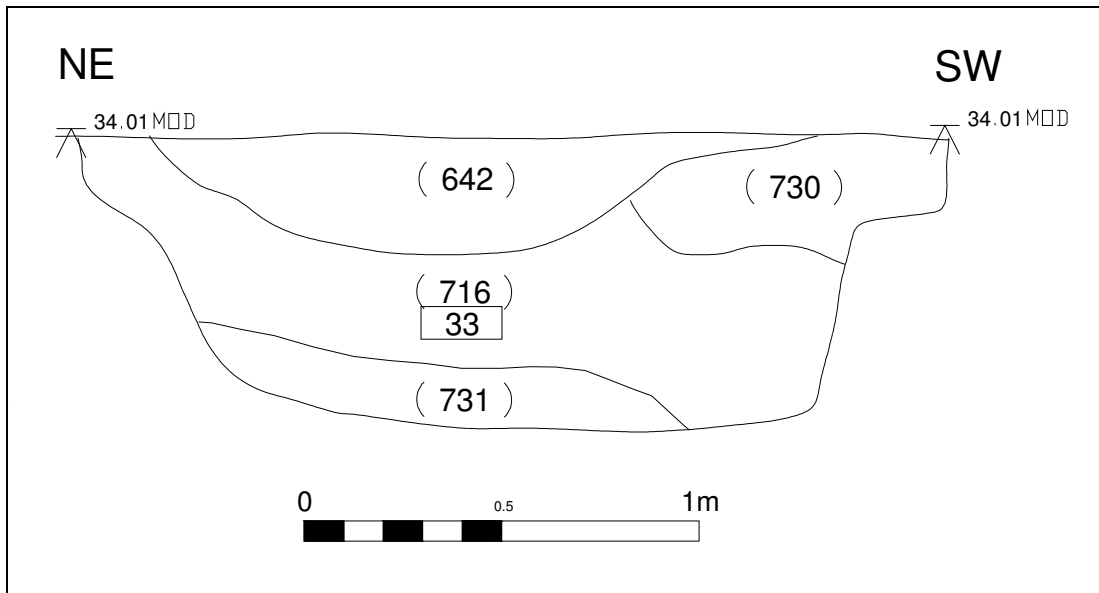


*Ditch 33/35 (figs 25, 30 & 31)*

7.3.10 Ditch [33/35/641] was a fairly straight linear feature which ran downslope in a roughly north-south direction. At its north end it was at maximum 1.2m wide and 0.52m deep, and varied from U-shaped to V-shaped (Fig 30). At its southern end it curved to the east. Later it had been cut through by the sub-circular enclosure ditch 31, but it continued as ditch [33] some 2.6m in width and 0.73m deep, with steep sides and a flat base. The primary fills were (374), a light brown silty clay with abundant charcoal and (731), a brownish yellow clay loam with some charcoal. Fill (374) contained a small amount of burnt flint, burnt clay and loomweight fragments, with four sherds of a Late Iron Age flint-tempered bead rim jar, three sherds of Quartz 1 ware and a single sherd of Rowland's Castle Ware. The secondary fills were (716) and (730), a light greyish to reddish yellow silty clay with occasional charcoal. These fills contained six sherds of Rowland's Castle Ware, a single sherd of Southern Atrebatian Overlap Ware, a fragment of loomweight and some degraded animal bone and teeth. The bone included a fragment of the shaft of a long bone, probably from a horse. The upper fills were (642/34/36) a dark grey silt loam with charcoal. The finds included burnt flint, burnt clay, a Roman brick, an iron nail, a fragment of greensand quern, 37 sherds of Rowland's Castle Ware, 23 sherds of Late Iron Age flint-tempered wares, 18 sherds of Quartz 1, 13 sherds of Southern Atrebatian Overlap Ware including a bead rim jar, three sherds of Late Iron Age chalk-tempered ware, and a single sherd of an Alice Holt greyware jar.



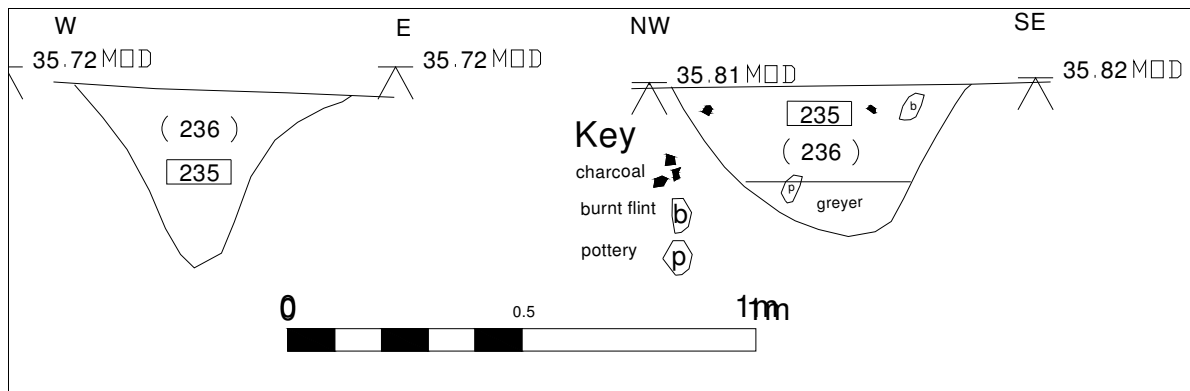
**Figure 30: Section 245 through ditch 35 towards the north end.**



**Figure 31: Section 580 through ditch 33 south of ditch 40.**

*Ditch 235 and associated postholes (figs 25 & 32)*

7.3.11 Ditch [235] was an enclosure ditch consisting of two lengths of straight, shallow ditch meeting at an angle of  $110^{\circ}$ ; one length was 13m, the other was 18m. It was some 0.40m deep with a 'v-shaped' profile, and was between 0.46m and 0.50 wide (Plate 5). Its fill (236) was a pale brown silty clay containing charcoal and patches of flint. The base of the deposit was gleyed in places, suggesting it held water. It contained burnt flint, Roman brick, 10 sherds of flint-tempered Late Iron Age pottery, one fragment of a North Gaulish Flagon (NOGWH), one sherd of Rowland's Castle, and one sherd of Southern Atrebatian Overlap Ware. The North Gaulish flagon probably dates from the mid to late 1<sup>st</sup> century AD. A 40 litre soil sample from fill 236 produced a few fragments of charcoal.



**Figure 32: Sections 206 and 96 through ditch 235.**



**Plate 5. Excavated part of ditch 235 at the angle between the two lengths, showing section 96.**

7.3.12 The two lengths of ditch enclosed an area that contained a group of seven postholes (Group 0) [219], [223], [225], [227], [231], [239], and [243] (figs 25 & 33). They were between 0.25m and 0.40m in diameter and were between 60mm and 350mm deep. They do not form an obvious structure and may not have been contemporary. Most contained burnt flint and charcoal that had entered the fills after the posts had rotted or been removed.

Posthole [219] was circular, 0.33m in diameter by 0.25m deep. It contained fill (220), a light brownish grey silty clay with some burnt flint. A 0.5 litre soil sample from fill 220 produced a few fragments of charcoal.

Posthole [223] was circular, 0.35m in diameter by 0.35m deep. It contained fill (224) a grey mottled silty clay with charcoal, above (281), a brownish yellow clay with charcoal flecks. Finds included burnt clay, burnt flint and a flint flake, probably used as packing (Plate 6). A 1.5 litre soil sample from fill 281 produced a few fragments of charcoal.

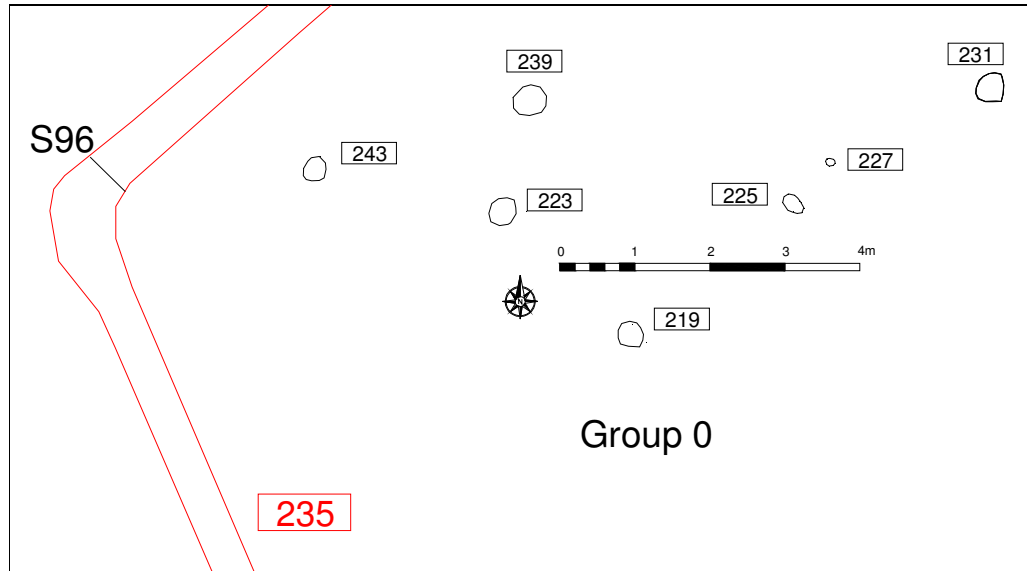
Posthole [225] was oval, 0.31m by 0.19m by 0.10m deep. It contained fill (226) a brown silty clay with charcoal patches and abundant burnt flint.

Posthole [227] was sub-circular, 0.25m in diameter by 0.15m deep. It contained fill (228) a light brownish grey silty clay with charcoal and burnt flint. A 1 litre soil sample produced a few fragments of charcoal.

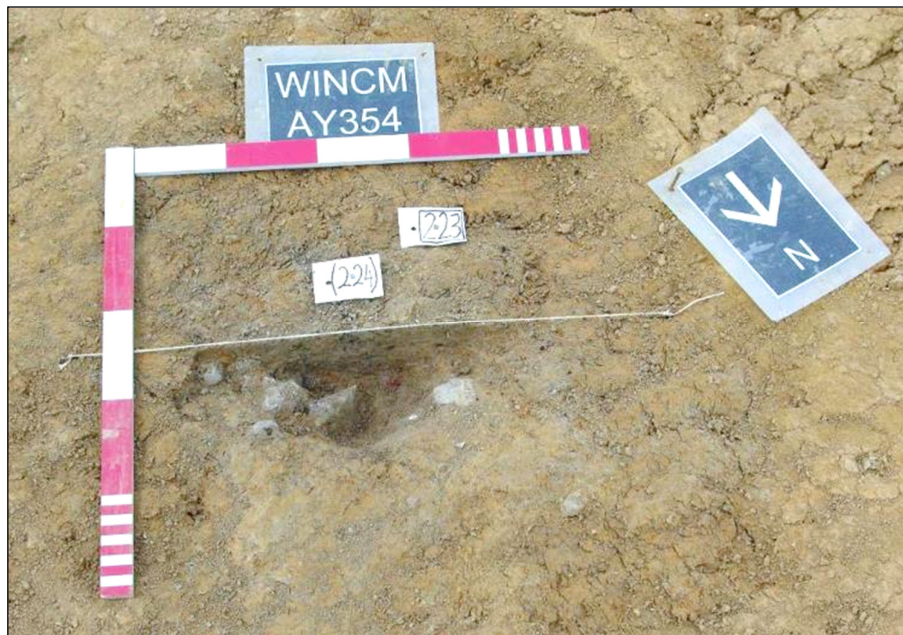
Posthole [231] was sub-circular, 0.35m in diameter and 0.10m deep. It contained fill (232), a weak red silty clay with large flints, which may have been packing.

Posthole [239] was circular, 0.40m in diameter by 0.26m deep. It contained fill (240) a light brownish grey silty clay with occasional charcoal flecks, burnt flint and two sherds of Q1 pottery.

Posthole [243] was circular, 0.30m in diameter by 0.06m deep. It contained fill (244) a grey mottled silty clay with charcoal, and burnt flint. A 4 litre soil sample from fill 244 produced a few fragments of charcoal.



**Figure 33: Group 0 Phase 3 postholes associated with enclosure ditch 235.**

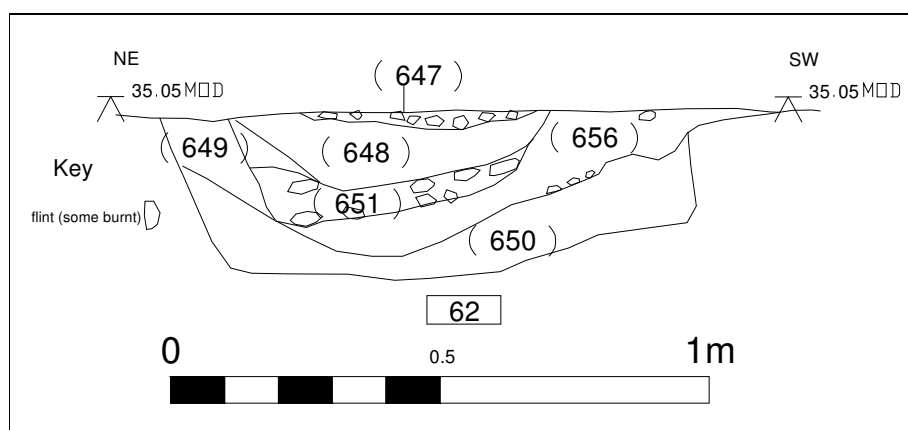


**Plate 6. Posthole 223 half-sectioned showing burnt flint packing.**

*Pit 62/646 (fig 25 & 34)*

7.3.13 After ditch 64 had filled up it was cut by pit 62/646, and the pottery in the pit suggests there was little time between the digging of the ditch, its filling, and the digging

and filling of the pit so it has been placed in this phase. The pit was an irregular oval, 1.45m by 1.10m and 0.35m deep, with rounded sides and a flat base. It contained eleven fills. The primary fill was (650/456), a brownish yellow silty clay with no finds. Above the primary fill were ten deposits of silty loam with charcoal flecks and burnt flint. The lowest fill was (656/63), a black, sandy silt loam mottled yellow brown which contained four fragments of a triangular loomweight, and 74 sherds of a large 26cm diameter Late Iron Age flint-tempered bead rim jar, two sherds of Southern Atrebatian Overlap Ware, one sherd of Quartz 1, one fragment of probable loomweight and 29 burnt flints. A 40 litre soil sample produced an abraded possible cereal grain, possible weed seeds/chaff, and wood and twig charcoal. Above it was (651/455), a brown silty clay with burnt flint; then (649/177), a brown silt loam; then (465), a brownish yellow silty clay, then (457), a pale brown silty clay with one sherd of Late Iron Age flint-tempered; then (648), a brown silt loam containing two fragments of loomweight, and a sherd of a quartz-tempered bead rim jar (Q1); then (463), a light grey silty clay; then (647), a brown silt loam with grey mottles; then (464) a yellow silty clay with 17 sherds of a small (20cm dia) Late Iron Age flint-tempered bead rim jar, and finally fill (66), a grey silty clay with charcoal.



**Figure 34: Section 295 through pit 62.**

#### *Posthole 241 (fig 25)*

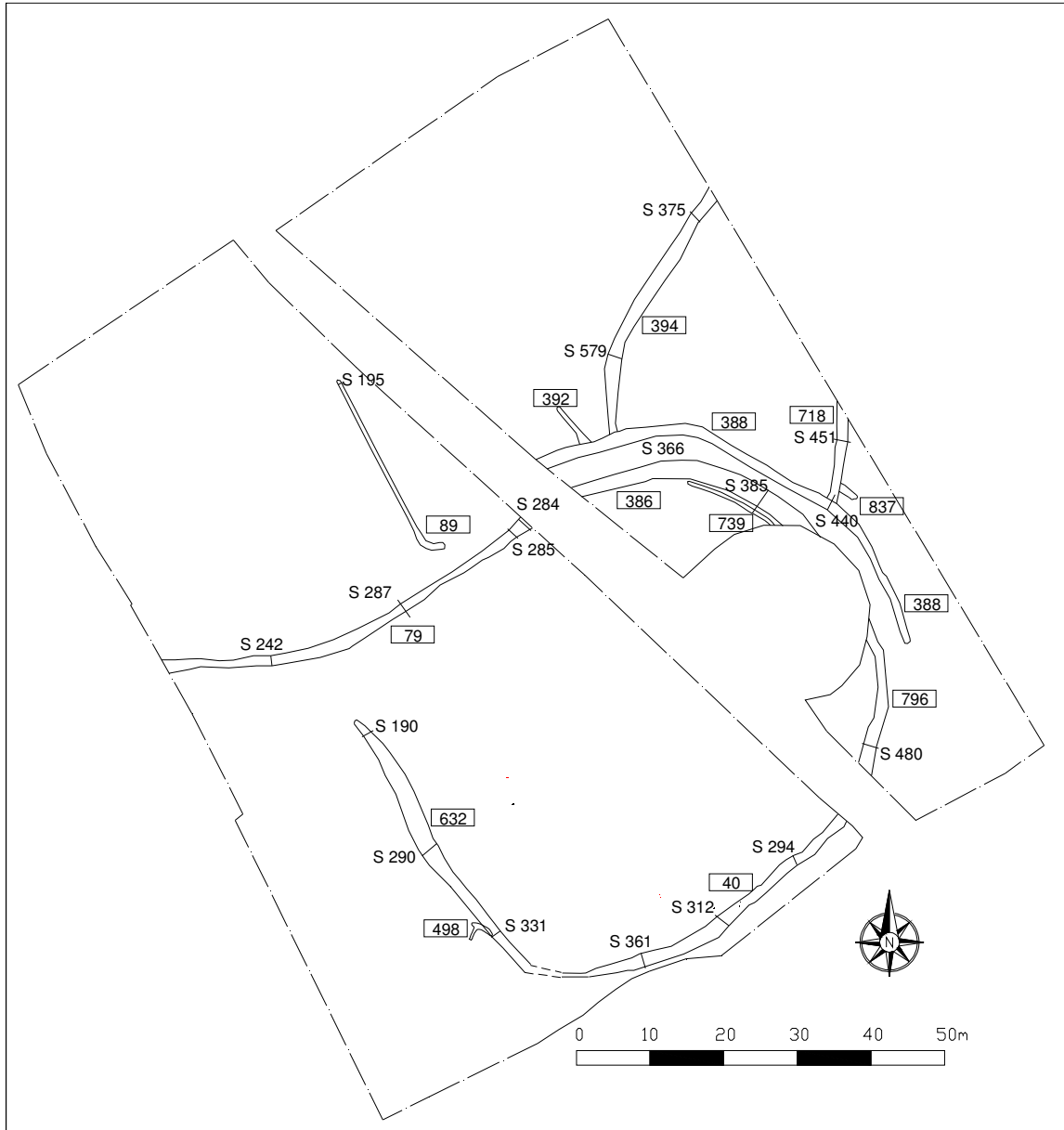
7.3.14 Posthole [241] lay to the north of ditch [235] adjacent to ditch [83]. It was sub-circular, 0.27m in diameter by 0.08m deep. It contained fill (242) a light grey brown silty clay with burnt flint. Its date is uncertain but has been placed in this phase as later Roman activity is concentrated further to the south and east.

### **7.4 Phase 4: Romano-British 2, the sub-circular enclosure: AD c.75-100**

#### *The sub-circular enclosure*

7.4.1 Ditches [79], [386], [796], [40] and [632] formed a sub-circular enclosure with a 10m wide access point to the west (fig 35). Ditch [79] continued westwards beyond the entrance. To the north-east of the enclosure there was an outer quadrant ditch [388], at its closest only 1.4m away from ditch 79, to which were attached three radiating ditches [392], [394] and [718]. Within the enclosure and outside it were a number of small pits and postholes which probably represent structures and other activities (figs 44 & 49). No obvious structure plans were visible.

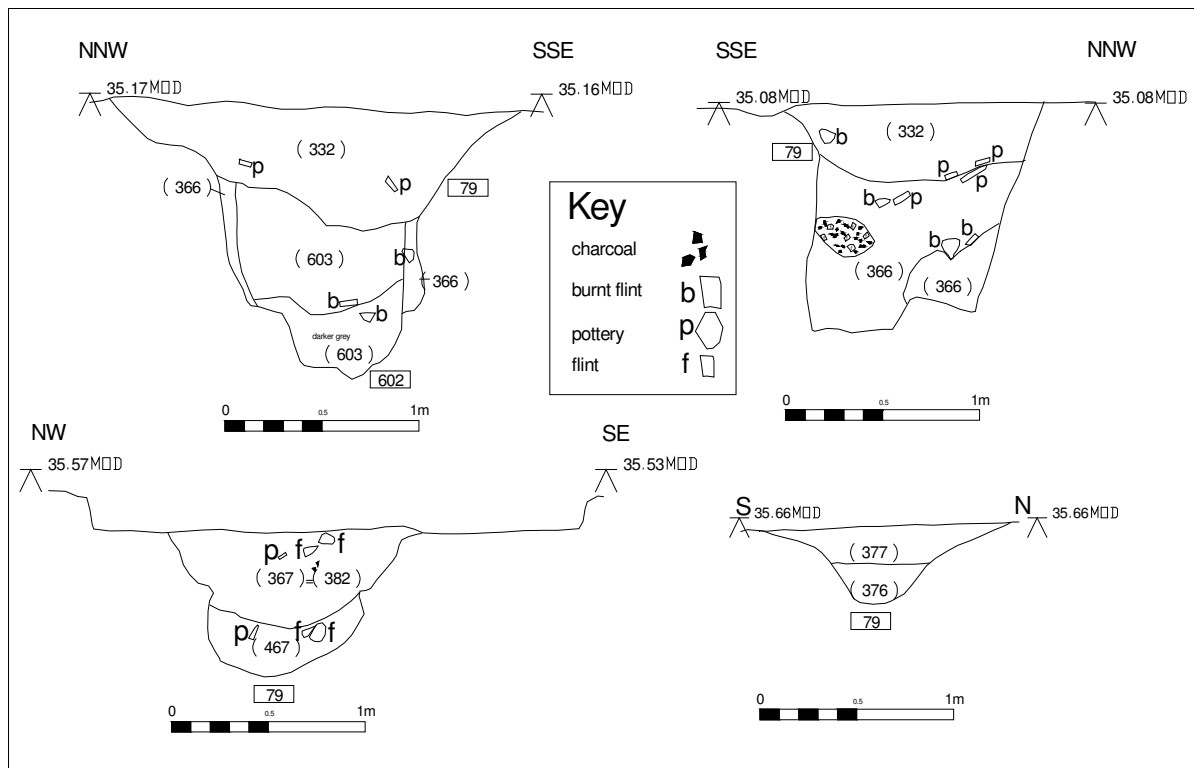




**Figure 35: Plan showing the ditches of the Phase 3 Romano-British 2 early Roman sub-circular enclosure. Illustrated sections are also shown.**

*Ditch 79 (fig 35 & 36)*

7.4.2 Ditch [79] ran from the western trench edge for 20.9m in an eastward direction before gently curving to the north and continuing for another 33.5m to where it ran under the tree protection area. The ditch was 1.2m wide and 0.39m deep with sloping sides and a round base at the western edge of the site. As it progressed to the east it deepened to a depth of 1.08m (Plate 7). The sides became more vertical and the base more uneven as it became deeper. In the centre of the trench it was 1.29m deep where it had been deepened to become waterhole [602]. To the east of the tree protection zone ditch [79] was numbered ditch [386].



**Figure 36: Sections (clockwise) 284, 285, 287 and 242 through ditch 79/602.**

7.4.3 The lower parts of the ditch showed signs of silting and slumping, fill (366). This contained 14 fragments of burnt clay, three fragments of animal bone (including a pig molar and incisor), 25 fragments of Roman brick, three fragments of loomweights, 1400 burnt flints, a broken flint core, and three fragments of greensand quern. The pottery consisted of 215 sherds of Quartz 1, 67 sherds of Rowland's Castle Ware, 22 sherds of Late Iron Age flint tempered pottery, 15 sherds of Late Iron Age chalk-tempered ware, and six sherds of Southern Atrebatian Overlap Ware. A soil sample produced a small amount of charcoal.

7.4.5 The secondary fill was (376/450/467/603/610/660), which ranged from a light greyish brown to a yellowish brown silty clay with a few charcoal flecks (a soil sample from 467 produced a small amount of charcoal). It contained 232 fragments of burnt flint, one flint core, one flint flake, seven fragments of loomweight, seven fragments of animal bone, two fragments of burnt clay and two fragments of greensand quern. The pottery consisted of 86 sherds of Quartz 1, 33 sherds of Rowland's Castle Ware, 26 sherds of oxidised flagon (FOX) 17 sherds of Late Iron Age flint-tempered ware, four sherds of Southern Atrebatian Overlap Ware and a sherd of Alice Holt ware. Of interest were a sherd from a Baetican amphora and a sherd from a Gauloise 4 amphora. This was the only sherd of Gauloise 4 amphora from the site; it is a type found widely across Europe and is found in Britain from the late 1<sup>st</sup> century until the mid-3<sup>rd</sup> century (Tyers 1966, 95).



**Plate 7 Section 285 through ditch 79/602.**

7.4.6 The upper fill was (659/626/377/383/80/332/382/367/601) a pale yellowish silty clay loam with charcoal flecks. Non-pottery finds consisted of 206 burnt flints, a flint flake, a flint scraper, 36 fragments of burnt clay, 17 fragments of roman brick, two fragments of Roman tegula, six fragments of loomweight, six fragments of animal teeth, three fragments of greensand quern (one a three-quarters complete upper stone (Plate 8)), a fragment of iron and a fragment of an iron sickle. The sickle was found at the base of the plough soil and may be a more recent object. The pottery consisted of 356 sherds of Rowland's Castle Ware, 276 sherds of Quartz 1, 51 sherds of Late Iron Age flint-tempered ware, 17 sherds of Southern Atrebatian Overlap Ware, seven sherds of Late Iron Age chalk-tempered ware, five sherds of oxidised flagon (FOX), two sherds of Hampshire bowls in fabric Quartz 4, and a sherd of Alice Holt ware. Of greater interest were a sherd of a local copy of a Gallo-Belgic platter of form CAM 16, a sherd of North Gaulish Whiteware, and four sherds of South Gaulish Samian.

7.4.7 A date in the mid-to late 1<sup>st</sup> century for the filling of the ditch seems likely. The types of pottery present are similar in all the fills, but a definite increase in the proportion of Rowland's Castle Wares can be seen as the ditch filled up, with 20% in the primary and secondary fills rising to 50% in the final fills.





**Plate 8. Three-quarters complete upper quernstone in ditch 79.**

*Ditches 386 and 796 (fig 35 & 37)*

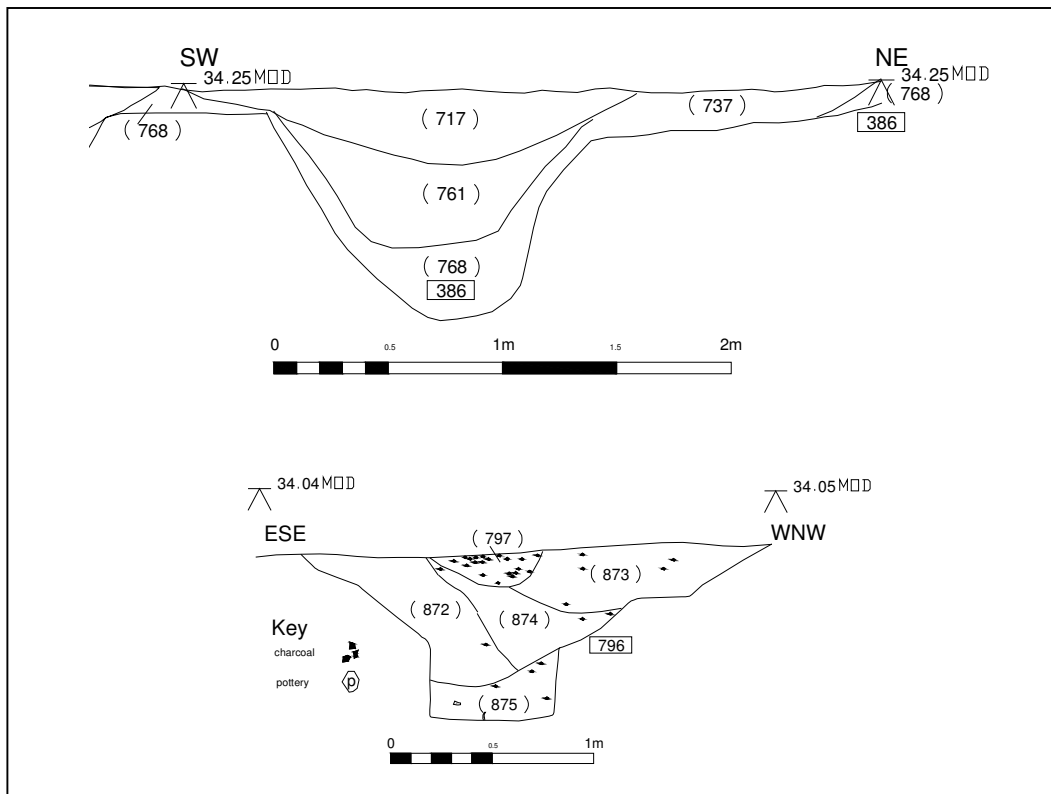
7.4.8 Ditch [386] was the continuation of ditch [79] beyond to the east of the tree protection zone. It curved for 34.5m to the south and east until it reached the circular area left for a large tree in the tree protection zone, it then continued beyond the tree-protection zone as ditch [796] for another 21.5m in a southerly direction. At its widest [386] was 2.0m wide and 1.0m deep with sloping sides and a rounded bottom while [796] had steeply sloping sides at the top which then dropped almost vertically to a flat base. Its depth was between 0.75m and 0.85m.

7.4.9 The bottom fill in [386] was (768/737/741) a light brownish grey silty clay with a few charcoal flecks. It contained four fragments of greensand quern, 70 fragments of animal bone, a loomweight fragment, 13 burnt flints, a flint flake and a flint tool. The pottery consisted of 89 sherds of Southern Atrebatian Overlap Ware (including bead rim and everted rim jars, 28 sherds of Rowland's Castle Ware, 22 sherds of Quartz 1 vessels (including a biconical jar and a globular beaker), and two sherds of a Terra Nigra Copy. Residual Iron Age material was present in the form of 12 sherds of flint-tempered wares and four sherds of chalk-tempered ware.

7.4.10 The secondary fill was (761), with fill (703) at the sides of the ditch. These contained five fragments of Roman brick, and 11 burnt flints. The pottery consisted of 74 sherds of Quartz 1, 41 sherds of Rowland's Castle Ware, 15 sherds of Southern Atrebatian Overlap Ware, one sherd of a Terra Nigra copy, and three sherds of South Gaulish Samian including fragments of a Dr 15/17 platter (AD 40-90), a Dr 37 decorated bowl of the late 1<sup>st</sup> century and a sherd of unknown form. . A 40 litre soil sample from fill 703 produced a few fragments of charcoal.

7.4.11 The final fills were (717), a light greyish brown silty clay, (874), a greyish brown silty clay, and (387), a yellow sandy clay. They contained a large amount of finds, possibly the ditch had become a deliberate dumping ground. There were 37 fragments of roman brick and tegula, 24 fragments of animal bone (including a cattle scapula),

11 fragments of perforated triangular loom weights, nine fragments of greensand querns, a quartzite whetstone, and 114 burnt flints. The pottery consisted of 412 sherds of Rowland's Castle Ware (mostly from cooking pots), 224 sherds of Quartz 1 (everted rim jars and bowls), 115 sherds of Southern Atrebatc Overlap Ware (including two near complete globular jars), seven sherds of Quartz 4, a sherd of Wiggonholt ware, and five sherds of a pulley-wheel-rim flagon. Imported wares were represented by two sherds of Baetican olive oil amphora, two sherds of North Gaulish Whiteware, two sherds of South Gaulish Samian (AD 50-110) and a sherd of the somewhat rarer Central Gaulish micaceous Lezoux fabric, dated AD 90-110. Late Iron Age residual pottery consisted of 46 sherds of flint-tempered vessels, four sherds of grog-tempered ware, and two sherds of chalk-tempered ware, and there were also nine prehistoric flint flakes.



**Figure 37: Sections 385 and 480 through ditches 386 and 796.**

7.4.12 The primary fills in the [796] part of the ditch were (877), a brown silty clay, (876), a brown sandy clay, and (875), a grey silty clay with occasional charcoal flecks. The only finds were in fill (875) which included a deposit of three pots (871). The group consisted of 182 sherds of a large Quartz 1 storage jar, 82 sherds of a large Rowland's Castle Ware storage jar, and 55 sherds from a Southern Atrebatc Overlap Ware girth beaker with incised lines and comb-stabbed decoration (Plate 9).



**Plate 9. Fragments of the Southern Atrebatian Overlap Ware girth beaker (left) and the Quartz 1 storage jar (right) at the base of ditch 796.**

7.4.13 The secondary fills, perhaps in a re-cut or after a period of slumping (fig 37) were (872), a brown silty clay with occasional charcoal flecks, below (874). Above this was (873) a dark brown silty clay with occasional charcoal, which in turn was below dark brown silt loam (797). Finds were recovered only from fill (874), which produced 27 sherds of Quartz 1, nine sherds of Rowland's Castle Ware, six sherds of Late Iron Age flint-tempered wares including a rim sherd from a large storage jar with a rim diameter of 56cm, burnt clay, burnt flint and some fragments of sheep/goat tooth enamel.

7.4.14 Geo-archaeological analysis of ditch [386] indicated that the initial fills were loose silty mud deposited in standing water followed by rapid weathering of the sides, including large blocks of the sides falling in (see Section 8 below).

#### *Ditch 40 (fig 35 & 38)*

7.4.15 The south part of the enclosure was formed by ditch [31/37/611/661/40/624/652]. At the east end it ran for some 23.67m gently curving in a south westerly direction. It then angled slightly more to the west and continued for another 15.75m, then narrowed and continued it the southwest corner. The ditch varied from 1.3m to 2.5m wide and from .020m to 1.290m deep. It mostly had near vertical sides and a flat base, but collapse and cleaning had altered this in places. The profile at the east end was 1.30m wide and 0.62m deep with steeply sloping sides and a slightly rounded base. This widened to a maximum of 2.5m as it ran west with a depth of 1.0m. The top 20cm gently sloped and then it dropped to almost vertical at the north and to an irregular slope at the south forming an almost pointed base. As it continued the sides became more vertical and the base flatter until it was 2.0m wide and 1.2m

deep. As 624 its profile changed to a shallow bowl shape with a rounded base. At this point it was 0.67m wide and 0.20m deep.

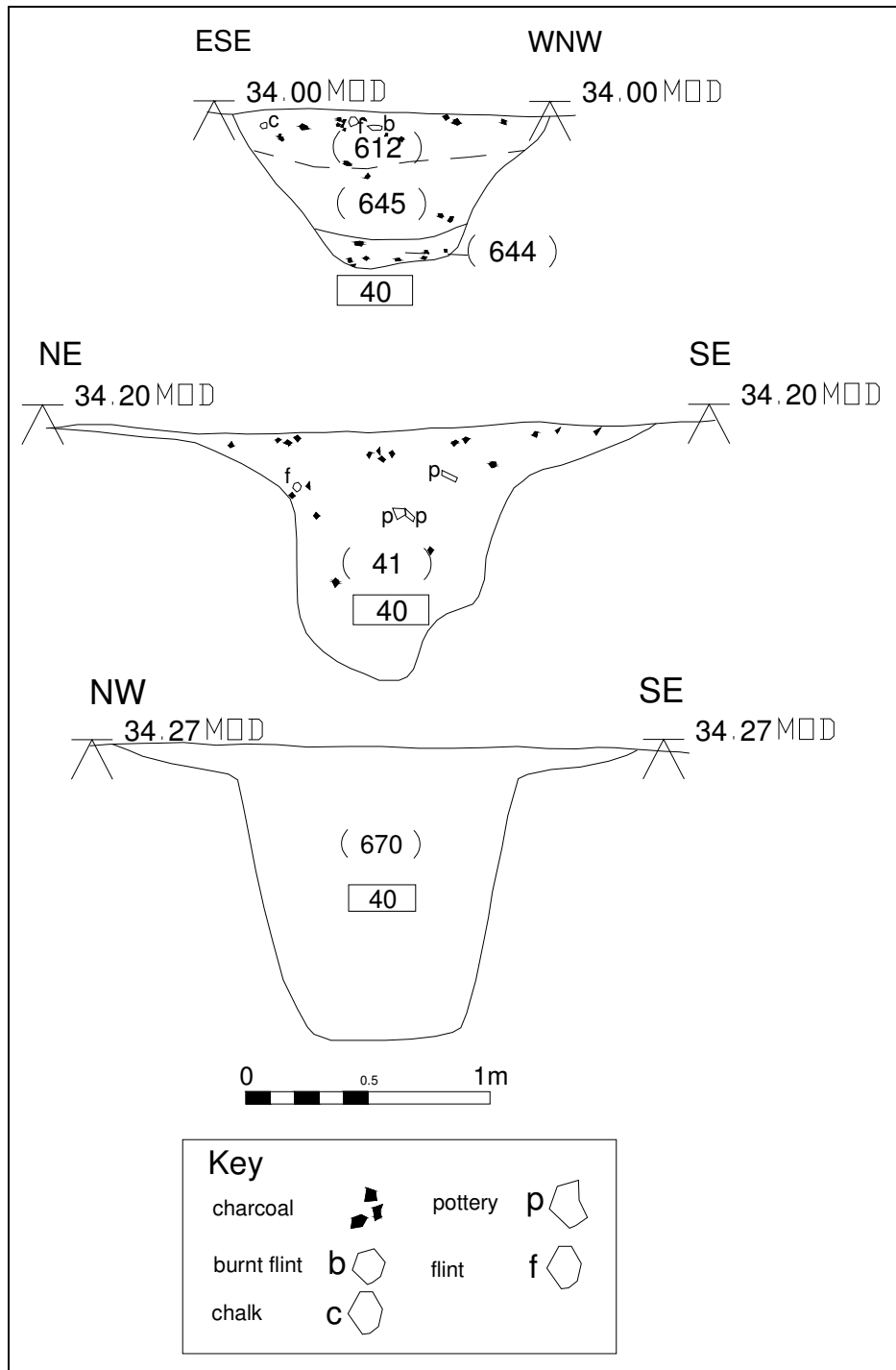


Figure 38: Sections 294, 312, and 361 through ditch 40.

7.4.16 In most parts of the ditch there was a single fill of silty clay, but in two areas primary fills could be distinguished. The primary fills were (644), (666), and (653), all silty clays with a few charcoal flecks. They contained six burnt flints, three fragments of burnt clay, a fragment of briquetage, and a fragment of imbrex, with the pottery consisting of 39 sherds of Quartz 1, 34 sherds of Rowland's castle, 16 sherds of Late

Iron Age chalk-tempered, 13 sherds of Late Iron Age flint-tempered, eight sherds from a Hampshire bowl in fabric Quartz 4, and one sherd of Southern Atrebatian Overlap Ware.

7.4.17 After the primary fills were deposited the ditch continued to fill gradually; only one secondary fill could be distinguished, fill (645) which was a silty clay with some charcoal but no finds.

7.4.18 The final filling of the ditch consisted of contexts (32), (38), (39), (41), (625), and (670) which had built up a deposit of grey brown silty clay between 300mm and 500mm thick. It contained numerous artifacts with two specific deposits with higher concentrations of artifacts; fills (381), and (612/662).

7.4.19 The general filling contained 187 burnt flints, 34 fragments of burnt clay, 23 fragments of triangular loom weights, eight fragments of querns, and six fragments of Roman brick. There were 19 animal bones including a cattle metacarpus. The pottery consisted of 208 sherds of Quartz 1, 156 sherds of Rowland's Castle, 73 sherds of Southern Atrebatian Overlap Ware, 34 sherds of Late Iron Age flint-tempered, 14 sherds of Terra Nigra copy (CAM 16 platter and a beaker), 10 sherds of pulley-wheel-rim flagons, two sherds copying a Gallo-Belgic beaker, and six sherds of Late Iron Age chalk-tempered wares. Imports were present in the form of one sherd from a North Gaulish flagon, and six sherds of South Gaulish Samian (AD 50-110).

7.4.20 The artifact deposits (381) and (612/662) (fig 35) were areas with much higher density of finds, but post-excavation analysis shows they contained a similar suite of artifacts to those present in the rest of the upper ditch fills and that the two groups were very similar in composition although deposited some 13 metres apart. A 40 litre soil sample from fill 612 produced degraded possible weed seeds and chaff fragments and a few fragments of charcoal.

Find type	(381) No of frags	(612/662) No of frags
Burnt flint	22	9
Greensand Quern	2	1
Roman CBM	14 brick	29 tegula
Loomweight	1	4
Late Iron Age flint-tempered	16	17
Southern Atrebatian Overlap Ware	3	1
Rowland's Castle Ware	169	224
Quartz 1	97	184
Quartz 4	9 (beaker)	8 (Hants bowl)
North Gaulish Flagon	4	1
South Gaulish Samian	9	4 including Dr 37 (AD70-110)
Octagonal bottle in blueish glass	1	0
Cream slipped oxidised flagon	0	1

*Ditch 632/184/267/606 (fig 35 & 39)*

7.4.21 The ditch forming the west side of the enclosure was [267/606/632] with re-cut [184] only seen towards its southern end. At the north end of the ditch [267] was 1.25m wide and 0.49m deep and bowl-shaped. It contained single fill (268), a brownish yellow silty clay with charcoal. Twenty metres to the south where it was numbered [632] the ditch was much larger at 2.6m wide and 1.38m deep with steep uneven sides and an

undulating flat base. Its primary fill was (466), a brown silty clay with common charcoal. A 40 litre soil sample from (466) produced possible degraded cereal, possible weed seeds/chaff and wood and twig charcoal, together with some burnt bone. Above (466) was (461), a yellowish brown silty clay. Above this was (363), a brown silty clay with common charcoal, below (633), a yellowish brown sandy clay, below (640), a yellowish brown sandy clay with a few charcoal flecks. At its southern end the ditch [606] reduced to 1.16m wide and 0.92m deep with almost vertical sides and a flat bottom. Its primary fills were (618), a light brown silty clay with occasional charcoal, and (669), an olive yellow silty clay, which had filled the ditch to the top.

7.4.22 The primary fills contained 114 burnt flints, a flint flake, 42 fragments of loom weights, three fragments of greensand quern, one fragment of Roman brick, an animal tooth, and a fragment of briquetage. The pottery consisted of 155 sherds of Quartz 1, 88 sherds of Southern Atrebatian Overlap Ware, 24 sherds of Rowland's Castle Ware, 18 sherds of Late Iron Age flint-tempered wares, two sherds of Quartz 3, and two sherds of Late Iron Age chalk-tempered wares. There were no imports. A mid- to late-1<sup>st</sup> century date is likely.

7.4.23 There was no sign of a re-cut at the north end of the ditch but 20m south it was evidenced as a broad cut [184] almost the full width of the ditch but only 0.90m deep (see section 290, fig 39, and Plate 10). It contained fills (340/341), a yellowish brown silty clay, below (329), a yellowish brown silty clay with common charcoal below (185), a grey silty clay (186), a yellowish brown clay with occasional charcoal. At the south end of the ditch the re-cut was also present and contained (696/668), a brownish yellow clay with a few charcoal flecks, beneath (695/607), a yellow clay (see section 331, fig 39).

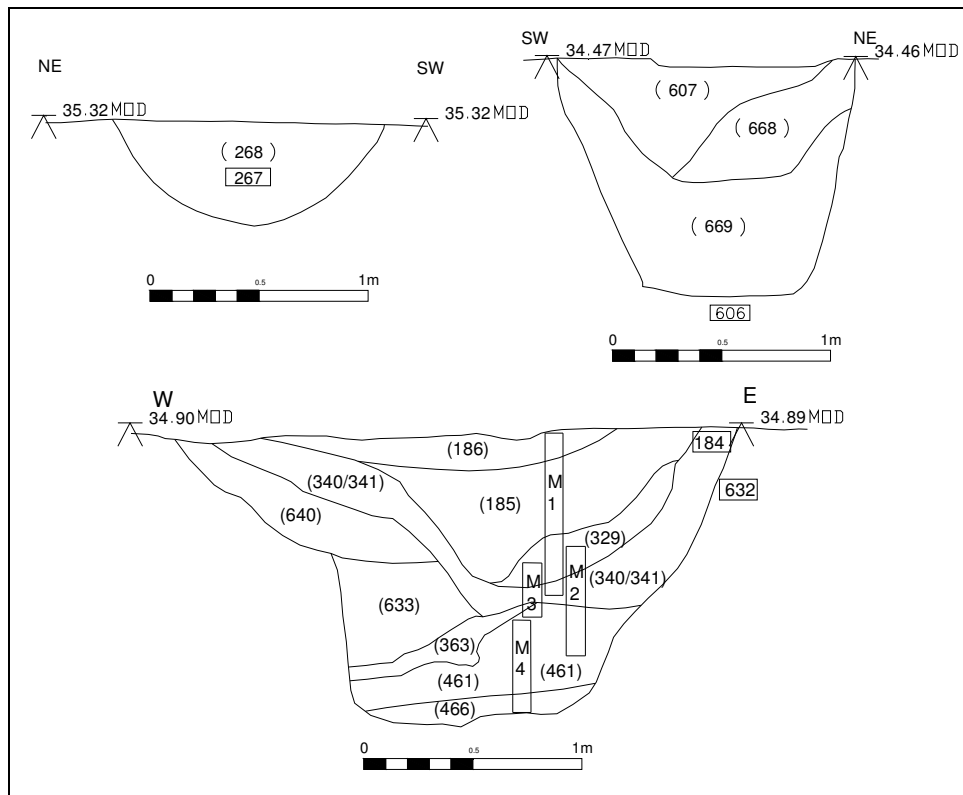
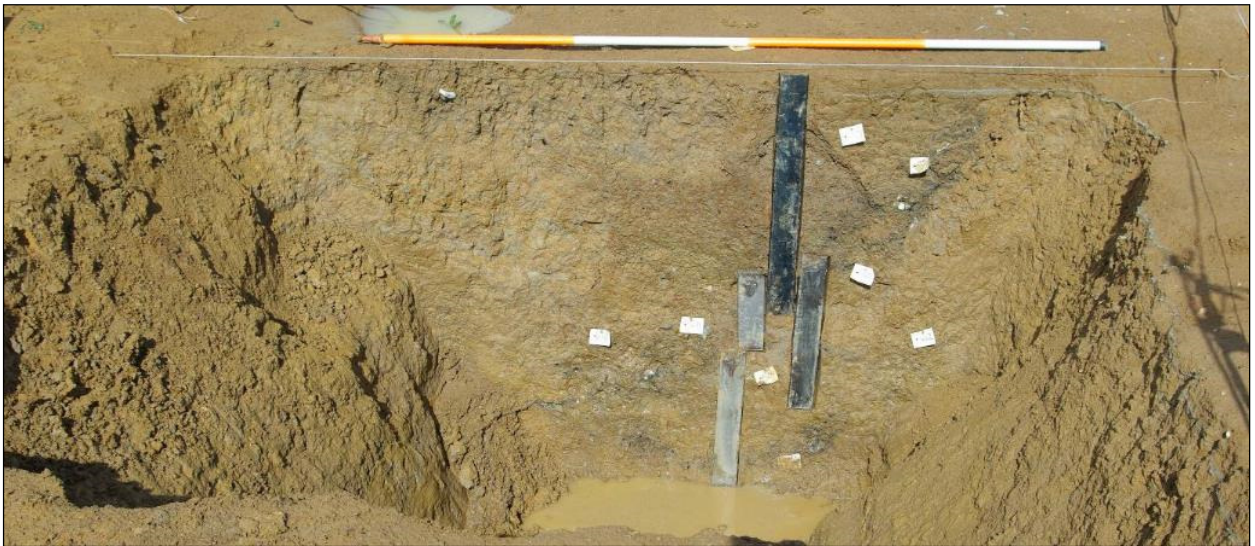


Figure 39: Sections (clockwise from top left) 190, 331 and 290 through ditch 184/267/632. (Section 290 shows position of column samples M1-4).



7.4.24 The fills of the re-cut contained 22 burnt flints, a flint flake, three fragments of burnt clay, probably from loom weights, and three fragments of greensand quern. The pottery consisted of 51 sherds of Quartz 1, 18 sherds of Rowland's Castle Ware, 18 sherds of Late Iron Age flint-tempered wares, seven sherds of Late Iron Age chalk-tempered wares, three sherds of Southern Atrebatian Overlap Ware, and two sherds of an Alice Holt ware Surrey bowl. Also present were 57 sherds of North Gaulish flagons, at least two vessels to judge by the two handles. A mid to late 1<sup>st</sup> century date is likely.

7.4.25 This ditch was selected for detailed examination of the ditch silts and a series of samples were retrieved for geo-archaeological analysis by Dr M Allen (Plate 10). The analysis showed that the initial fills were laminated indicating deposition underwater. Above these the main fill (461) was rapidly derived from the weathered sides with some admixture of windblown charcoal. The primary fill of the recut (340/341) included burnt flint, charcoal and burnt soil, suggesting a hearth area had been thrown or eroded into the ditch, followed by slower erosion of the sides incorporating some topsoil until the ditch fills reached the surface. At no point was there a hiatus where a soil horizon formed (see Section 8.1 for fuller discussion).

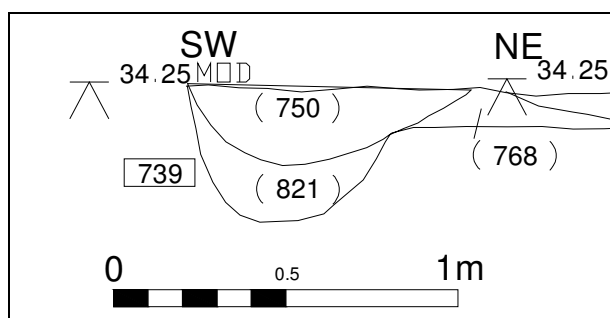


**Plate 10. Section 290 through ditch 184/632 showing position of the sampling boxes.**

*Ditch 739 (figs 35 & 40)*

7.4.26 Ditch [739] was a narrow ditch which ran 0.60m inside enclosure ditch [386]. Some 13.0m was exposed. It was 0.40m wide and 0.20m deep with steeply sloping sides and a rounded base (Plate 11). The primary fill was (821), a light yellow brown silty clay. It contained four fragments of burnt flint, a quartzite sandstone whetstone, three fragments of Roman brick, three sherds of Quartz 1 (including a bead rim bowl) and one sherd of Late Iron Age flint-tempered ware.

7.4.27 The upper fills were (750/740) a dark greyish brown silty clay. They contained three fragments of burnt flint, three loom weight fragments, and two pieces of greensand quern. The pottery consisted of 13 sherds of Quartz 1, eight sherds of Rowland's Castle Ware, five sherds of Late Iron Age flint-tempered ware, and four sherds of an oxidised flagon.



**Figure 40: Section 385 through ditch 739.**



**Plate 11. Excavated length of ditch 739.**

7.4.28 The purpose of this ditch/trench is not known. It would seem to date to the mid-to late 1<sup>st</sup> century, as does the enclosure ditch adjacent to it. If there was a greater length it would be tempting to see it as holding a palisade or a revetment for a bank inside the enclosure, particularly as this part of the enclosure has a double ditch, possibly defensive, but doubling up the defence on only 25% of the circuit is difficult to explain. The feature might have been an early part of setting out the enclosure ditch, although changing the position of the ditch by 600mm can hardly have made a great difference to the endeavour.

*Ditch 388 (figs 35 & 41)*

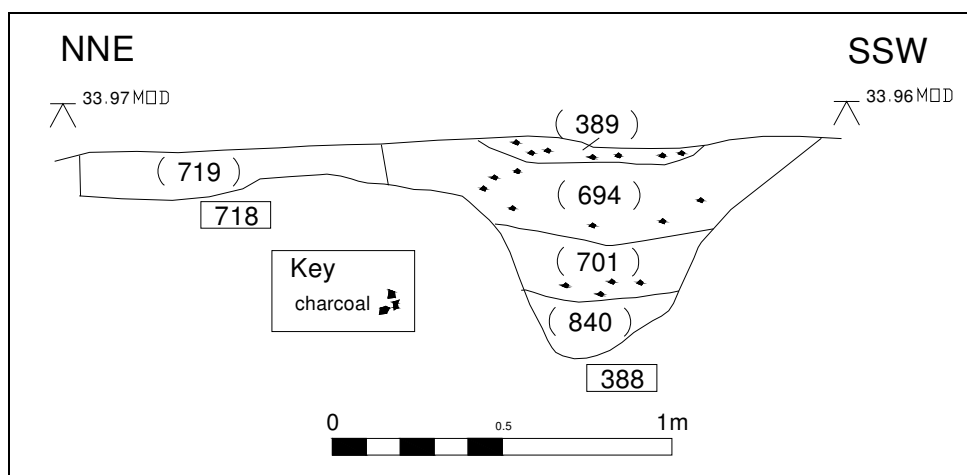
7.4.29 Ditch [388] formed an outer enclosure ditch parallel to ditch [386]. Its north-west end lay beneath the tree protection zone where a modern ditch and hedge divided the trench. It ran eastwards curving in a south-easterly direction for 63.37m to where it terminated. For most of its length it was 3.5m from ditch [386] but at its closest there was only 1.6m between the two ditches. At its widest and deepest it was 1.4m wide



and 0.66m deep. Six sections of the ditch were excavated. The primary fills, (701), (753), (831), (840) and (858) were grey-brown to dark grey silty clay loams with charcoal. They contained 116 burnt flints, 91 small fragments of bone (including sheep/goat molars), three fragments of greensand quern, one fragment each of Roman brick and tegula, and 54 fragments of loom weights. The pottery consisted of 57 sherds of Quartz 1, 29 sherds of Late Iron Age flint-tempered wares, 25 sherds of Rowland's Castle Ware, 14 sherds of Southern Atrebatian Overlap Ware, and one sherd of Quartz 2. Also present were eight sherds of North Gaulish flagons. A mid to late 1<sup>st</sup> century date is likely.

7.4.30 The secondary fills (389), (694), (777), (748), (799), and (853) were brownish yellow to light grey brown with charcoal. They contained 62 burnt flints together with two flakes and a flint grain-rubber, one fragment of greensand quern, two fragments Roman brick, and 45 fragments of loom weights. The pottery consisted of 358 sherds of Quartz 1, 244 sherds of Late Iron Age flint-tempered wares, 134 sherds of Rowland's Castle Ware, one sherd of red oxidised flagon, two sherds of white flagons, one sherd of Quartz 4, and one sherd of Southern Atrebatian Overlap Ware. Also present were two sherds of North Gaulish flagons. A single sherd of Central Gaulish Black Samian from upper fill 389 is considered intrusive from a 2<sup>nd</sup> century phase of rubbish dumping 349. The filling is unlikely to be much later than the primary fills.

7.4.31 The geo-archaeological analysis of this feature (see Section 7) indicated that all the fills were largely a weathered natural accumulation of the parent material with the slight colour changes being due to post-depositional gleying. This would concur with a fairly rapid process of filling as suggested by the pottery.



**Figure 41: Section 440 through ditch 388.**

*Ditch 498 (fig 35)*

7.4.32 A small section of shallow ditch [498] led from waterhole [482] to ditch [184/632]. It ran for 2.3m (with a width of 0.32m) in a north-easterly direction from [482] where it turned to run 3.0m (with a width of 0.71m) in a south-easterly direction to join ditch [184/632]. It was only 0.16m deep with a rounded profile. Its fill (499) was a yellow brown silty clay with abundant mottling. It contained burnt flint, charcoal and two sherds of Quartz 1. This feature probably helped direct water from the partially disused waterhole [482] into the still functioning [184/632].

*Ditch 392 (fig 35)*

7.4.33 Ditch [392] was a 6.2m length of ditch that joined the north edge of outer enclosure ditch [388]. At its widest it was 0.56m wide and 0.24m deep and had vertical sides and a rounded base. Its fill (393/769/749) was a brownish yellow silty clay which contained burnt flint, four loomweight fragments, 18 sherds of Rowland's Castle Ware, 24 sherds of Quartz 1, and 15 sherds of Late Iron Age flint-tempered ware.

*Ditch 394 (fig 35 & 42)*

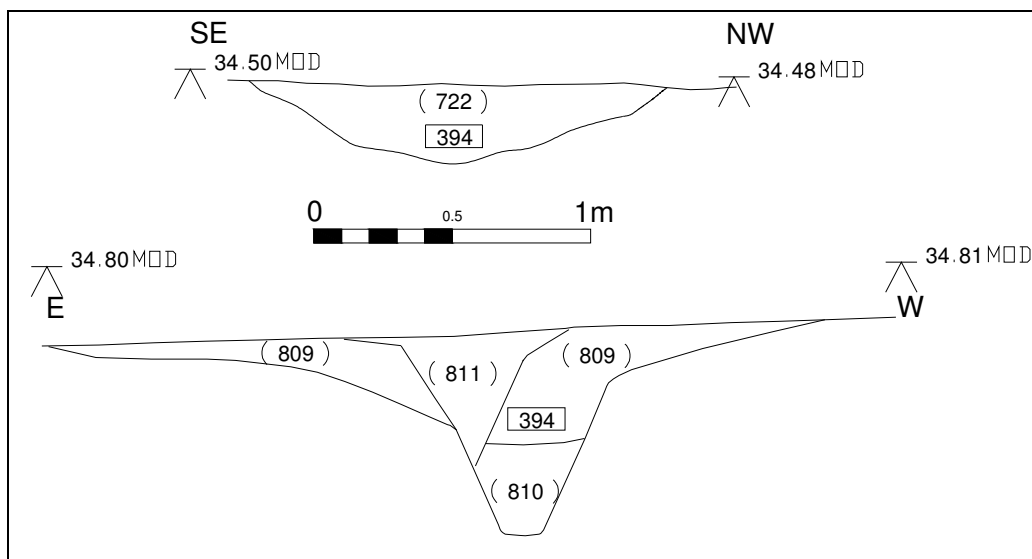
7.4.34 Ditch [394/808] (Plate 12).was another ditch that joined the outer enclosure ditch [388]. At its northern extent it was 1.5m wide and 0.29m deep with a bowl-shaped profile, but as it approached the enclosure it widened and deepened to 2.2m wide and 0.78m deep with steep sides and a pointed base before narrowing again to 0.98m wide and only 65mm deep where it joined ditch 388.



**Plate 12. Excavated length of ditch 394.**

7.4.35 The primary fill was (810) a dark yellow brown silty clay with charcoal flecks, it contained no finds. The ditch then filled with (809) a yellowish brown silty clay, again with no finds. This episode of deposition had filled the ditch to the top, after which it was partly cleaned out to create a V-shaped ditch (see section 579), before finally filling with (395), (811), (722), (795) and (798).

7.4.36 The fills of the re-cut contained 54 fragments of burnt flint, five flint flakes, one fragment of Roman brick, 16 loomweight fragments, three fragments of greensand querns, and one cow tooth. The pottery consisted of 186 sherds of Quartz 1, 124 sherds of Rowland's Castle Ware (including a batch marked cooking pot and a jug), 34 sherds of Southern Atrebatian Overlap Ware, 11 sherds from oxidised pulley-wheel rim flagons, six sherds of Late Iron Age flint-tempered wares, and one sherd of Quartz 4. Also present was one sherd of South Gaulish Samian of uncertain form, dated AD50-110.



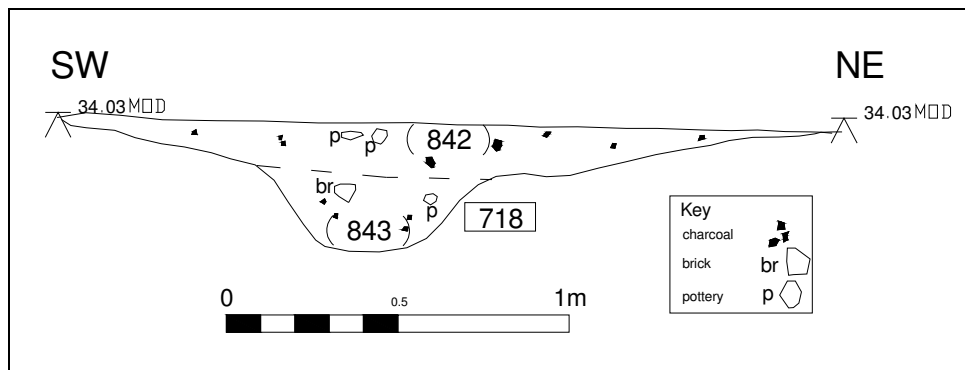
**Figure 42: Sections 375 and 579 through ditch 394.**

7.4.37 The finds assemblage suggests the ditch was silted up with little evidence of domestic occupation, was re-cut, and then in the last quarter of the 1<sup>st</sup> century it was used to dump a wide range of domestic refuse.

#### *Ditch 718 (fig 35 & 43)*

7.4.38 Ditch [718] was another ditch that joined enclosure ditch [388]. It was aligned approximately north-south. Some 14m were within the site. At its north end the ditch was 1.5m wide and 0.37m deep with gradually sloping sides steepening to a rounded base (section 451, fig 42). Further south it had more gently sloping sides and a flat bottom and was 1.2m wide and 0.25m deep. The section suggests the ditch was originally just under a metre wide and erosion, perhaps trampling by animals, had created a wider disturbed upper part to the feature.

7.4.39 The ditch contained primary fill (843) a light brownish grey silty clay, beneath fill (719/842) a yellowish brown silty clay with occasional charcoal flecks. The primary fill contained five sherds of Quartz 1 pottery, some burnt flint and a fragment of Roman brick. The upper fill contained burnt flint, eight loom weight fragments, 109 sherds of Quartz 1, 57 sherds of Rowland's Castle Ware, seven sherds of Late Iron Age flint-tempered ware, four sherds of Quartz 4, two sherds of Late Iron Age chalk-tempered ware, one sherd of a pedestal-based vessel in Southern Atrebatian Overlap Ware, one sherd of oxidised flagon (FOX), and a single sherd of South Gaulish Samian assigned the period AD 50-110.



**Figure 43: Section 451 through ditch 718.**

*Ditch 837 (fig 35)*

7.4.40 Ditch [837] was a short length of ditch attached to the east side of [718]. It ran for 2.78m, was 0.90m wide and 0.28m deep, and had with steep sides and a rounded base. It contained two fills; (839), a yellowish brown clay with charcoal flecks, beneath (838), a light brownish grey silty clay with charcoal. There were no finds from the primary fill; the upper fill contained were nine fragments of burnt flint, 10 sherds of Quartz 1 pottery, two sherds of Rowland's Castle Ware, one sherd of Southern Atrebatian Overlap Ware, and a single sherd in Late Iron Age flint-tempered ware from a large bead-rim storage jar.

*Ditch 89 (fig 35 and Plate 13)*

7.4.41 Ditch [89/4/91/229] cut both ditches [83] and [235]. Ditch [89] ran alongside [83] for 15.6m to where it cut ditch [235]. It then diverged from [83] going in a more southerly direction for a further 19.8m before curving to the north-east for 2.5m where it terminated (Plate 13). In the north, where it cut ditch [83], it was 0.63m wide and 0.31m deep with a rounded, bowl-shaped profile. As it travelled south the profile became steep-sided with a pointed base widening to a maximum of 0.96m wide and a depth of 0.65m deep. At its terminal end the profile was again rounded with a width of 0.69m and depth of 0.45m.

7.4.42 The primary fills were (371/629/230), a weak red, silty clay with occasional charcoal, and (27) and (28), yellow brown silty clays with occasional charcoal and burnt flint. They contained 83 fragments of burnt flint, two flint flakes, four fragments of Roman ceramic building material, and two fragments of querns. The pottery consisted of 25 sherds of Southern Atrebatian Overlap Ware, 12 sherds of Rowland's Castle Ware, 10 sherds of Late Iron Age flint-tempered ware, and a sherd of Gallo Belgic copy (a beaker). There were no imports. A date in the mid-1<sup>st</sup> century is likely.



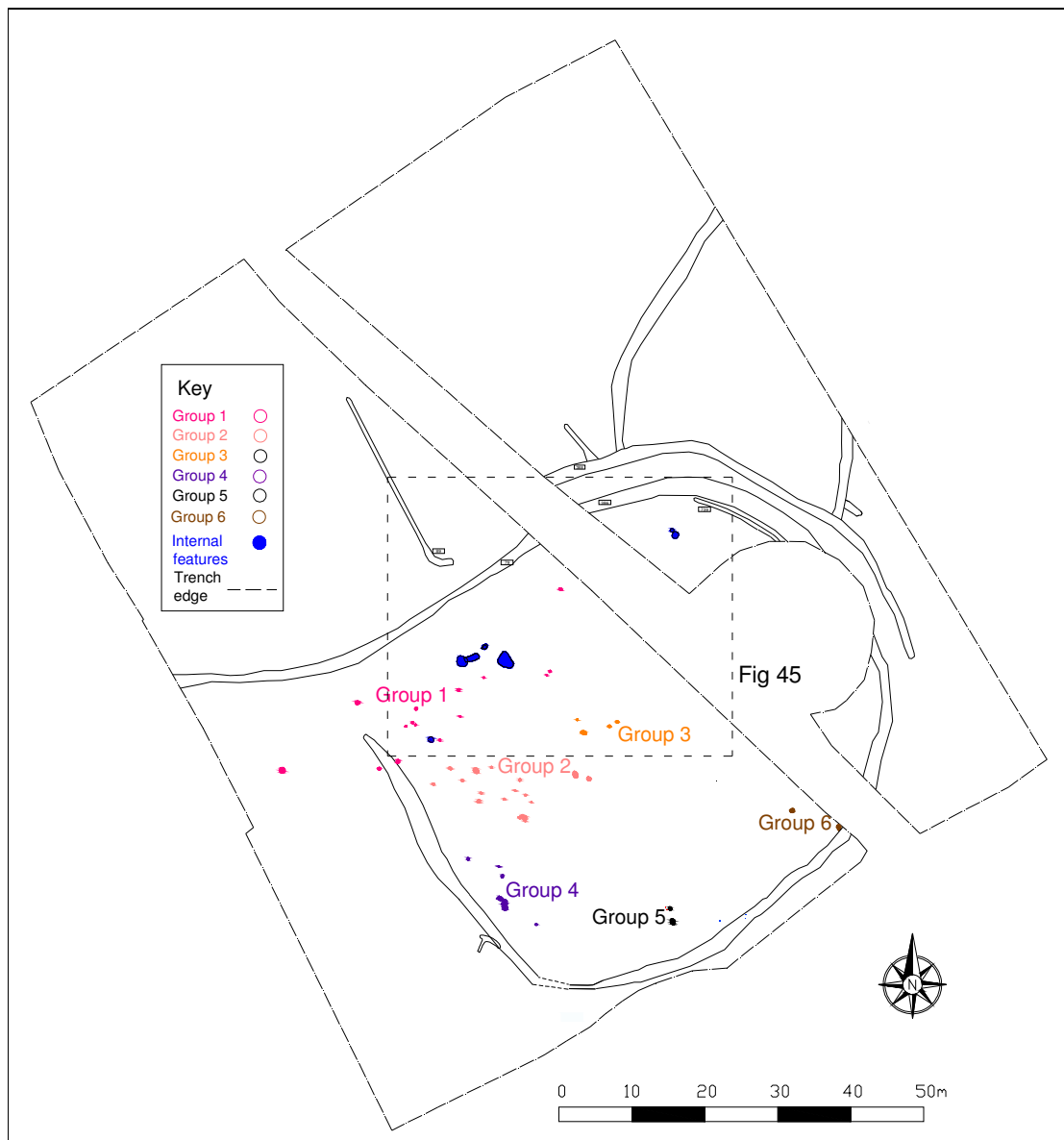


**Plate 13. The terminal of ditch 89.**

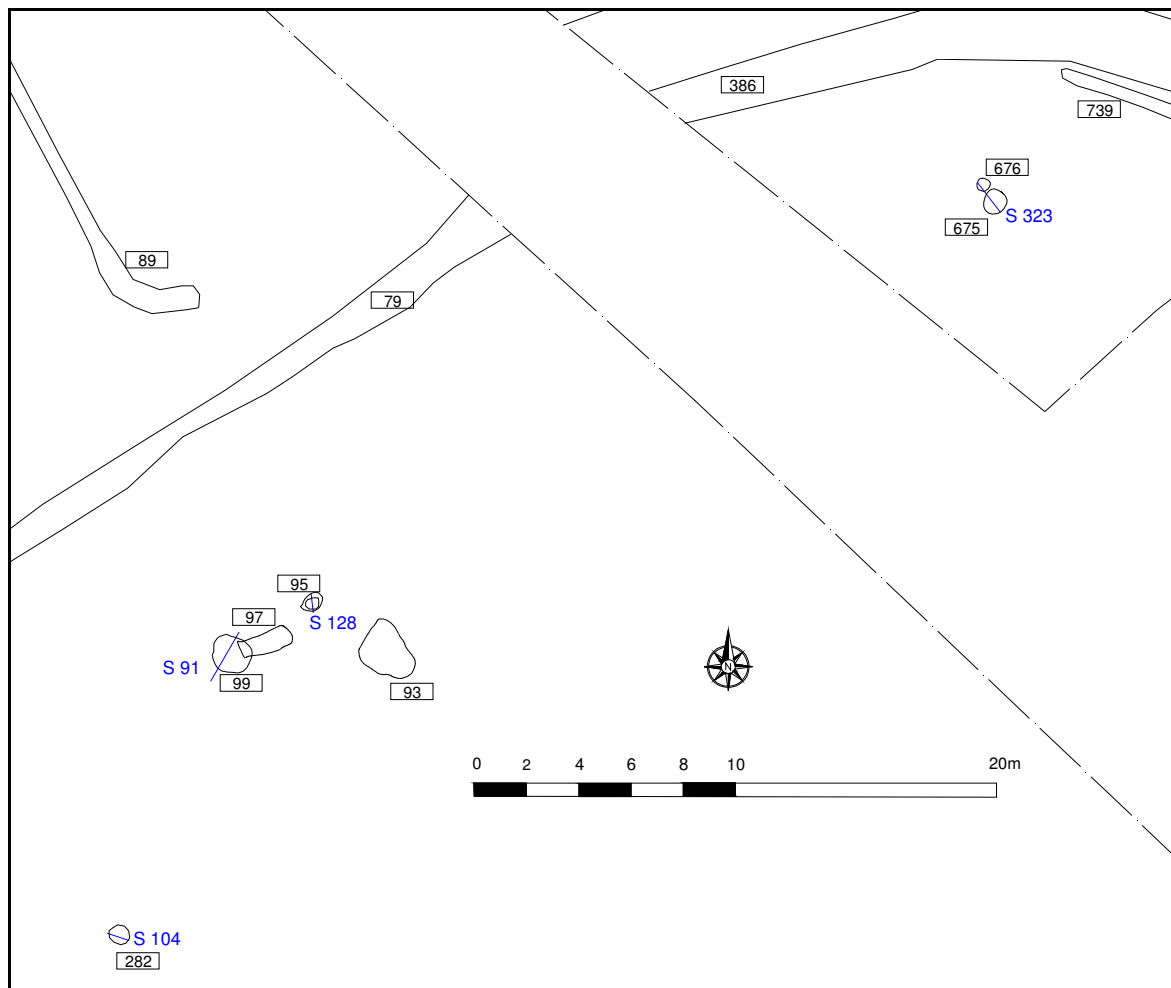
7.4.43 The upper fills were (90/92), a weak red, silty clay and fill (5/26), a dark brown silt loam with abundant charcoal and burnt flint. They contained 37 fragments of burnt flint, and six fragments of greensand querns. The pottery consisted of 107 sherds of Rowland's Castle Ware, 53 sherds of Quartz 1, and nine sherds of Late Iron Age flint-tempered ware. Imports were present in the form of one sherd of a North Gaulish flagon, and one sherd of South Gaulish Samian (AD 50-110). A date in the third quarter of the 1<sup>st</sup> century seems a likely date for the final filling of the ditch.

#### *Features within the Phase 4 Romano-British 2 sub-circular enclosure*

7.4.44 There were postholes and pits within the enclosure area (figs 44 & 45). The pits were [93/313], [95], [97], [99], [282], [675], and [676]. Some were quite shallow and had indistinct edges and bases. The dating of these features is uncertain but [93/313], [95], and [282] all contained sherds of Dressel 20 amphora, which is a rare fabric on the site and is otherwise only found in the fills of the ditches forming the sub-circular enclosure.



**Figure 44: Plan of internal features and posthole groups associated with the Phase 4 Romano-British 2 sub-circular enclosure.**



**Figure 45: Plan of internal features associated with the Phase 4 Roman-British 2 sub-circular enclosure**

*Feature 93/313*

7.4.45 Feature [93/313] was 0.87m in diameter and 0.13m deep. It was filled by (94/314), a weak red, silty clay loam containing three burnt flints, four fragments of burnt clay, 18 sherds of Quartz 1, seven sherds of Rowland's Castle Ware, one sherd of Late Iron Age chalk-tempered, one sherd of Late Iron Age flint-tempered, and two sherds of a Dressel 20 Baetican olive oil amphora.

*Feature 95*

7.4.46 Feature [95] was an oval pit, measuring 0.90m by 0.64m and was 0.49m deep. The fill was (96), a weak red, silty clay. It contained four burnt flints, four small fragments of Roman brick, and intrusive fragments of chalk and 19<sup>th</sup> century land drain. Pottery consisted of 12 sherds of Southern Atrebatian Overlap Ware, eight sherds of Rowland's Castle Ware, two sherds of Dressel 20 Baetican olive oil amphora, and one sherd each of Quartz 1, Late Iron Age flint-tempered, and Late Iron Age chalk-temper.

*Feature 97*

7.4.47 Feature [97] was rectangular, 2.0m by 0.74m and only 0.10m deep. It was filled by (98), a weak red, silty clay loam containing nine burnt flints and pottery consisting of ten sherds of Quartz 1 and six sherds of Rowland's Castle Ware.

### *Feature 99*

7.4.48 Feature [99] was roughly circular, 1.55m in diameter and only 0.07m deep. It contained fill (100), a weak red, silty clay loam containing six burnt flints, a flint pebble grain-rubber, nine sherds of Rowland's Castle Ware, six sherds of Late Iron Age flint-tempered ware, three sherds of Southern Atrebatian Overlap Ware, and one sherd of Quartz 1, as well as an intrusive fragment of post-medieval drain pipe.

### *Pit 282*

7.4.49 Pit [282] was a circular pit measuring 0.77m by a depth of 0.10m. It had gently sloping sides and a flat base. It contained a fill of dark brown clay loam with charcoal flecks (283), but most of the feature was filled by finds. There were 10 burnt flints, a pair of greensand upper quern stones broken into 245 fragments and totalling over 18kg, 104 sherds of Rowland's Castle pottery, 85 sherds of Quartz 1 pottery, 1 sherd of Southern Atrebatian Overlap Ware and the lower half of a Dressel 20 Baetican olive oil amphora broken into 112 sherds, totalling over 2.5kg (Plate 14).



**Plate 14. Pit 282 partly excavated showing flints, burnt quern fragments and amphora sherds.**

### *Feature 675*

7.4.50 Feature [675] lay 5.0m south of inner enclosure ditch [386]. It was roughly circular, 0.94m in diameter, flat-bottomed and 0.18m deep. It contained fill (681), a dark yellow brown, clay loam with charcoal. Around the edge of the feature was a deposit (683) of 21 large flint cobbles, both burnt and unburnt, containing a dump of artifacts (351). The dump consisted of three small burnt flints, eight fragments of a greensand quern upper stone, 27 fragments of perforated triangular loomweights, 250 large sherds of Rowland's Castle Ware, 83 sherds of Quartz 1 fabric, and one sherd of Late Iron Age flint-tempered ware (Plate 15).

### *Feature 676*

7.4.51 Feature [676] was adjacent to [675] and to the north (Plate 15). It was circular, 0.55m in diameter and 0.08m deep with a flat base. It contained a dark yellow brown clay loam fill (682) with charcoal which contained a dump of artifacts (677) comprised of six fragments of burnt clay, 69 large sherds of Quartz 1 pottery, and 66 large sherds of Rowland's Castle Ware.





**Plate 15. Features 675 and 676 (foreground), showing dumps of artifacts in-situ.**

### **Posthole Groups**

7.4.52 Six groups of postholes were identified within the sub-circular enclosure in trench A (fig 44), predominantly in the west part of the enclosure. No obvious building plans could be seen and the postholes may relate to short-lived agricultural activity such as tethering posts or fodder racks.

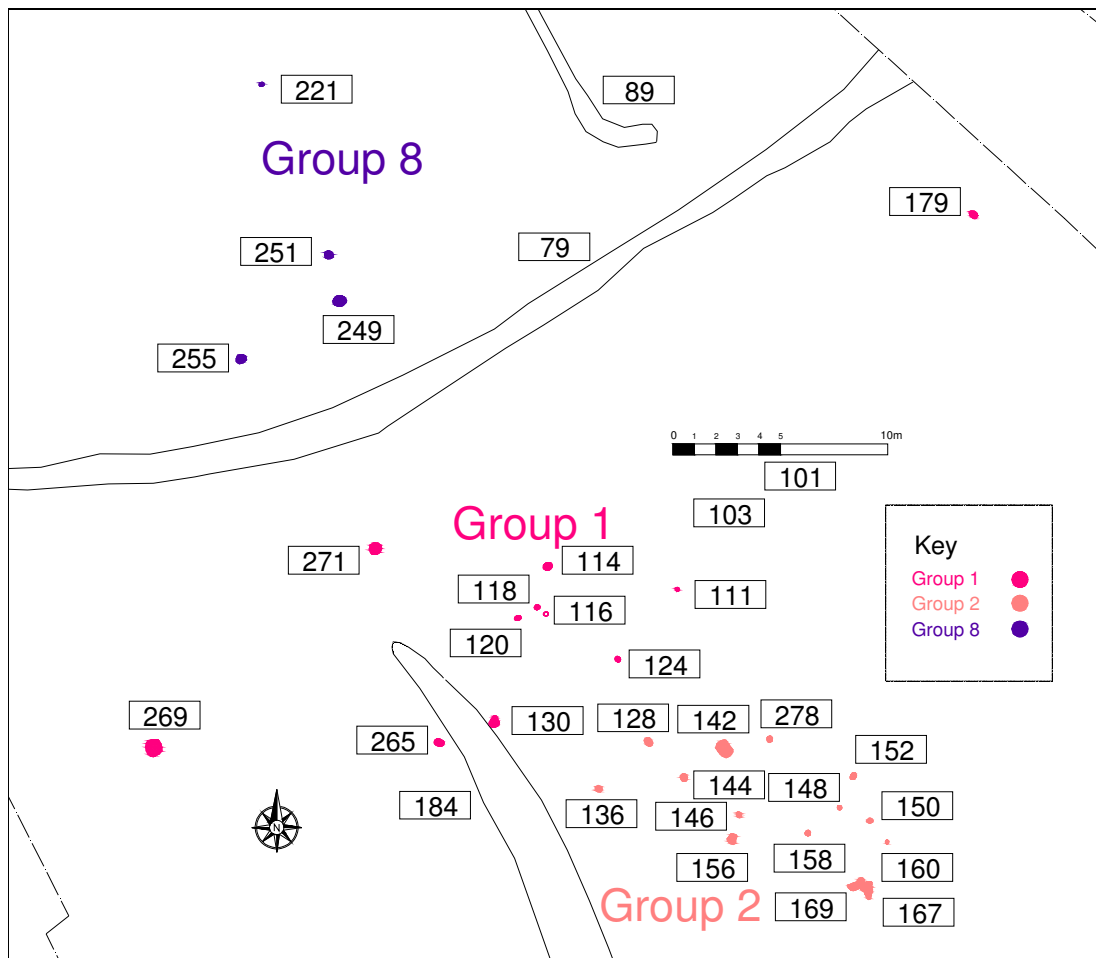
#### *Group 1 postholes (fig 46)*

7.4.53 Thirteen postholes [101], [103], [111], [114], [118], [116], [120], [124], [130], [265], [269], and [271] ran in a south-west to north-easterly direction across the centre of the site. They were in the same area and to the southwest of features [93], [97] and [99]. The postholes were mostly between 3.0m and 4.0m apart.

Posthole [101] was sub-rectangular, 0.27m by 0.20m, and 0.16m deep. It had sloping sides to a rounded base. It contained fill (102), a dark brown clay loam with charcoal flecks, which contained eight sherds of Quartz 1 pottery.

Posthole [103] was circular, 0.60m in diameter and 0.14m deep. It had sloping sides narrowing to an irregular base. It contained fill (104) a yellow brown clay loam containing 63 fragments of burnt flint.

Posthole [111] was an irregular-shaped feature, 0.35m across and 0.14m deep. Its fill (280) contained a fragment of burnt clay and one sherd of fabric Quartz 1. A post mould [279] showed the post (280) had been circular and 0.20m in diameter. After the post rotted or was removed the void was filled by (112), a brown silty clay loam with charcoal flecks and 22 small fragments of burnt animal bone. A one litre soil sample from fill 112 produced a few fragments of charcoal.



**Figure 46: Plan of posthole groups 1, 2 and 8.**

Posthole [114] was a circular posthole 0.40m in diameter and 0.10m deep. It contained (115), a yellow brown sandy clay loam with charcoal flecks and burnt flint.

Posthole [118] was a circular posthole 0.23m in diameter and 0.01m deep. It contained (119) a light brownish grey silty clay.

Posthole [116] was a circular posthole 0.19m in diameter and 0.01m deep. It contained (117) a light brownish grey silty clay.

Posthole [120] was an oval posthole 0.30m by 0.20m. It contained (121) a yellowish brown silty clay which contained no finds.

Posthole [124] was a circular posthole 0.26m in diameter and 0.01m deep. It contained (125) a light grey silty clay.

Posthole [130] was roughly circular measuring 0.36m in diameter by 0.12m deep. It had sloping sides and a flat base. It was filled by (131) a pale brown clay with charcoal flecks, which contained no finds.

Posthole [265] was roughly oval measuring 0.45m by 0.33m by a depth of 0.12m. It was filled by (266), a light yellowish brown silty clay which contained no finds.

Posthole [271] was roughly circular, 0.55m in diameter, and 0.25m deep. It lay centrally in the causeway between the terminus of ditch 184 and ditch 79. It was filled by (272), a yellowish brown silty clay containing charcoal flecks which contained no finds.

Posthole [269] was roughly circular measuring 0.75m in diameter and was 0.07m deep. It was filled by (270) a brownish yellow silty clay. It contained no finds.

*Group 2 postholes (fig 46)*

7.4.54 Group 2 consisted of fourteen postholes. They were [128], [136], [142], [144], [146], [148], [150], [152], [156], [158], [160], [167], [169], and [278/154].

Posthole [128] was roughly oval, 0.33m by 0.22m, and was 0.07m deep. The western edge was near vertical, and the eastern sloped slightly to a flat base. It contained (129) a light brownish grey clay with no finds.

Posthole [136] was roughly circular, 0.30m diameter and 0.20m deep, with steep sides and a rounded base. It contained (137), a very pale brown silty clay loam with charcoal flecks.

Posthole [144] was roughly circular, 0.33m in diameter, and 0.22m deep with sloping sides and a round base. It contained (145), a brown clay loam with charcoal flecks, quantities of burnt flint and one sherd of pottery of Quartz 1 fabric.

Posthole [146] was sub-circular, 0.28m in diameter and 0.08m deep. The eastern edge was vertical but the western edge sloped gently down to a slightly curved base. It contained (147), a very pale brown clay with a few charcoal flecks but no finds.

Posthole [156] was an irregular-shaped feature, 0.42m by 0.30m, by a depth of 0.16m. It had vertical sides and a flat base. It contained (157), a very pale brown clay with charcoal flecks, contained a triangular loomweight in 40 fragments, together with burnt flint, three sherds of Late Iron age chalk-tempered ware and two sherds from a large Rowland's Castle storage jar.

Posthole [158] was roughly circular 0.25m diameter. It contained (159) a very pale brown silty clay loam but was either weathered out or lost during machining.

Posthole [142] was sub-rectangular, 0.78m by 0.60m, by 0.05m deep. It contained fill (143), a light grey silty clay with no finds.

Posthole 278 (fill 277) was roughly circular, 0.27m in diameter, and 0.10m deep. Its fill (277) a yellowish brown silty clay with no finds. Within the fill was post mould [154] which was 0.15m in diameter. The post mould contained (155) a light brownish grey clay with charcoal, burnt bone and burnt flint.

Posthole [152] was a roughly circular posthole 0.25m in diameter and 0.07m deep. It had steeply sloping sides and an irregular base. It contained fill (153), a light grey silty clay which contained two sherds of Quartz 1.

Posthole [148] was circular, 0.22m in diameter, and 0.20m deep. It contained (149), a light brownish grey silty clay, containing 23 fragments of burnt flint, and three fragments of burnt clay.

Posthole [150] was roughly circular 0.22m diameter. It contained (151), a pale brown silty clay loam but was either weathered out or lost during machining.

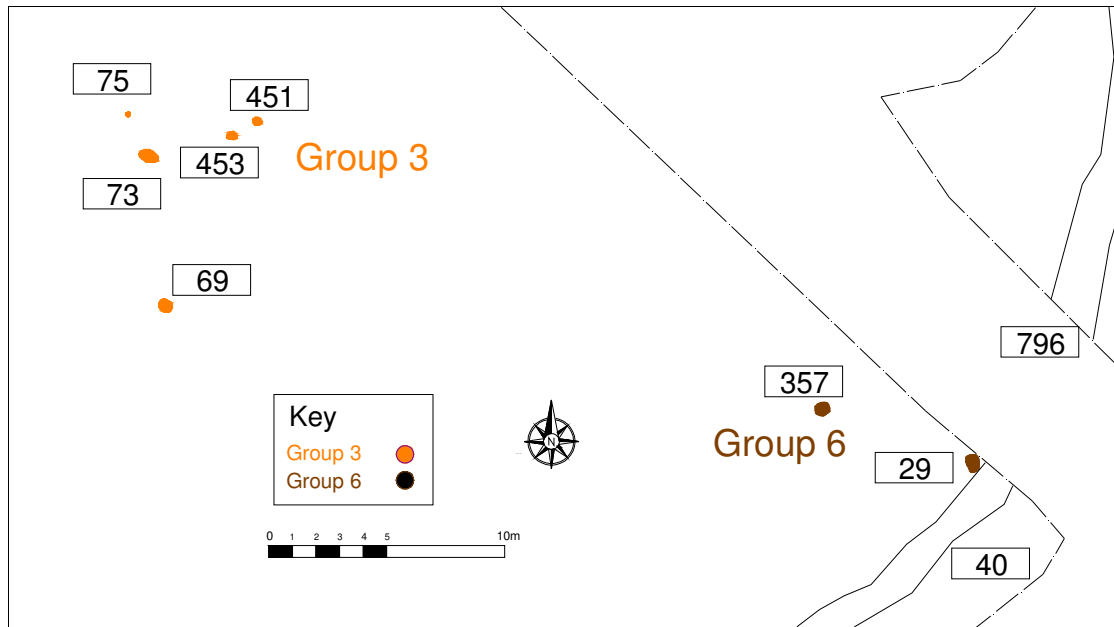
Posthole [160] was roughly circular, 0.18m diameter and 0.10m deep. It contained (161), a very pale brown silty clay loam with charcoal flecks and a heavy concentration of burnt flint. . A 1.5 litre soil sample from fill 161 produced a few fragments of charcoal.

Posthole [169] was circular, measuring 0.30m in diameter and 0.08m deep with steeply sloping sides and a flat base. It contained (170) a light grey silty clay. It produced one fragment of loom weight.

Posthole [167] was oval, measuring 0.52m by 0.20m by a depth of 0.08m. It contained (168), a very pale brown silty clay with no finds.

*Group 3 postholes (fig 47)*

7.4.55 Group 3 was five postholes to the east of group 2. It consisted of [75], [73], [69], [453] and [451]. These postholes covered an area 8.2m by 5.0m.



**Figure 47: Plan of posthole group 3 and 6.**

Posthole [75] was roughly circular 0.22m in diameter and 0.10m deep. It had steeply sloping sides to a pointed base. It contained (76) a light grey clay with charcoal. It contained no finds.

Posthole [73] was oval, measuring 0.86m by 0.51m and 0.12m deep. In profile it was bowl-shaped with a slightly uneven rounded base. It contained (74), a grey clay with charcoal. A circular post mould [800], fill (951) measuring 0.26m in diameter by 0.12m deep with a U-shaped profile was observed. Finds from these features consisted of burnt flint, five sherds of Quartz 1, three sherds of Rowland's Castle Ware and one sherd of Late Iron Age flint-tempered ware.

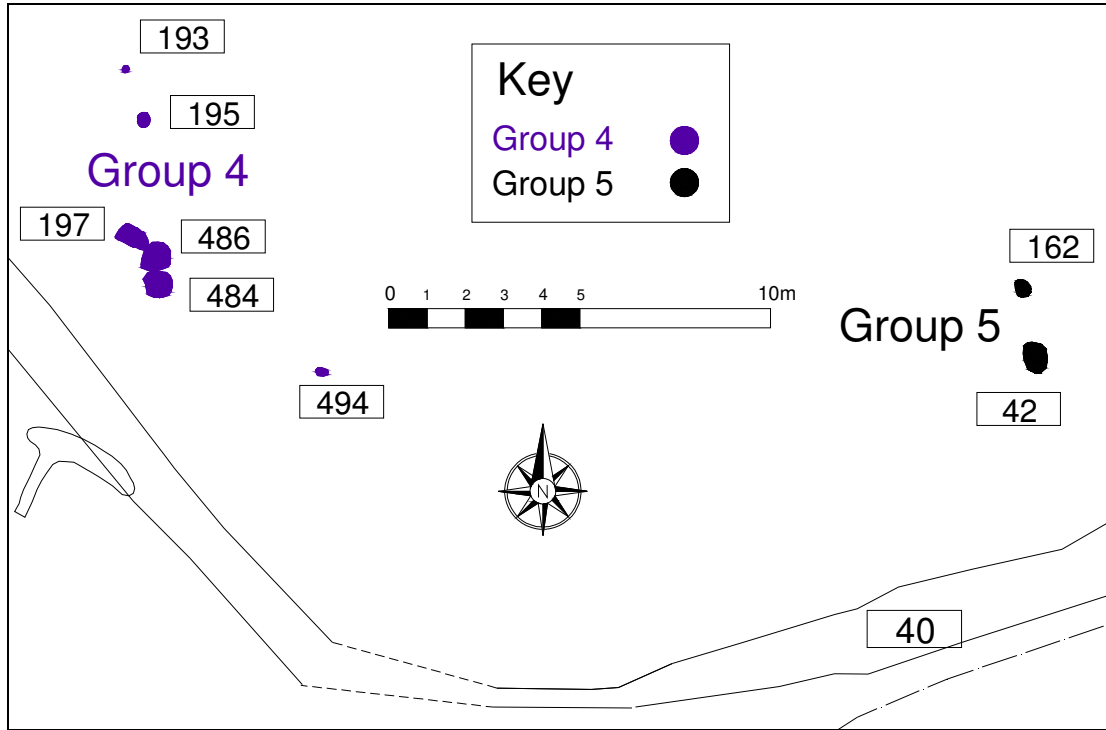
Posthole [69] was circular, measuring 0.71m with a depth of 0.08m. It had steeply sloping sides and a flat base. It contained (70), a dark grey brown clay with burnt flint. Pottery from this feature consisted of one sherd of Late Iron Age flint-tempered ware and one sherd of Late Iron Age chalk-tempered ware.

Posthole [453] was oval, measuring 0.50m by 0.40m with a depth of 0.10m. It had sloping sides and a rounded base. It contained (454), a reddish yellow silty clay with charcoal. Finds consisted of burnt flint, burnt clay, four sherds of Late Iron Age flint-tempered ware, 14 sherds of Quartz 1, and eight sherds of oxidised flagon.

Posthole [451] was sub-circular measuring 0.37m in diameter with a depth of 0.23m. It contained a post pipe [459] (fill 452). The posthole fill was (458), a pink silty clay with charcoal. Finds consisted of burnt flint and a flint core. Pottery consisted of four sherds of Quartz 1.

*Group 4 postholes (fig 48)*

7.4.56 A group of six postholes lay to the south of Group 2. They consisted from the north of [193], [195], [197], [486], [484] and [494].



**Figure 48: Plan of posthole groups 4 and 5.**

Posthole [193], a sub-circular posthole 0.18m in diameter and 0.05m deep. It contained fill (194), a yellowish brown silty clay with no finds.

Posthole [195] was circular, 0.38m in diameter, and 0.12m deep. It contained fill (196), a yellow brown silty clay with no finds.

Posthole [197] was irregular 0.76m by 0.40 by 0.11m deep. It contained fill (198), a light brownish grey silty clay with charcoal flecks.

Posthole [486] was an irregular/sub-circular shape, 0.70m by 0.60m by 0.21m deep. It contained fill (487), a very pale brown sandy silt with charcoal flecks.

Posthole [484] was an irregular/sub-circular shape 0.65m in diameter by 0.30m deep. It contained fill (485), a very pale brown, sandy silt with charcoal flecks.

Posthole [494] was oval 0.32m by 0.21m by 0.10m deep. It contained fill (495) a light brownish grey silty clay. No finds were recovered.

*Group 5 postholes (fig 48)*

7.4.57 Group 5 consisted of two postholes [162], and [42], which lay to the east of group 4.

Posthole [162] was oval 0.50 m by 0.36 m by 0.11 m deep. It contained fill (163) a grey brown silty clay containing burnt flint, daub, charcoal, and eight fragments of loomweight. A soil sample of 30 litres produced mainly charcoal

Posthole [42] was oval 0.80 m by 0.60 m by 0.10 m deep. It contained fill (43) a grey silty clay with burnt clay, burnt flint and daub.

*Group 6 postholes (fig 47)*

7.4.58 Group 6 consisted of two postholes, [29] and [357]. They were placed some 7.5m apart.

Posthole [357] was circular, 0.65m diameter and 0.11m deep. It contained fill (368), a yellow brown silty clay with abundant charcoal and common burnt clay. Pottery from this feature consisted of five sherds of Quartz 1 and one sherd of Late Iron Age flint-tempered ware.

Posthole [29] was oval 0.72m by 0.55m by 0.14m deep. It contained fill (30), a grey brown silty clay. No finds were recovered.

*Associated features outside the Phase 4 Romano-British 2 sub-circular enclosure*

7.4.59 A number of features, including a possible hearth, pits and postholes, lay outside the sub-circular enclosure (fig 49). The postholes were divided into two groups, Group 7 to the south of the enclosure, and Group 8 to the north.

*Hearth 390 (figs 49 & 50)*

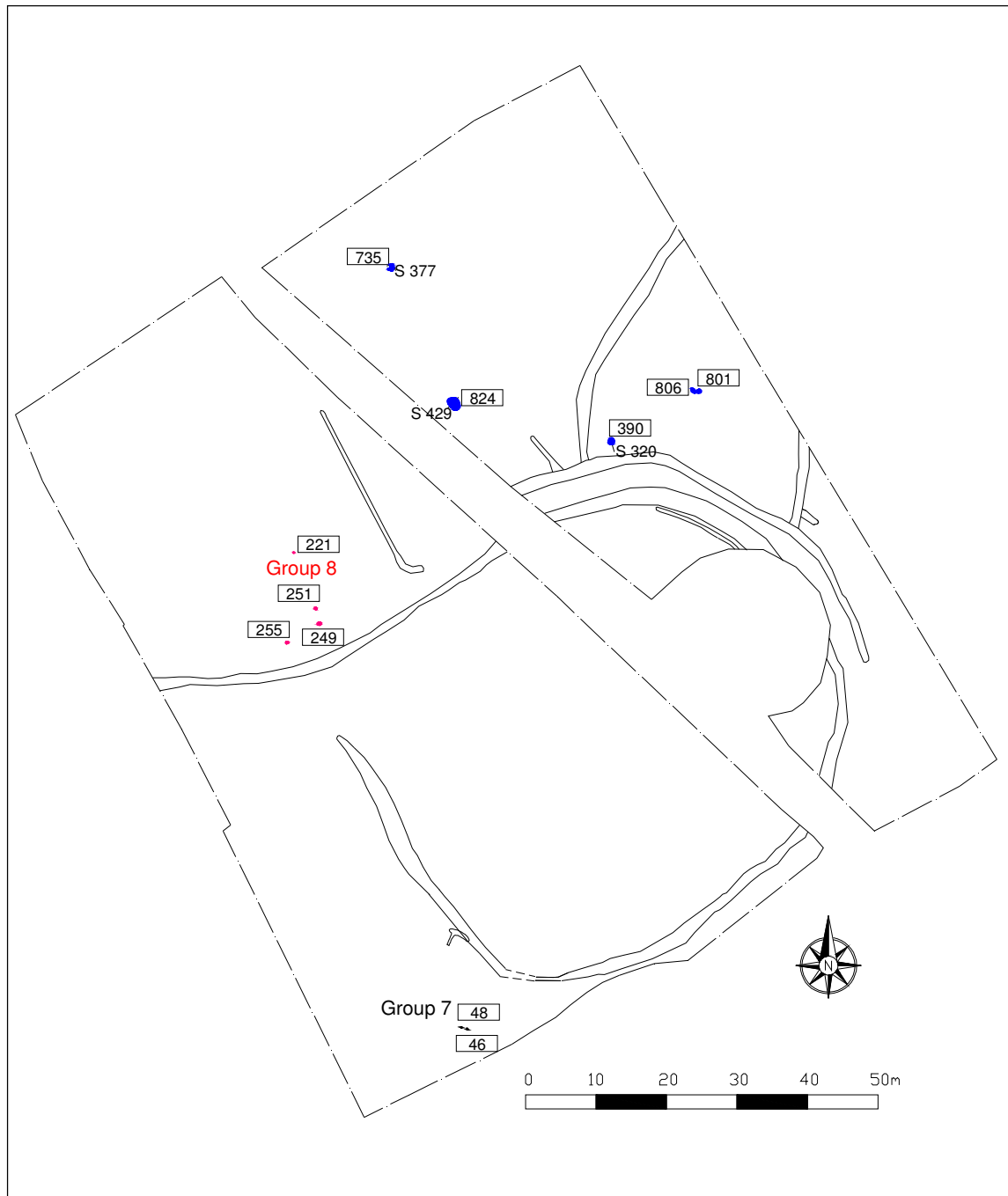
7.4.60 Hearth [390] was circular, 1.0m in diameter and 0.11m deep. It contained three fills, (702), the lowest fill, was the natural burnt red above which was a deposit of charcoal (674), which included a sherd of Quartz 1 pottery, and three small fragments of burnt clay, possibly from loomweights. After the hearth went out of use it was filled by (391) a layer of light brownish grey sandy silt with charcoal and burnt clay mottles. Finds consisted of three burnt flints, a possible loomweight fragment, eleven sherds of Quartz 1 pottery, and four sherds of Rowland's Castle Ware.

*Feature 801 (fig 49)*

7.4.61 Feature [801] was sub-circular, 0.70m in diameter and 0.28m deep and roughly bowl-shaped in profile. It contained fill (802), a pale brown silty clay loam. The finds recovered were seven fragments of Roman brick, six burnt flints, 37 sherds of Quartz 1 and 17 sherds of Rowland's Castle Ware.

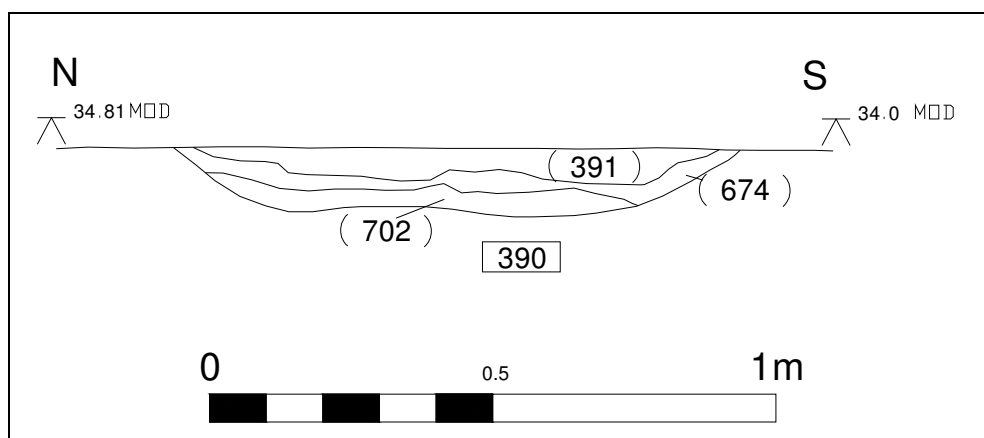
*Feature 806 (fig 49)*

7.4.62 Feature [806] was sub-rectangular, 0.90m in length and 0.53m wide and 0.20m deep. It had an irregular profile. It was filled by (807), a yellow brown clay loam. The pottery consisted of two sherds of Quartz 1, and a sherd of South Gaulish Samian dated to the mid to late 1<sup>st</sup> century.



**Figure 49: Features outside the Phase 4 Romano-British 2 sub-circular enclosure.**

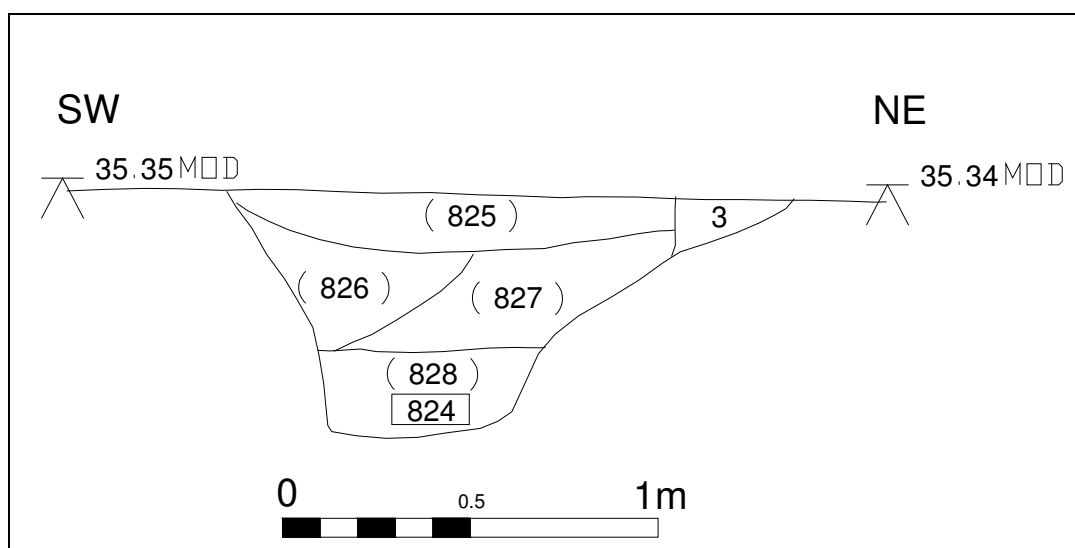




**Figure 50: Section 320 through hearth 390.**

*Pit 824 (figs 49 & 51)*

7.4.63 Pit [824] was oval in shape, 2.0m by 1.57m wide, and 0.65m deep with a flat base. It contained four fills. The primary fill was (828) a grey silty clay loam with abundant charcoal, it contained one sherd of Rowland's Castle Ware and one sherd of Quartz 1. The pit was filled with two other deposits (826) and (827). Fill (826) had no finds while (827) contained loomweight fragments, four sherds of Rowland's Castle Ware, eight sherds of Quartz 1 and one sherd of a Late Iron Age flint-tempered bead-rim jar. The final fill (825) contained many more finds with 24 burnt flints, a fragment of Roman ceramic building material, 27 sherds of Quartz 1, nine sherds of Rowland's Castle Ware, and seven sherds of Late Iron Age flint-tempered ware. The Rowland's Castle Ware included a thick rim from a large, flint-tempered storage jar with a rim diameter of 36cm.

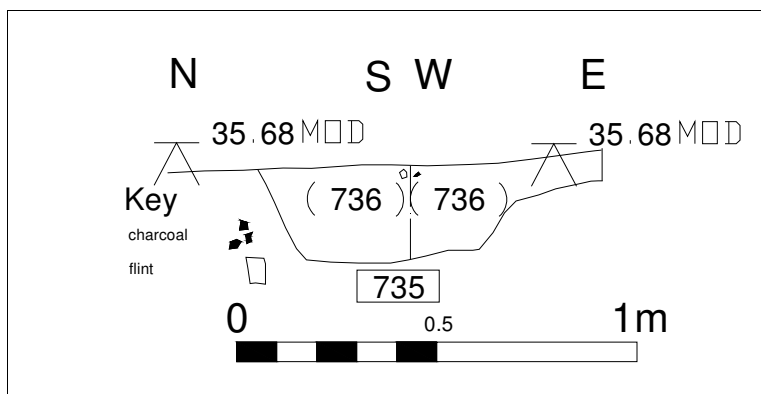


**Figure 51: Section 429 through pit 824.**

*Pit 735 (figs 49 & 52)*

7.4.64 Pit 735 lay just to the west of ditch 435. It was a roughly oval feature 0.76m long by 0.62m wide and some 0.30m deep. On the north side it was steeply sloping while the east side was shallower, gently sloping then stepping down to a flat base. The pit contained a single fill (736), a grey brown clay loam. Finds consisted of burnt flint, a

sherd of Rowland's Castle Ware and three sherds of Quartz 1 pottery. A sherd of intrusive modern glass was also recovered.



**Figure 52: Section 377 through pit 735.**

*Group 7 postholes (figs 49)*

7.4.65 Posthole Group 7 consisted of two postholes [46] and [48] in the southwest part of the enclosure.

Posthole [46] was oval 0.30 m by 0.22 m by 0.06 m deep. It contained fill (47) a yellow brown silty clay.

Posthole [48] was oval 0.30 m by 0.22 m by 0.15 m deep. It contained fill (49) a yellow brown silty clay.

*Group 8 postholes (figs 46 & 49)*

7.4.66 Posthole Group 8 consisted of three postholes [249], [251] and [255] which lay to the north of the enclosure. [249] and [251] both cut ditch 235. Posthole [221] which was 8.2m to the north-west of the group also cut ditch 235 and has been included here.

Posthole [221] was 8.2m to the north of posthole [251]. It was sub-circular, 0.22m in diameter, by 0.17m deep. It contained fill (222), a grey brown silty clay with charcoal flecks and burnt flint.

Posthole [249] was 1.7m to the south of posthole [251] and roughly circular, 0.50m in diameter and 0.10m deep. It cut ditch [235]. It contained fill (250), a yellowish brown silty clay.

Posthole [251] was 2.6m to the west of posthole [247] and cut ditch [235]. It was 0.39m in diameter and 0.08m deep. It contained fill (252), a pale brown silty clay which produced burnt flint, nine sherds of Rowland's Castle Ware and 23 fragments of oxidised flagon.

Posthole [255] was 4.7m to the south west of posthole [249]. It was sub-circular, 0.39m in diameter and 0.17 m deep. It contained fill (256), a grey brown silty clay with charcoal flecks and burnt flint. A 10 litre soil sample from fill 256 produced a fragment of charcoal.

## **7.5 Phase 5: Romano-British 3, the sub-rectangular enclosure: AD c.75-150**

### *The sub-rectangular enclosure*

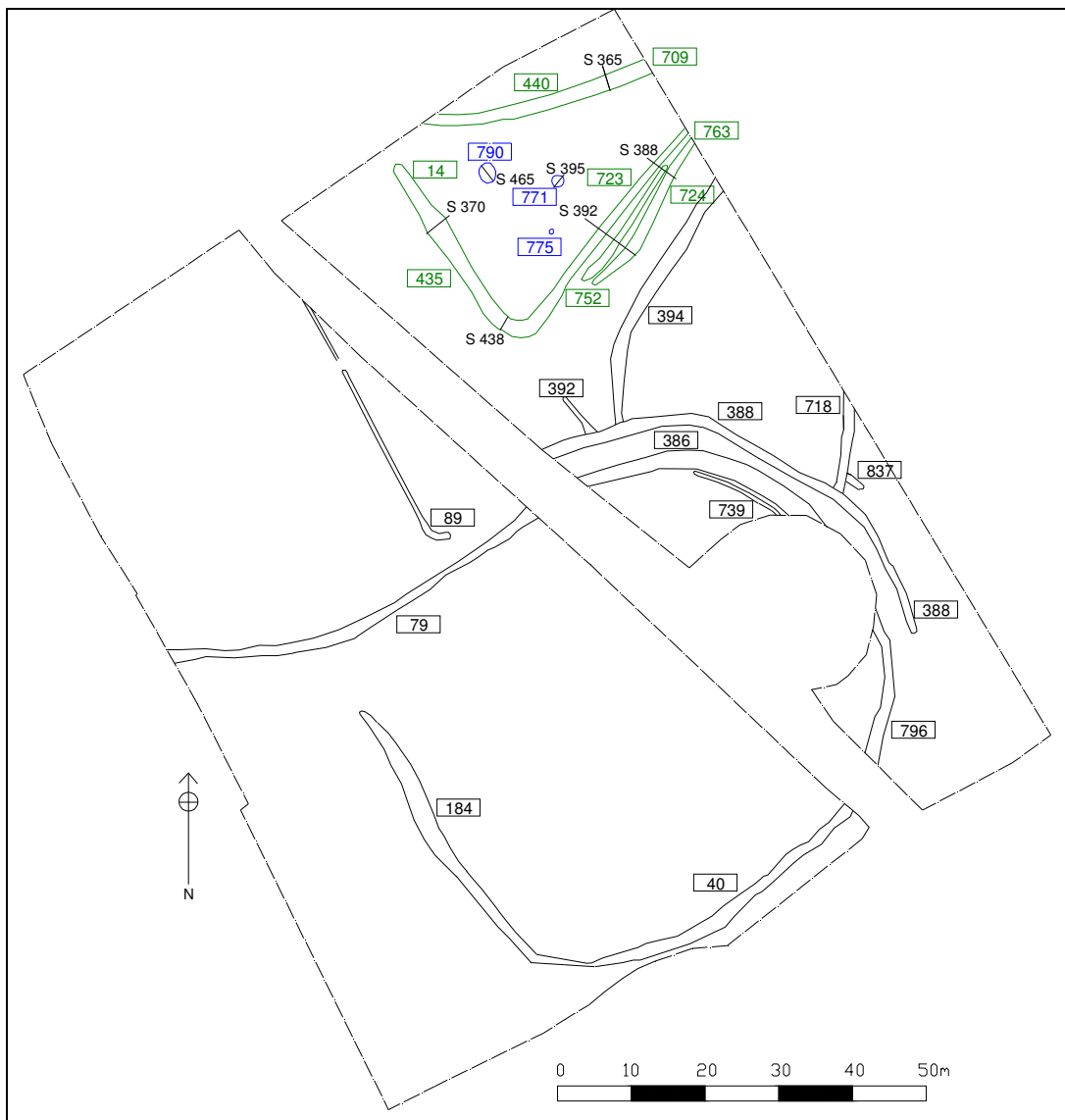
7.5.1 To the north of the main sub-circular enclosure was a second enclosure (fig 53). The exposed parts included a ditch that formed a near right angle so it has been tentatively identified as having a sub-rectangular form. The right-angled ditch was [14/435/723], to the north of it was ditch [440/709], and to the south were ditches [724/763] and [752]. Although much of the pottery in the ditches described here is little different to the pottery from the ditches of the sub-circular enclosure there is a 2<sup>nd</sup> century component in the upper fills of these features suggesting that occupation shifted to or continued in this area for longer than in the areas of the sub-circular enclosure, where very few finds can be dated later than the late 1<sup>st</sup> century. The enclosure included a number of associated features.

### *Ditch 14/435/723 and its fills (fig 53, 54, 55 & 56)*

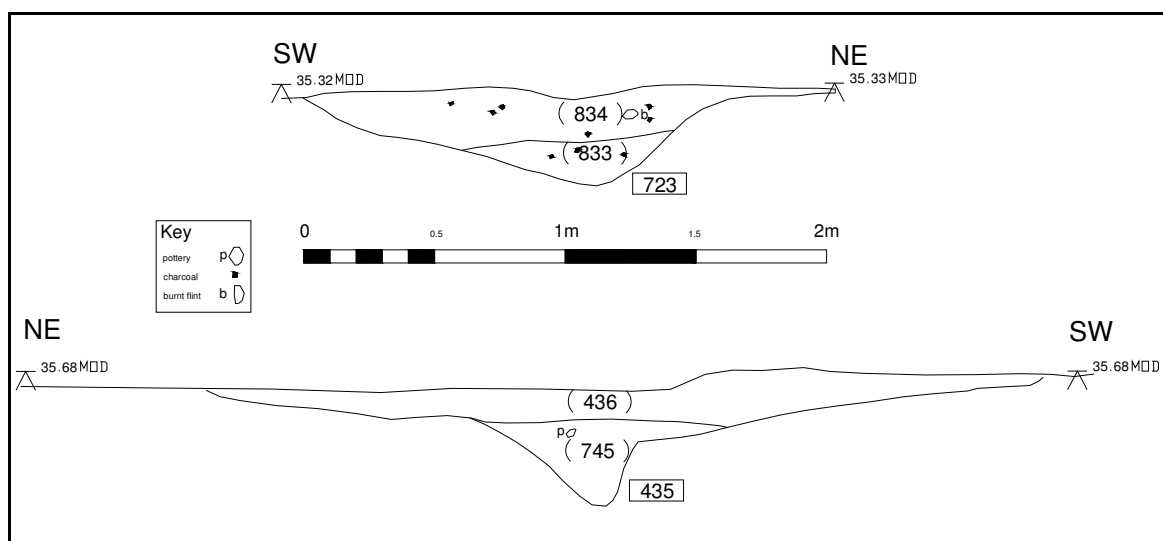
7.5.2 Ditch [14] was 1.0m wide and 0.46m deep with steeply sloping sides and a rounded base at its terminus. It became wider as it progressed southeast to a maximum of 2.0m wide with gently sloping sides, then narrowed again to 1.3m wide, deepening to 0.57m with steep sides and a rounded base before turning at a near right angle and heading to the northeast, where it was recorded as ditch [435/723], up to 2.0m wide and 0.54m deep with very gently sloping sides and a pointed base. Ditch [723] showed slight signs of primary silting, with thin deposits of grey clay (742) and (743) on the sides. They contained no finds.

7.5.3 The silty clay loam ditch fills could be divided into two phases, secondary fills in the main body of the ditch (788), (733), (805), (804), (833) and (745) and tertiary deposits that filled the much enlarged upper parts of the ditch (15), (787), (738), (436), (437), (438), (744), (803), and (834).

7.5.4 The secondary fills contained seven fragments of burnt flint, one flint flake, one microlith, three fragments of Roman ceramic building material, an iron nail, and a fragment of burnt bone. The pottery consisted of 70 sherds of Rowland's Castle Ware, 27 sherds of Quartz 1, 25 sherds of oxidised flagons, 15 sherds of Southern Atrebatian Overlap Ware, five sherds of Quartz 4, and two sherds of Late Iron Age flint-tempered ware. Imports were present in the form of six sherds of North Gaulish pulley wheel rim flagons, and five sherds of Samian. The Samian vessels were all from South Gaul, and included fragments of an 18/31 dish (AD 90-110) and a fragment of a Dr36 cup with a lead repair (AD 70-110). A date at the end of the 1<sup>st</sup> century or early in the 2<sup>nd</sup> is likely. A 10 litre soil sample from fill 733 produced a few fragments of charcoal.



**Figure 53: The Phase 5 Romano-British 3 sub-rectangular enclosure (green) with associated features (blue) and its relationship to the Phase 4 Romano-British 2 sub-circular enclosure (black).**



**Figure 54: Sections 438 (top) and 370 (bottom) through ditch 435/723.**

7.5.5 The tertiary fills contained 40 fragments of burnt flint, one microlith, seven fragments of Roman ceramic building material, 21 fragments of greensand quern, a sandstone whetstone, 18 fragments of burnt clay, 52 fragments of loomweights, and 44 fragments of briquetage. The pottery consisted of 1291 sherds of Rowland's Castle Ware (including four jars with batch marks), 848 sherds of Quartz 1, 27 sherds of Southern Atrebatian Overlap Ware, 12 sherds of Late Iron Age flint-tempered ware, 11 sherds of oxidised flagons, eight sherds of Wiggonholt, seven sherds of Quartz 4, together with single sherds of Nene Valley Colour Coat, Terra Nigra copy, and Quartz 5. Imports were present in the form of six sherds of North Gaulish pulley wheel rim flagons, and 12 sherds of Samian. Five of the Samian sherds were South Gaulish, and included fragments of a large decorated bowl of form Dr30 (AD 40-110) and a Dr18 dish ((AD 50-90). Seven sherds were Central Gaulish products including two 18/31 dishes (AD 90-150). The tertiary fills contained a similar assemblage to the secondary fills, but in addition produced fragments of querns and loomweights, Central Gaulish Samian, and Nene Valley Colour coat. A date in the second quarter of the second century is likely.

*Ditch 752 and its fills (fig 53, 55 & 56)*

7.5.6 Ditch [752] cut ditch [14/435/723]. It was 1.44m wide and 0.46m deep at its widest with steeply sloping sides and a pointed base narrowing to 0.94m wide and 0.35m deep with more gently sloping sides. The primary fills were (786), a brown silty clay, (754), a grey sandy clay, and (830), a brown silty clay. The primary fills contained only pottery. It consisted of seven sherds of Rowland's Castle Ware, five sherds of Southern Atrebatian Overlap Ware, two sherds of Quartz 1, two sherds of oxidised flagons, and a sherd of a Terra Nigra copy, possibly form CAM1.

7.5.7 The secondary fills were (785), a greyish brown silty clay, below (789), another brown silty clay, 747, a grey brown silty clay loam, and (829), a grey brown silty clay. They contained two fragments of Roman ceramic building material and pottery consisting of 27 sherds of Rowland's Castle Ware, 18 sherds of Quartz 1, 10 sherds of Southern Atrebatian Overlap Ware, four sherds of Late Iron Age flint-tempered ware,

and two sherds of oxidised flagons. Imports were present in the form of two sherds South Gaulish Samian, probably from a form 36 dish (AD 70-110).

7.5.8 The primary and secondary fills of this ditch contain very similar assemblages both having predominantly late 1<sup>st</sup> century wares, with little that dates into the 2<sup>nd</sup> century, which is puzzling as the ditch cuts the 2<sup>nd</sup> century fills of ditch [14/435/723]. A possible explanation is that this area of the site was a midden during the late 1<sup>st</sup> century and all of the finds in ditch 752 are redeposited.

*Ditch 724/763 and its fills (fig 53, 55 & 56)*

7.5.9 Ditch [724/763] cut ditch 752. At its north end [724/763] was 1.45m wide and 0.52m deep with steeply sloping sides and a pointed base. It widened to a maximum of 1.75m with a depth of 0.65m with gently sloping sides and a rounded base (Plate 16) before narrowing to 0.94m wide and 0.32m deep sloping to a pointed base near its terminal end. Three sections of the ditch were excavated.

7.5.10 The primary fills were (784), a grey silty clay loam, (756), a yellow brown silty clay, and (813), a light brownish grey silty clay. Finds consisted of a fragment of greensand quern, and pottery. The pottery consisted of 13 sherds of Rowland's Castle Ware, three sherds of Quartz 1, two sherds of Quartz 1, one sherds of Southern Atrebatian Overlap Ware, one sherd of Late Iron Age flint-tempered ware and a sherd of South Gaulish Samian of dish form 36 (AD 70-110).

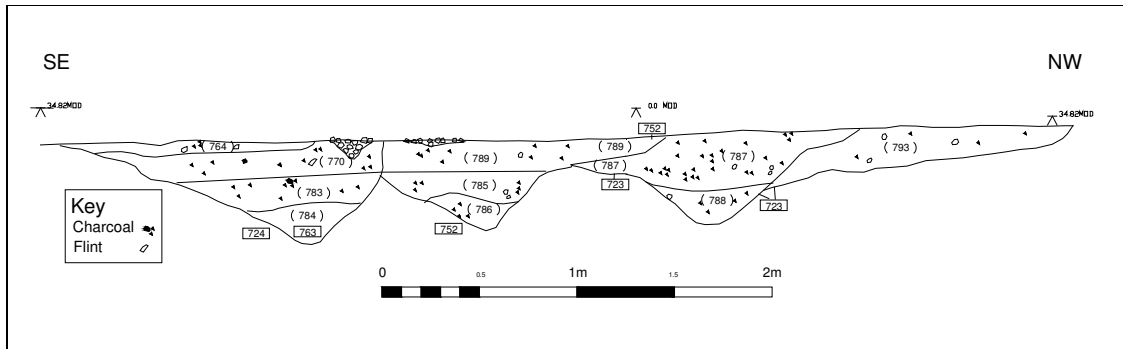
7.5.11 The ditch may then have been re-cut, shifting slightly south, and then filled up with (746), a reddish grey clay, (764), a yellow brown clay loam, (726) a grey clay, (732) a dark yellow brown silty clay, (725) a grey clay, (783), a dark grey silty clay, (770), a dark yellow brown clay loam, (734), grey clay, (439) a grey clay, and (812) a brown silty clay. The finds consisted of 17 fragments of burnt flint, six fragments of Roman ceramic building material, one fragment of greensand quern, nine fragments of loom weights, an iron nail and five fragments of briquetage. The pottery consisted of 277 sherds of Rowland's Castle Ware, 275 sherds of Quartz 1, one sherd of Southern Atrebatian Overlap Ware, three sherds of Late Iron Age flint-tempered ware, four sherds of oxidised flagons, one sherd of Terra Nigra copy, one sherd of whiteware flagon, two sherds of Nene Valley Colour Coat, and a single sherd of grog-tempered ware. Imports were present in the form of 10 sherds of Samian, one sherd of Central Gaulish Black Samian from an unusual vessel with an applied head motif, and one sherd of a North Gaulish flagon. Six of the Samian sherds were South Gaulish, and included fragments of a form 18 dish (AD 50-110), two sherds from Central Gaulish products possibly also from a form 18 dish (AD 120-190), and two sherds from an East Gaulish form 31 dish (AD 150-250).

7.5.12 The primary fills of the ditch would appear to be 1<sup>st</sup> century in date, but the secondary fills, although containing much 1<sup>st</sup> century material, include fabrics that suggest a 2<sup>nd</sup> century or early 3<sup>rd</sup> century date for the final filling. It is possible the 1<sup>st</sup> century material is re-deposited from an earlier phase of rubbish dumping in this part of the site. This interpretation is backed up by the geo-archaeological analysis which showed that both primary and secondary fills consisted of rapidly deposited parent material with no sign of a soil horizon forming during a hiatus in the backfilling.

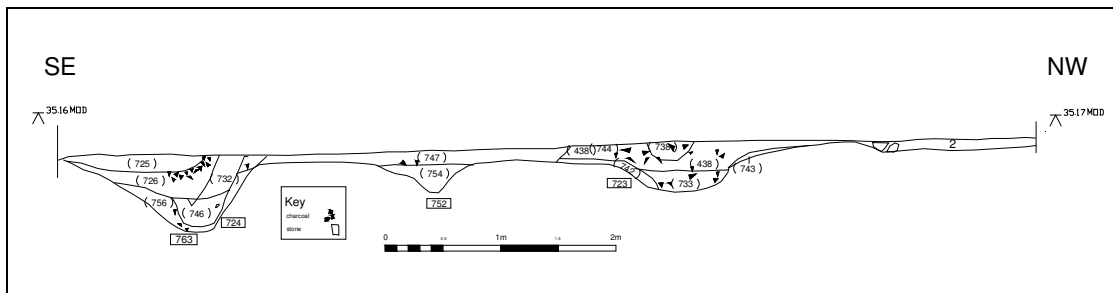




**Plate 16. Ditch 724/763 in foreground, ditches 752 and 723 beyond. View looking north.**



**Figure 55: Section 388 through ditches 723 & 752 & 724/763.**



**Figure 56: Section through ditches 723 & 752 & 724/763.**

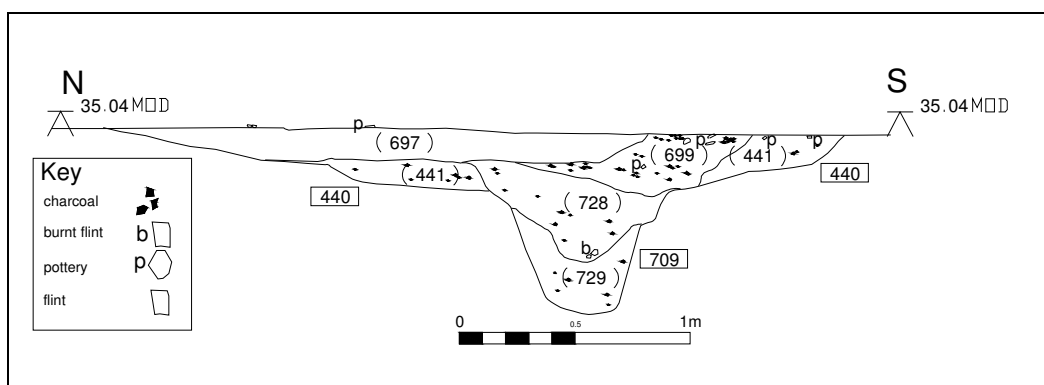
*Ditch 440/709 (figs 53 & 57)*

7.5.13 Ditch [440/709] was a curved ditch running 31.7m in an east-west direction to the north of [14/435/723]. In its original form the ditch was probably about 1m wide with steep sides and a rounded base. The primary fill (729) was a brownish yellow clay loam. It contained a burnt flint and a sherd of Quartz 1 pottery. The secondary fill was (728), a pale pinkish grey silty clay, which contained a burnt flint and a sherd of Quartz 1 pottery.



**Plate 17. Excavated length of ditch 440.**

7.5.14 In its latest phase the ditch was wide, up to 2.0m, and shallow, some 300mm (Plate 17). It seems unlikely that this was a deliberate re-cut; it was possibly due to animal trampling. The tertiary fills of this phase were (441) a greyish brown silty clay, (699), a dark grey clay loam and (706), a dark greyish brown clay loam. These fills contained 148 fragments of burnt flint, 61 fragments of brick, tegula and box flue tile, one flint flake, one fragment of greensand quern, two small fragments of an iron blade, eight fragments of iron smithing slag, and eight fragments of loomweights. The 13 fragments of animal bone consisted of a calcaneus from an immature sheep/goat and 12 fragments of cattle molars. The pottery consisted of 905 sherds of Rowland's Castle Ware (including a batch marked jar), 366 sherds of Quartz 1, 46 sherds of Quartz 4, 12 sherds of Southern Atrebatian Overlap Ware, six sherds of whiteware flagons, six sherds of Late Iron Age flint-tempered ware and three sherds of Dorset Black Burnished ware. Imports were represented by 18 sherds of North Gaulish flagons and 35 sherds of Samian. Twenty five sherds of the Samian were South Gaulish products and included a Dr 36 bowl, Dr 27 and Dr 33 cups, and a Dr 18 bowl. The Dr 36 bowl had been broken and repaired with lead rivets, suggesting its owner considered it a special piece. The other ten sherds of Samian were Central Gaulish wares comprising eight sherds of a Dr 33 cup and two sherds, probably from a dish of form 18/31R. A date in the early to mid-2<sup>nd</sup> century seems likely for the closing of this deposit. Some contamination was observed in the form of two iron nails and a post-medieval horseshoe from (441)



**Figure 57: Section 365 through ditch 440/709.**

*Features associated with the Phase 5 Romano-British 3 sub-rectangular enclosure*

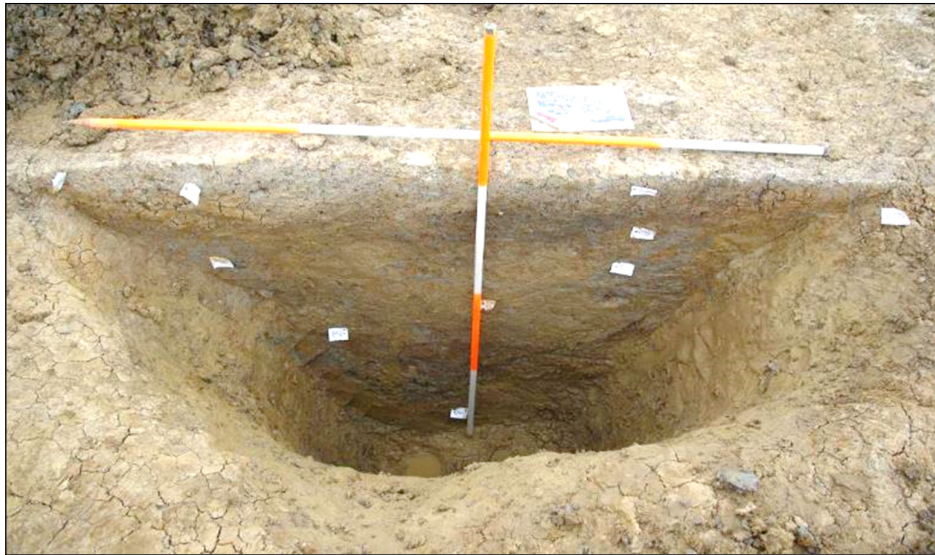
*Well 790 (figs 53 & 58)*

7.5.15 Well [790] was probably dug in the mid- to late 1<sup>st</sup> century AD, and may have been in use for perhaps a generation; the pottery in the final fills contains many residual sherds but probably dates to the first quarter of the 2<sup>nd</sup> Century. The well was oval in shape, 2.82m north-south by 2.27m east-west and was 2.7m deep (fig 52 & Plate 18). It had very steep sloping sides which narrowed to a rounded base only 400mm across. It contained eight fills. The primary silting was (841) was a wet, yellowish brown silty clay with a few charcoal flecks, and burnt flint. The pottery consisted of eight sherds of Quartz 1, two sherds of South Gaulish Samian dated AD 50-110, and a sherd of a native copy of a Gallo-Belgic vessel.

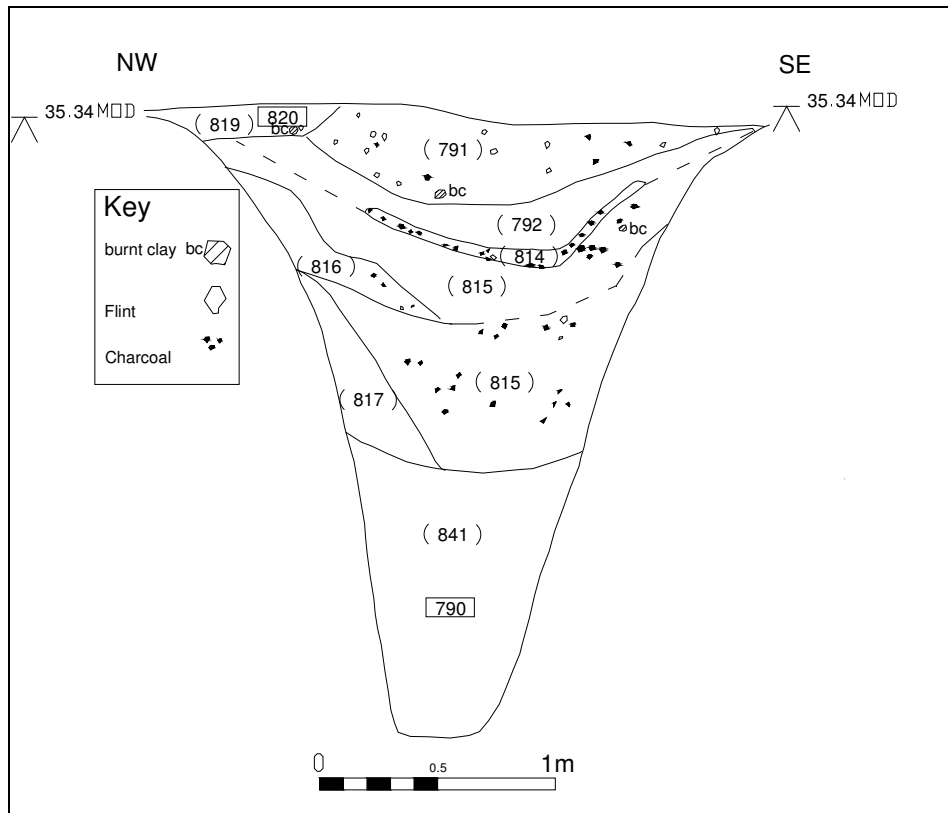
7.5.16 The secondary fills were a series of silted deposits, (817), a dark brown clay, which in turn was below (816), a grey silty clay loam with occasional charcoal, below (815), a yellow brown silty clay with burnt clay and charcoal. Above (815) was (814), a grey silty clay with occasional charcoal flecks. The only fill to produce finds was (815) which contained nine sherds of Southern Atrebatian Overlap Ware, six sherds of Rowland's Castle Ware and four sherds of Quartz 1. A 40 litre soil sample from fill 815 produced a few fragments of charcoal.

7.5.17 The final tertiary fills were (791) and (792), both silty clays. In contrast to the lower fills they contained a large number of artifacts, suggesting the partially backfilled well had become a rubbish pit. The finds consisted of 13 fragments of cow teeth, one burnt flint, a fragment of greensand quern, a piece of Roman brick/tile, and four fragments of loomweights. The pottery consisted of 132 sherds of Rowland's Castle Ware, 73 fragments of Quartz 1 pottery, 21 fragments of Southern Atrebatian Overlap Ware, including sherds from a Fishbourne type 27 dish, six sherds of Quartz 4 fabric, all from Hampshire bowls, three sherds of Late Iron Age flint-tempered wares, and a fragment of central Gaulish Samian. Its form is unknown but a date of manufacture between AD 120 and 190 is fairly certain. The pottery from the tertiary fills was 56% Rowland's Castle Ware.





Section 465  
**Plate 18. Well 790, excavated to the top of primary fill.**

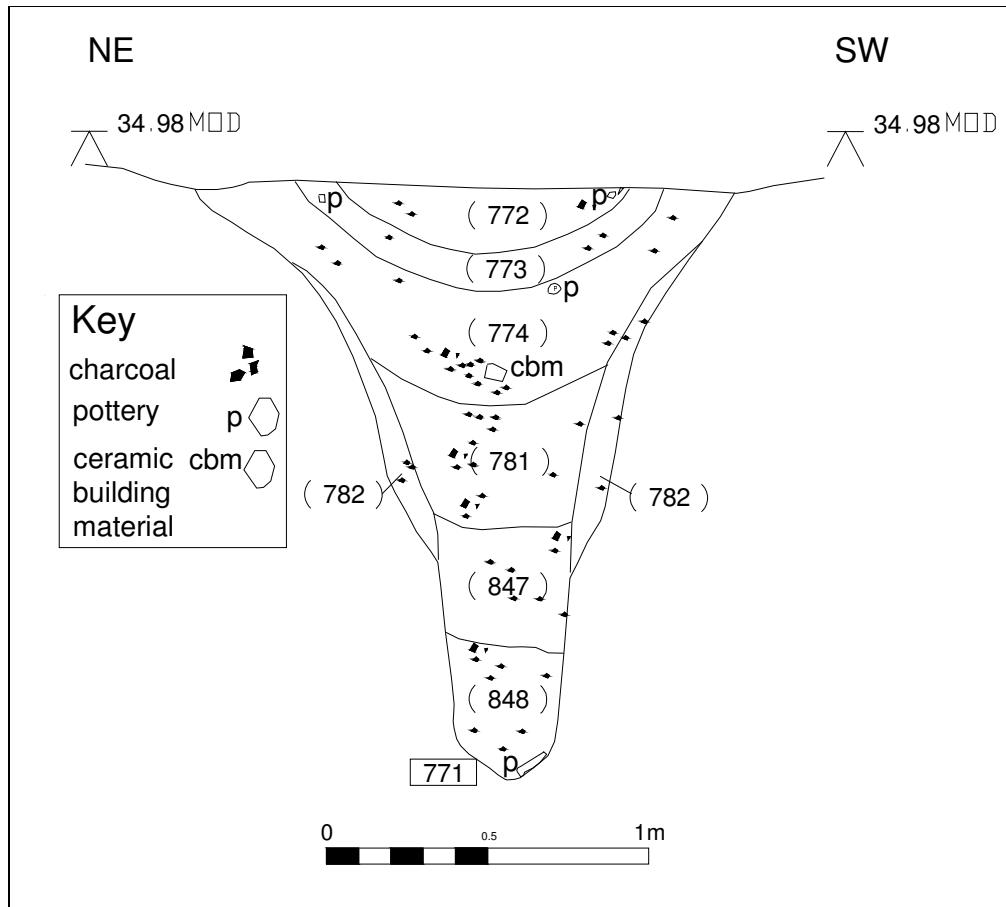


**Figure 58: Section 465 through well 790.**

*Well 771 (figs 53 & 59)*

7.5.18 Well [771] was 8.0m to the east of well 790. It was roughly circular, 1.7m in diameter and 1.85m deep with a similar profile to well 790. The primary fill was (848), a brown silty clay with charcoal flecks. It included two sherds of Southern Atrebatian Overlap Ware and a large rim sherd of a North Gaulish mortaria, suggesting a date in the mid- to late first century.

7.5.19 The well was perhaps then deliberately backfilled around the end of the first century with fills (847), (781), (774), and (782), all silty clays with some charcoal. The deliberate backfilling scenario is based on cross-fitting sherds of a Terra Nigra bowl of CAM form 16, dated to AD 40-85, which were found in fills (774) and (847). This is the only occurrence of this imported ware on the site. Other finds from the backfilling were 17 fragments of loomweight, eight fragments of bone, 53 fragments of Rowland's Castle Ware, 35 sherds of Southern Atrebatian Overlap Ware, 29 sherds in fabric Quartz 1, three sherds of flagons, the two sherds of Terra Nigra bowl of CAM form 16, and a sherd from a Wiggonholt flanged bowl. Fill 774 also produced five sherds of South Gaulish Samian representing a Dr 37 bowl, a Dr 18/31R dish Dr 33 cup and a sherd from an unknown form; a date c.AD100 is likely. Rowland's Castle Ware formed 41% of this backfilled deposit.



**Figure 59: Section 395 through well 771.**

7.5.20 The top two fills (773), and (772), were both dark greyish brown silty clay loams. They included a fragment of tegula, eight fragments of loomweight, two fragments of quern, 139 fragments of Rowland's Castle Ware (50 sherds coming from a perforated vessel), 82 sherds of jars in fabric Quartz 1, 13 fragments of Southern Atrebatian Overlap Ware, four sherds of a North Gaulish whiteware flagon, one sherd of oxidised flagon, two sherds in fabric Quartz 4, one sherd in Iron Age chalk-tempered ware, and three sherds of a locally made copy of a Terra Nigra vessel. A 40 litre soil sample from fill 772 produced a few fragments of charcoal.

7.5.21 The top two fills had possibly slumped into the hollow caused by the compression of the lower fills, but the pottery they contained is of the same date as the backfill deposit below, the only indicator of a later date being the higher proportion of Rowland's Castle Ware, 57%.

### 7.6 Phase 6: Romano-British 4, First/Second century activity at the north end of the site.

7.6.1 At the highest part of the site, in Trench B, four ditches and a number of features were revealed (fig 60). There were no stratigraphic links between them. Some of the features may have been Late Iron Age, some contained 1<sup>st</sup> century material, but it may well have entered the features in the early 2<sup>nd</sup> century. Ditch [535] was part of a sub-rectangular enclosure. Some 50m to the south of it was an interrupted ditch consisting of two lengths [599] and [908]. There was a gap of 64m between the two ditches and in the gap was a small three-sided rectangular area enclosed by a shallow gully [890] accompanied by a pit.

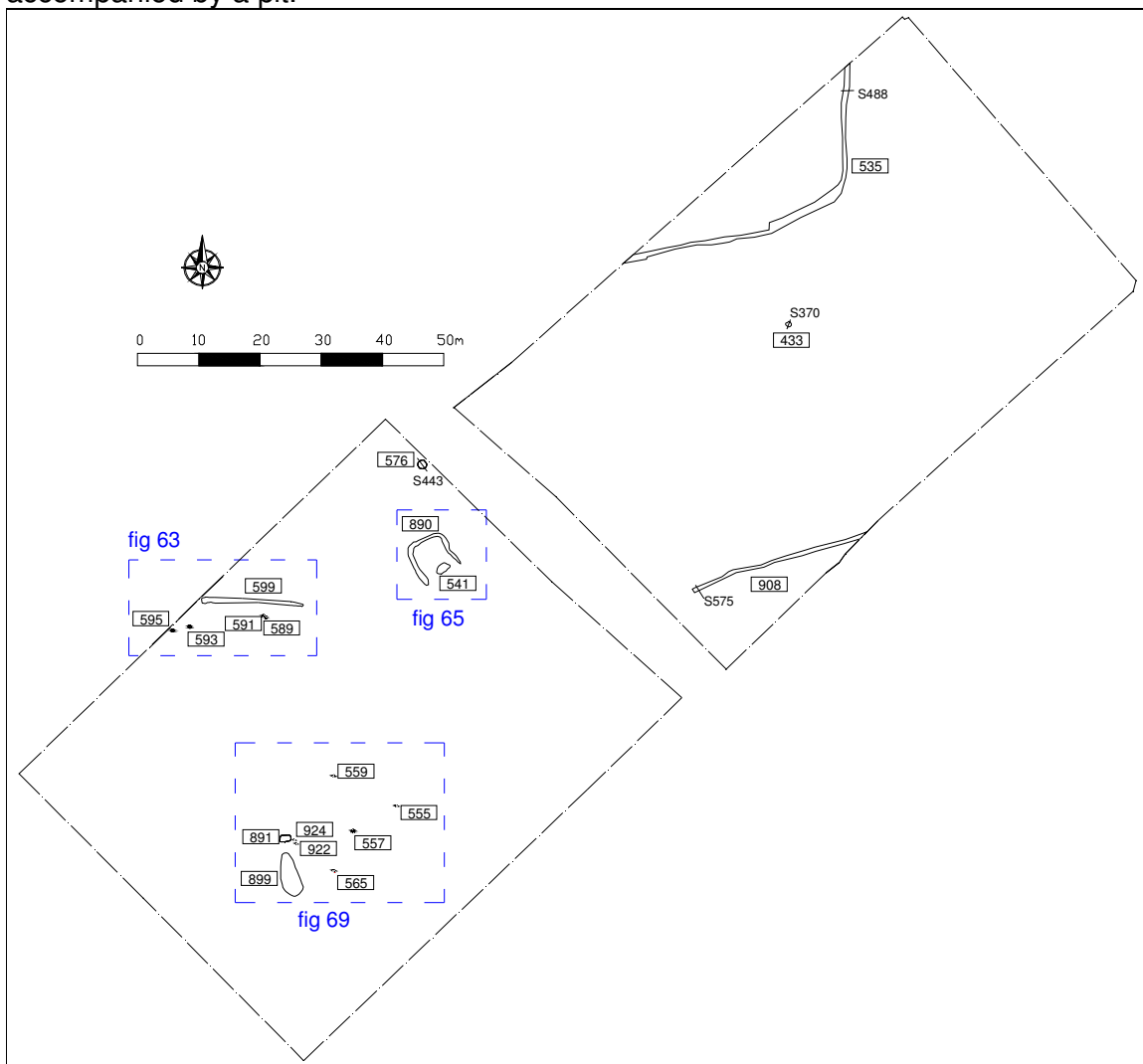
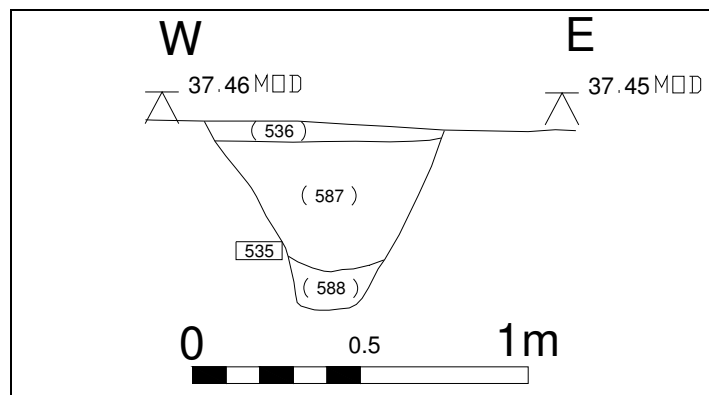


Figure 60: Phase 6 Romano-British 4 ditches 535/567, 908, 599 & 890 and associated features in Trench B.



*Ditch 535 (figs 60 & 61)*

7.6.2 Ditch [535/567] formed the corner of an assumed sub-rectangular enclosure at the north end of Trench B, at the highest part of the site. Some 57m of ditch was revealed, in two lengths meeting at 100 degrees. At the north end its profile was 0.71m wide and 0.56m deep with steeply sloping sides narrowing to a flattish base (fig 54). Where it turned west it was much wider and shallower being 3.32m wide and 0.47m deep and bowl-shaped. As it ran west it deepened to 0.80m and narrowed to 1.27m wide with steep irregular sides and a flat narrow base, the top then widened to 1.7m wide for the top 0.14m, the centre 0.57m width then dropping sharply to a depth of 0.57m with a pointed base.



**Figure 61: Section 488 through ditch 535.**

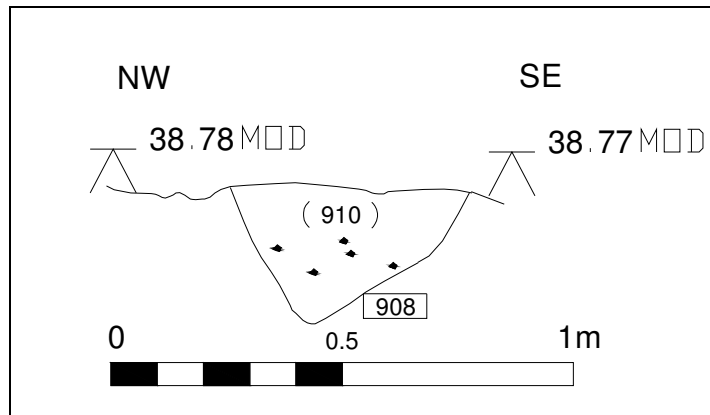
7.6.3 The primary fills were (588) grey brown silty clay loam with grey mottles, (584) yellow brown clay loam with grey mottles, (888) grey silty clay loam, and (886) grey silty clay loam. They contained 17 fragments of burnt flint, one flint scraper, and one fragment of brick. The pottery consisted of 16 sherds of Late Iron Age flint-tempered ware, 12 sherds of Rowland's Castle Ware, six sherds of Quartz 1, and one sherd of whiteware flagon. . A 40 litre soil sample from fill 588 produced a few fragments of charcoal.

7.6.4 The secondary fills were (587), yellow brown silty clay loam, (536), strong brown silty clay loam, (887), grey brown silty clay loam, (561) yellow brown silty clay loam, (573), light brownish grey silty clay loam with manganese flecks, (568), yellowish brown silty clay loam, and (885), pale brown silty clay loam. These fills contained 669 fragments of burnt flint, one flint flake, four fragments of greensand quern, one fragments of Roman brick, and 11 fragments of loom weights. The pottery consisted of 140 sherds of Rowland's Castle Ware, 112 sherds of Quartz 1, 95 sherds of Late Iron Age flint-tempered ware, and one sherd of a Gallo-Belgic platter copy.

*Ditch 908 (figs 60 & 62)*

7.6.5 Ditch [908] was some 52m to the south of ditch [537] and ran parallel to it. Some 29m were revealed. At its east end it was 0.81m wide and 0.32m deep and bowl-shaped with a rounded base, in its middle section it was 0.63m wide and 0.21m deep with steep sides and a flat base. At its west terminus it was 0.51m wide and 0.31m deep with steep sides down to a pointed base. It contained a single fill (911/909/910) a grey sandy clay with charcoal. Finds consisted of six fragments of burnt flint, 11

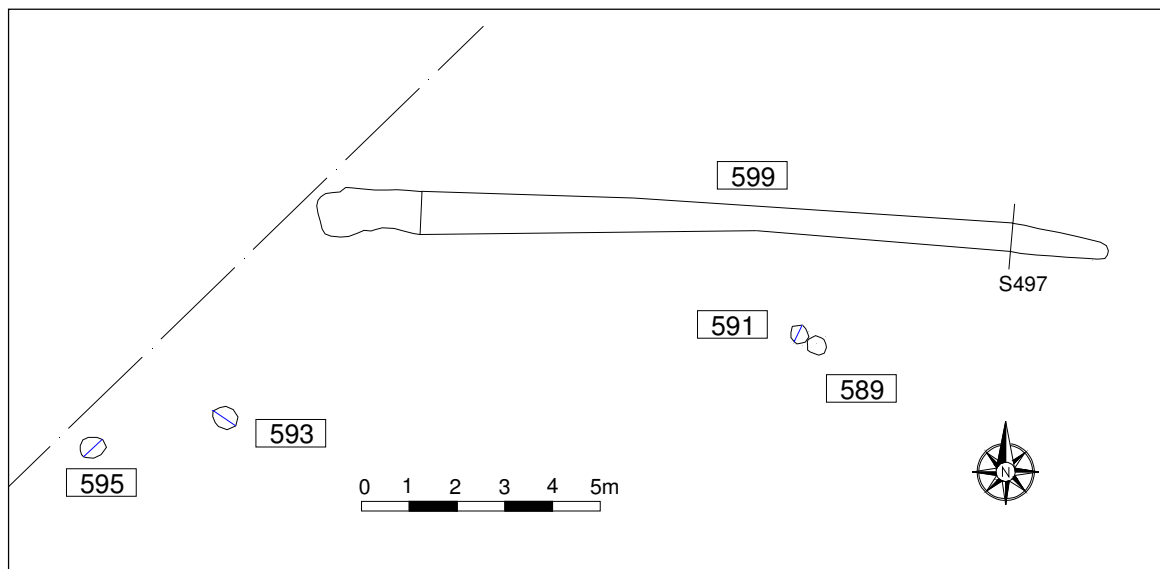
sherds of Rowland's Castle Ware, four sherds of Late Iron Age flint-tempered ware, and one sherd of Quartz 1. A 40 litre soil sample produced a few fragments of charcoal.



**Figure 62: Section 575 through ditch 908.**

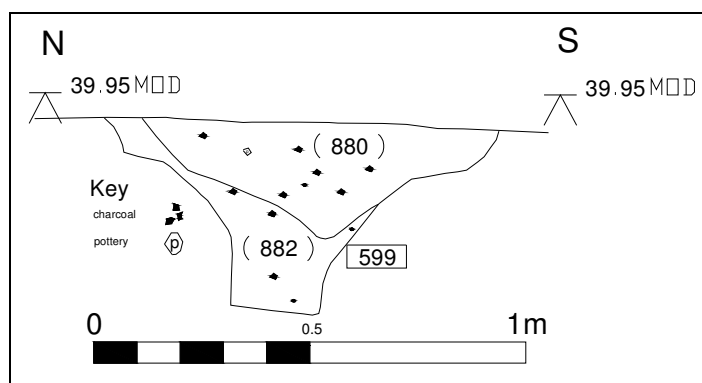
*Ditch 599 and associated postholes (fig 60, 63 & 64)*

7.6.6 Ditch [599] was an east-west ditch. At its west end it was 0.60m wide and 0.38m deep with steep sides running down to a pointed base. At the east terminus it was 0.91m wide and 0.46m deep with irregular steep sides and a flat base. The west end contained (884), a dark brown silty clay, beneath (883), a yellowish brown silty clay. The east end was filled by (882), pinkish grey silty clay, beneath (880) a similar fill. The primary fills contained 12 burnt flints, two fragments of tegula, four sherds of Rowland's Castle Ware, and two sherds of Southern Atrebatian Overlap Ware.



**Figure 63: Plan of ditch 599 and associated postholes.**

7.6.7 The secondary fills contained 10 burnt flints, a core and a flake, two fragments of ceramic building material, five sherds of Quartz 1, three sherds of Rowland's Castle Ware, and one sherd of Quartz 4.



**Figure 64: Section 497 through ditch 599.**

7.6.8 To the south of ditch [599] were four postholes, arranged in two pairs (fig 62). These contained no finds. Postholes [589] and [591] were both circular postholes 0.40m in diameter with steep sides and rounded bases lying just centimetres apart. [589] was 0.12m deep and 591 was 0.10m deep. Their fills 589 (fill 590) and 591 (fill 592) were yellowish brown silt loams with charcoal flecks. Post moulds were observed within them. Posthole 593 lay 11.5m to the south west of 589/591. It was circular, 0.56m in diameter and 0.18m deep, with steep sides to a pointed base. It contained (594), a light brownish grey silty clay with charcoal flecks, which showed traces of a post-mould. Posthole 595 was 2.3m further to the southwest. It was also circular measuring 0.49m in diameter and 0.20m deep. It had steep sides and in profile two distinct post moulds could be seen. It contained (596), a brownish yellow silt loam.

*Three-sided gully 890 and associated features (figs 60, 65 & 66)*

7.6.9 Gully [890] formed a small three-sided enclosure, some 7m square. The gully varied from 0.50m wide to 1.05m wide and it was from 0.16 to 0.30m deep (Plate 19). Its profile varied (fig 59). It contained fill (895/896/894), a light brownish grey soil with charcoal flecks. Finds from the fills consisted of five fragments of burnt flint, four sherds of oxidised flagon, and one sherd of Rowland's Castle Ware.

7.6.10 Pit [541] lay between the two arms of enclosure [890] (fig 64). It was sub-rectangular, measuring 2.27m by 1.43m by 0.20m deep and contained (542), a yellow brown silty clay that contained no finds.

7.6.11 A deposit of greyish brown silty clay, 905, lay in the centre of the enclosed area. It was 2m by 1.4m and 30mm thick. It produced a secondary flint flake, 5 fragments of heathstone, and four sherds of Rowland Castle Ware.

7.6.12 This small enclosure was the only feature of its type on the site and its interpretation is difficult. The lack of finds in the ditch, and in Trench B in general suggests that it was not a dwelling. It could have surrounded a small field shelter, perhaps for agricultural workers or it could have provided an area for corralling or tending to animals. There are similar features in Late Iron Age and early Roman cemeteries, such as Westhampnett (Fitzpatrick, 1997). Pit [541] would have been a suitable size for an adult burial; it was carefully investigated but no trace of a burial was found.

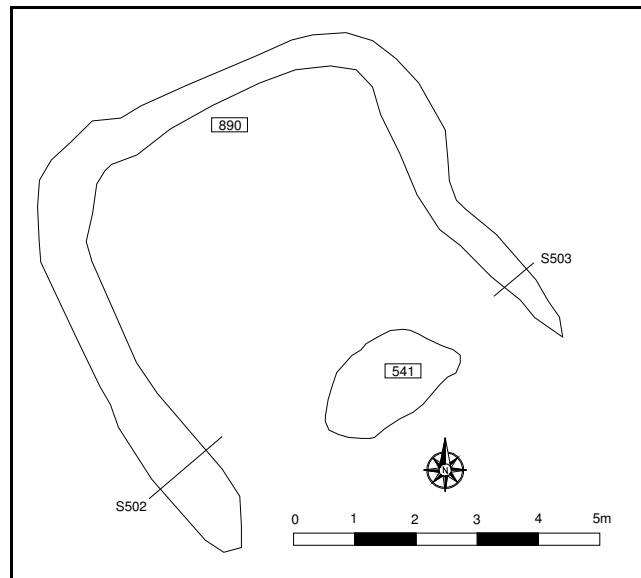


Figure 65: Plan of gully 890 and pit 541.

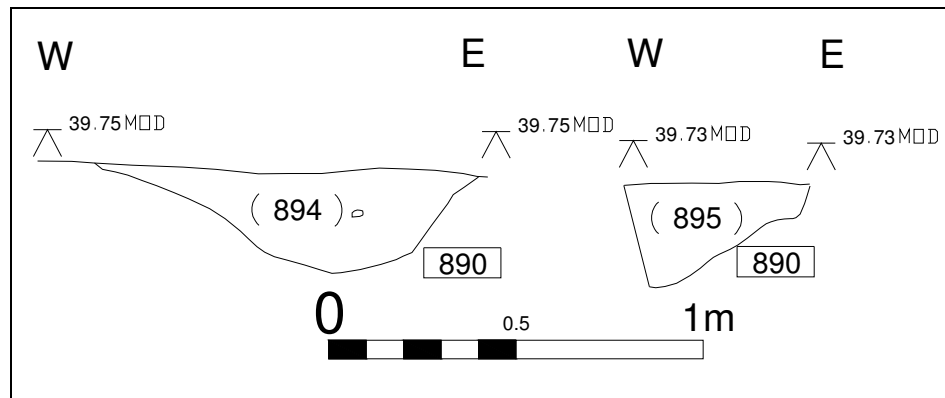


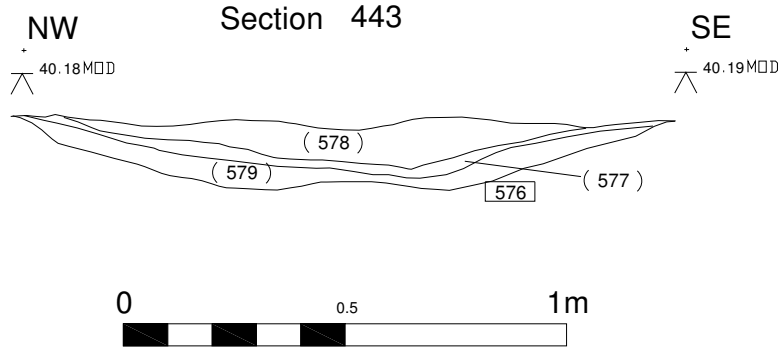
Figure 66: Sections 502 and 503 through Gully 890.



Plate 19. Excavated section of gully 890.

*Pit 576 (fig 60 & 67)*

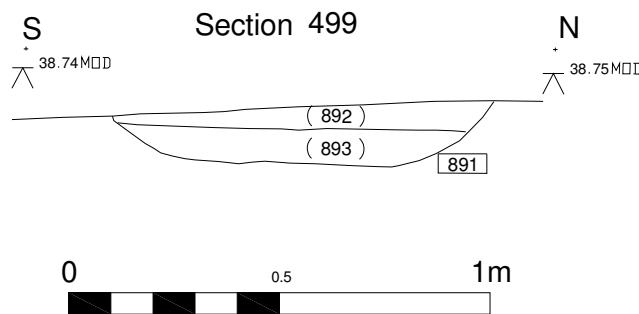
7.6.13 Pit 576 was a sub-circular shallow dish shaped burnt depression containing no finds. It measured approximately 1.40m in diameter and was 0.18m deep. It contained three distinct layers of burning. The bottom layer (579) was red silty clay which lay beneath (577) a black charcoal layer. The top layer 578 was ash grey silt.



**Figure 67: Section through 576.**

*Pit 891 (figs 60 & 68)*

7.6.14 Pit 891 was a shallow sub-rectangular feature measuring 1.80m long by 0.90m wide and 0.16m deep. The bottom fill (893) was a black charcoal-rich deposit which was sealed by (892) a pale brown silty clay. Both fills contained burnt flint.



**Figure 68: Section through 891.**

*Waterhole 899 and associated features (figs 60, 69, & 70)*

7.6.15 Waterhole [899] was a large, elongated oval pit. It was 7.25m long by 3.11m wide and 1.60m deep. Its steep sides narrowed to a flat base only 0.50m wide (Plate 20). It contained four fills of silt loam, all apparently entering the pit from the west side. The primary fills (904) and (902) did not contain finds. Fill (901) contained some 4kg of burnt flint totalling 7,450 fragments, together with a small fragment of burnt clay, possibly from a loomweight. A 30 litre soil sample produced a small amount of charcoal. The upper fill (900), contained 28 burnt flints and a second fragment of burnt clay. The subsoil for some distance around the west side of the pit contained large amounts of burnt flint and it is likely that this pit was a water source for cooking activities. The absence of burnt flint in the primary fills suggests that the water was removed from the waterhole and placed in a container, and after use a 'burnt mound' of fire-shattered flint was created to the west of the waterhole, the mound later being used in the backfilling of the feature.



Plate 20. Section through waterhole 899.

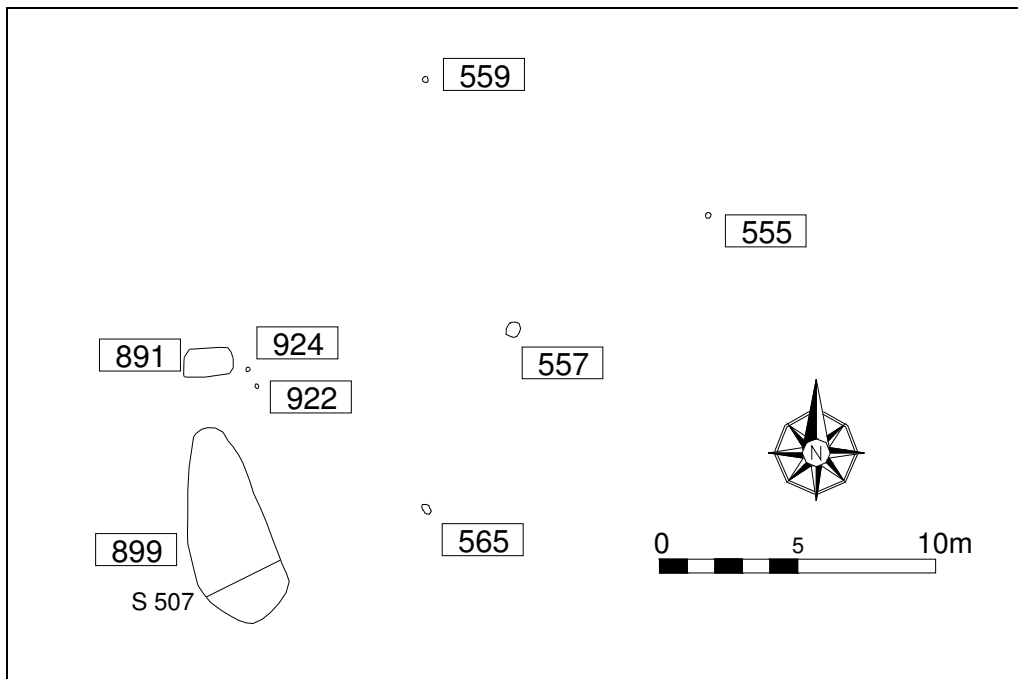
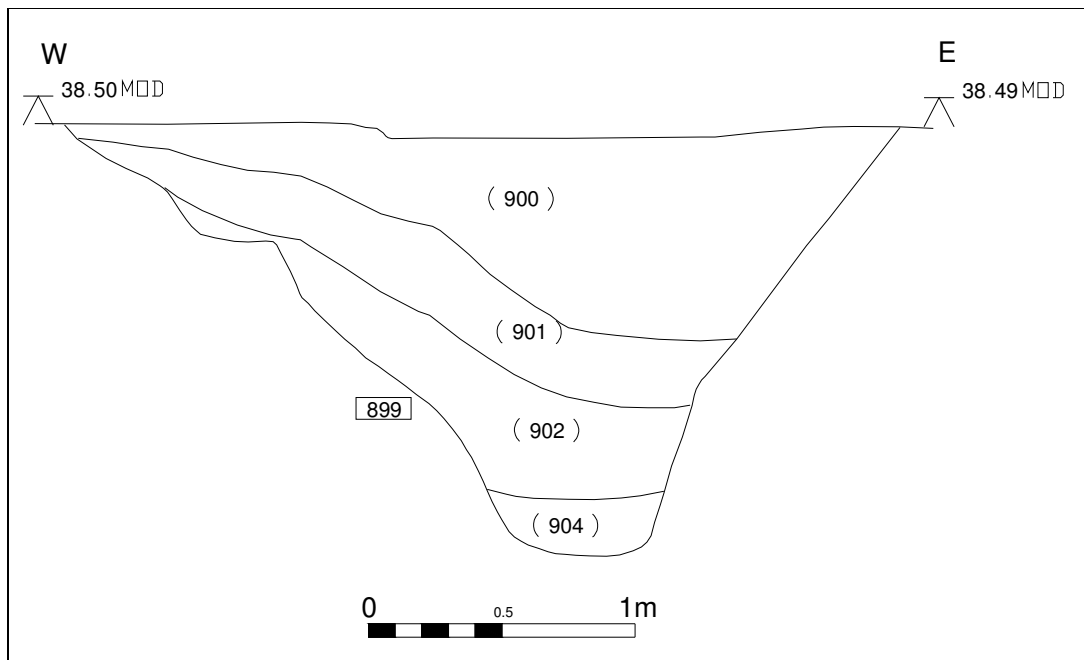


Figure 69: Plan of waterhole 899 and associated features.



**Figure 70: Section 507 through waterhole 899.**

7.6.16 Six features to the east of waterhole [899] may have been associated with it (fig 69). They were shallow, none deeper than 0.14m deep, and none contained finds apart from charcoal which could have been introduced by worm activity, so they might have been natural in origin.

Posthole [555] was circular, some 0.20m in diameter and 0.09m deep. It contained (556), a yellowish brown silty clay.

Posthole [557] lay 8m south west of [555], and was circular, some 0.46m in diameter and 0.11m deep. It contained (558), a yellowish brown silty clay.

Posthole [559] was 11m north-west of [555] and was circular, some 0.22m in diameter and 0.06m deep. It contained (560), a yellowish brown silty clay with charcoal.

Posthole [565] lay 6.8m south west of [557] and was oval, measuring 0.41m by 0.24m and 0.14m deep. It contained (566) a grey sandy silt loam with charcoal.

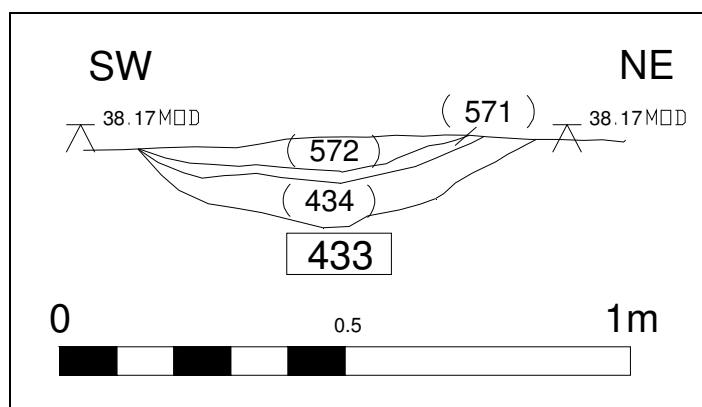
Posthole [922] lay 7m north-west of [565] and was oval, some 0.16m by 0.12m and 0.07m deep. It contained (923), a grey brown silty clay.

Posthole [924] lay 0.50m north-west of [922] and was circular, some 0.15m in diameter, and was 0.08m deep. It contained (925), a yellowish brown silty clay with charcoal.

*Pit 433 (figs 60 & 71)*

7.6.17 Pit [433] lay between enclosure ditch [535] and interrupted ditch [908]. It was sub-circular, 0.68m in diameter, and 0.17m deep. It was bowl-shaped and contained three fills. The bottom fill was (434), a grey silty clay with charcoal flecks, which lay below (571), a layer of charcoal, below (572), a brown silty clay with charcoal flecks. Fill 433 contained one sherd of Rowland's Castle Ware.





**Figure 71: Section 370 through pit 433.**

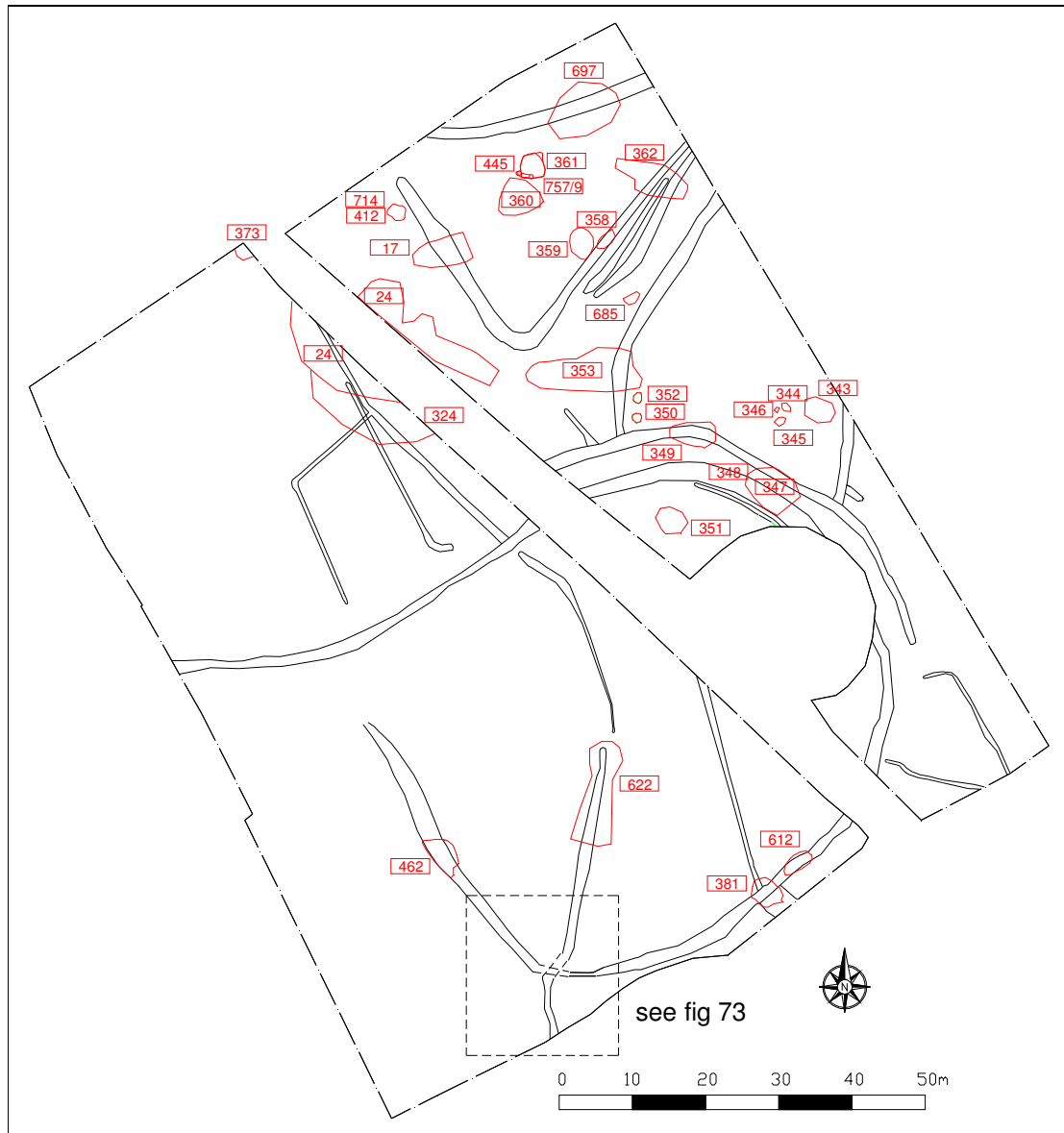
### ***7.7 Phase 7: Romano-British 5, abandonment of the site AD c.150.***

7.7.1 Very few deposits could be securely dated to the 2<sup>nd</sup> century and it is likely that the site had undergone a major change by the mid-2<sup>nd</sup> century. There is some evidence that the south part of Trench A was still used for animal husbandry (see section 7.8), but there is little evidence for human habitation apart from a number of deposits of rubbish. These were mostly found in the north part of trench A (fig 72).

7.7.2 A possible final closing dump of artifacts, context 349, was found deposited over filled-in ditch 388, to the south of the sub-rectangular enclosure where domestic occupation perhaps continued the longest in Trench A. The deposits consisted of 25 burnt flints, seven fragments of querns, seven fragments of burnt clay, four fragments of Roman brick, five fragments of briquetage, and 68 fragments of loomweights. The pottery consisted of 641 sherds of Rowland's Castle Ware, 458 sherds of Quartz 1, 11 sherds of whiteware flagons, and 14 sherds of South Gaulish Samian of forms 18 and 30. The seven sherds of Quartz 4, and six sherds of Late Iron Age pottery were undoubtedly residual. No Southern Atrebatian overlap ware was present. The deposit did include a sherd from a Poole Harbour BB1 flat-rimmed bowl, probably after AD 120 and one sherd from a Central Gaulish 18/31 Samian dish, dated AD 120-150.

7.7.3 Other spreads of artefacts were found in the north part of Trench A on the interface between the subsoil and the natural or features below. A number could be related to the tops of artefact-rich features beneath them and were clearly the upper fills of features that had been disturbed and scattered by ploughing. Others were possibly the fills of very shallow ploughed-out features, or possibly dumps of rubbish that had been scattered on the ground surface during the final phases of the site. One spread of artifacts, 380, was found in Trench B.

7.7.4 The spreads were numbered 17, 24, 324, 343, 344, 345, 346, 347/348, 350, 351, 352, 353, 358, 359, 360, 361/445/757/759/762, 362, 373, 381, 412/714, 462, 612, 622, 685, and 697 in Trench A, and 380 in Trench B. The finds from these layers consisted of 19 fragments of burnt flint, 109 fragments of Roman brick, tile and flue tile, seven fragments of loomweights, 15 fragments of greensand querns, two whetstones, a palette in a micaceous sandstone, two flint flakes, 13 fragments of slag (including a smithing hearth bottom), a nail and a Roman faience melon bead (Item 8).



**Figure 72: Major features of all periods with spreads of abandonment phase, in red.**

7.7.5 The pottery from the spreads in trenches A and B consisted of 1106 sherds of Rowland's Castle Ware, 308 sherds of Quartz 1, 35 sherds of Late Iron Age flint-tempered wares, nine sherds of Southern Atrebatian Overlap Ware, two sherds of Quartz 4, two sherds of oxidised flagons (FOX), two sherds of Alice Holt ware, two sherds of whiteware flagon, one sherd of Nene Valley Colour Coat, and a sherd of Poole Harbour BB1 flat rim bowl. A single sherd of Late Iron Age grog-tempered pottery was recovered. Imports were represented by a sherd of a North Gaulish flagon, a sherd from a North Gaulish mortaria and six sherds of Samian. The Samian consisted of three sherds of South Gaulish ware (dated AD 50-110), one sherd of Central Gaulish ware (dated AD120-190) and two East Gaulish sherds (dated AD 150-200). The latest sherd in the assemblage is a fragment of New Forest Colour Coat beaker, probably

dated to after AD 250, and potentially as late as the 4<sup>th</sup> century. It was probably dropped on the site long after occupation had ceased.

7.7.6 The assemblage did not contain the marker for the late Roman period in this part of Southern England, grog-tempered ware, which becomes increasingly common from the mid-3<sup>rd</sup> century.

7.7.7 In terms of the pottery assemblage in the spreads some 96% consisted of Rowland's Castle Ware or the closely related Quartz 1, 3% was residual late Iron Age/Early Roman wares, with less than 1% from more widely sourced wares such as Samian, North Gaulish flagons, BB1 and Nene Valley Colour Coat. It would seem that by the mid- to late 2<sup>nd</sup> century the people who used the site had little access to, or need for, fine ware vessels.

## **7.8 Phase 8: Romano-British 6, the post-enclosure waterhole AD 150+.**

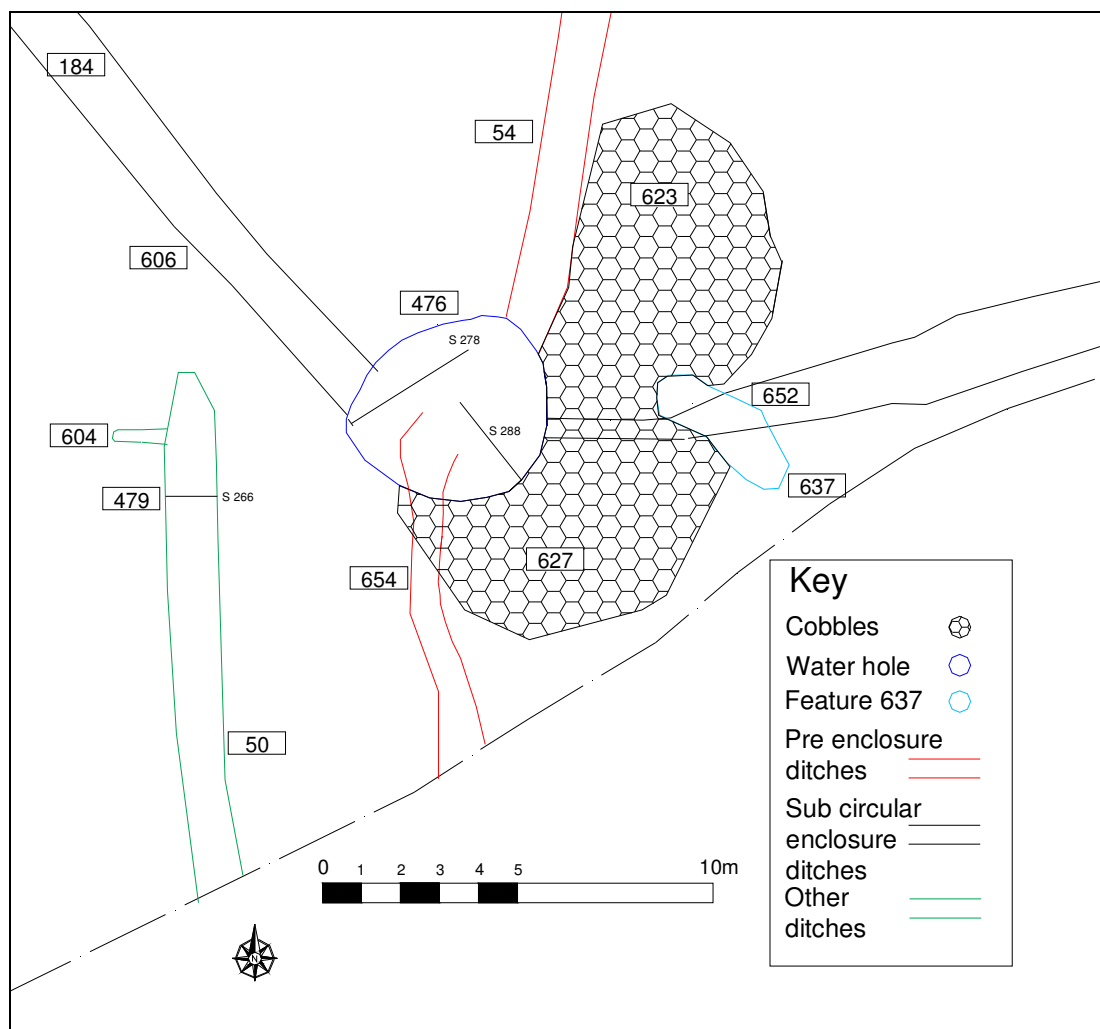
7.8.1 After the ditches of the sub-circular enclosure in Trench A had silted up, probably by the mid-2<sup>nd</sup> century, a large waterhole was dug through the ditch fills at the lowest part of the Trench. Presumably the various partially silted-up enclosure and pre-enclosure ditches that met at this part of the site had resulted in a boggy area that was recognised as being of use to water animals. A ditch unconnected to the enclosure ditch lay to the west of the waterhole and has been placed in this phase. The waterhole gradually silted up, but was provided with a flint cobbled surface around part of it to cut down on the erosion. At some later point the edge of the flint cobbles were cut by a second waterhole which penetrated down into an earlier ditch. This waterhole would have been more suitable for human use than for watering animals; this has also been placed in this phase. The excavation of a large waterhole for stock at this point suggests that the animals could not be watered from the stream to the south of the site, perhaps it belonged to others.

7.8.2 The date of this phase is uncertain; the finds were all early Roman in date, but may all have been residual. A later Roman date, before the regeneration of the Forest of Bere, is likely.

### *Waterhole 476 (figs 73 & 74)*

7.8.3 Waterhole [476] had been dug at the junction of the partially silted up ditches [31], [54], [184/632] and [654] and they would have directed water into it, certainly the silts of ditch 184 were found slumping into the waterhole. The waterhole was sub-circular in plan measuring 5.21m east-west by 4.71m north-south. It was at least 1.30m deep but was not bottomed due to safety reasons. On the southwest quadrant the edge dropped steeply for 0.50m at which point there was a 0.88m wide ledge before it again dropped steeply. The other sides dropped at an angle of some 20 degrees.

7.8.4 The earliest exposed fill was (619/636) a reddish yellow silty clay with common charcoal found lying above the silt (618) from ditch [184], and above the natural on the south side of the waterhole. Finds included burnt flint, a fragment of briquetage, 11 sherds of Rowland's Castle Ware, eight sherds of Quartz 1, one sherd of Late Iron Age flint-tempered ware, and one sherd of Southern Atrebatian Overlap Ware. These finds could all have been re-deposited from the fills of the adjacent ditches.



**Figure 73: Phase 8 Roman-British 6 waterhole 476 with associated cobbled areas and features (see fig 72 for position of this plan).**

7.8.5 A flint cobble surface 623/627 (fig 73) was then laid around the east and south side of the waterhole at this point, partly over the upper surface of fill 636. It respected the line of ditch 54, (a pre-enclosure ditch suggesting that still served to direct water to the waterhole, but ran over the top of the upper fill of enclosure ditch 624 and ditch 654, showing that those ditches were completely filled by this point. The flint layer sloped gently down towards the waterhole and is interpreted as hard standing to access the pit (Plate 21). The cobble surface seems too extensive for use solely by people so was probably used to prevent stock 'poaching' the edge of the waterhole. The absence of a hard standing around the other edges of the waterhole must mean stock was unable to access them so there must have been a barrier. No postholes for a fence were seen, so a hedge along the west side of the line of ditches [54] and [654] is probable.

7.8.6 The finds from the cobble surface consisted of 21 burnt flints, a small sherd of briquetage and 33 fragments of triangular perforated loom weights. The pottery consisted of 23 sherds of Rowland's Castle Ware, 22 sherds of Southern Atrebatian

Overlap Ware, six sherds of Late Iron Age flint-tempered pottery, four sherds of Quartz 1, and one sherd of oxidised flagon (FOX).

7.8.7 Some of the cobbles eroded from the main body and rolled down into the waterhole becoming incorporated in silty clay fills (617), (635), (478) (488), and (489). This was probably due to stock trampling the edges of the waterhole. One of the 'cobbles' was a fragment of a quernstone in Old Red Sandstone, sourced from the Forest of Dean or the Bristol area. Other finds included four burnt flints, 24 sherds of Rowland's Castle Ware, 17 sherds from an oxidised flagon (FOX), 12 sherds of Quartz 1, and a sherd of Late Iron Age flint-tempered ware.

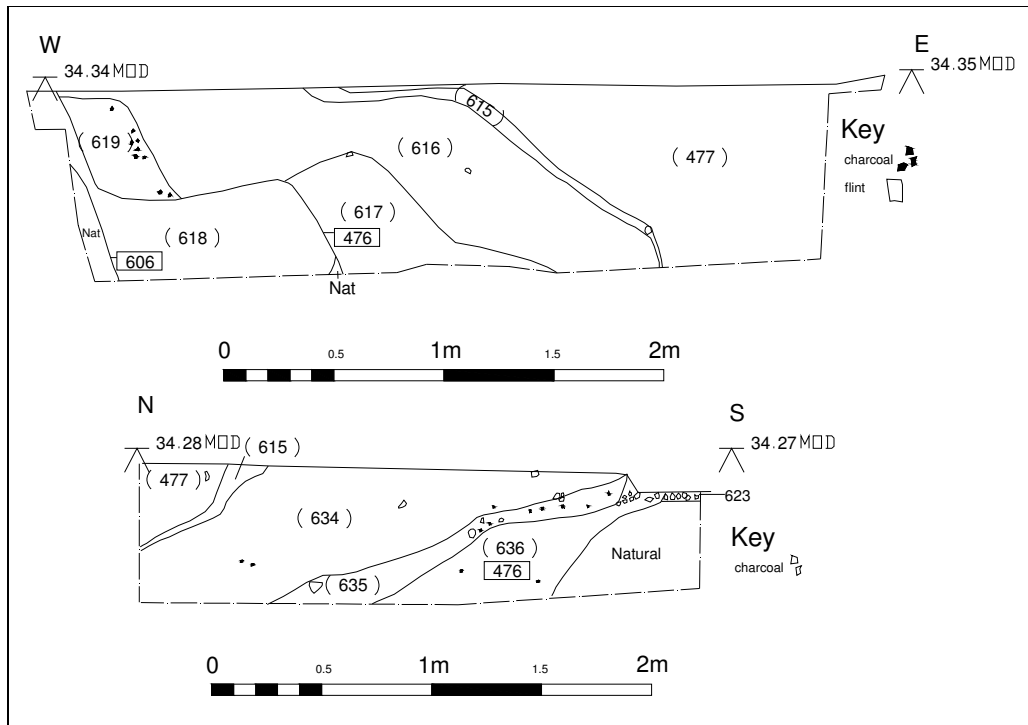
7.8.8 The waterhole then silted up with a deposit of silty clay (616/634) over 800mm thick. The pottery was the same mix of types as was found in the earlier fills, but included a sherd from a central Gaulish Samian dish of form 18/31 which probably dates from AD120-150. This was followed by a thin deposit of silt (615); the only find from (615) was a fragment of Roman tegula.

7.8.9 After (615) was laid down the waterhole finally silted up to the surface with (477), a grey silty clay. It contained 204 burnt flints, and two fragments of ceramic building material, together with 59 sherds of Rowland's Castle Ware, 28 sherds of Quartz 1, eight sherds of oxidised flagon (FOX), five sherds of Southern Atrebatian Overlap Ware, and five sherds of Late Iron Age flint-tempered pottery. A soil sample of 40 litres produced little environmental material.

7.8.10 The pottery did not alter much throughout the sequence of fills, suggesting that the waterhole filled fairly rapidly, probably during the early to mid-2<sup>nd</sup> century AD. Alternatively all the finds are residual from the fills of the ditches that the waterhole cut through.



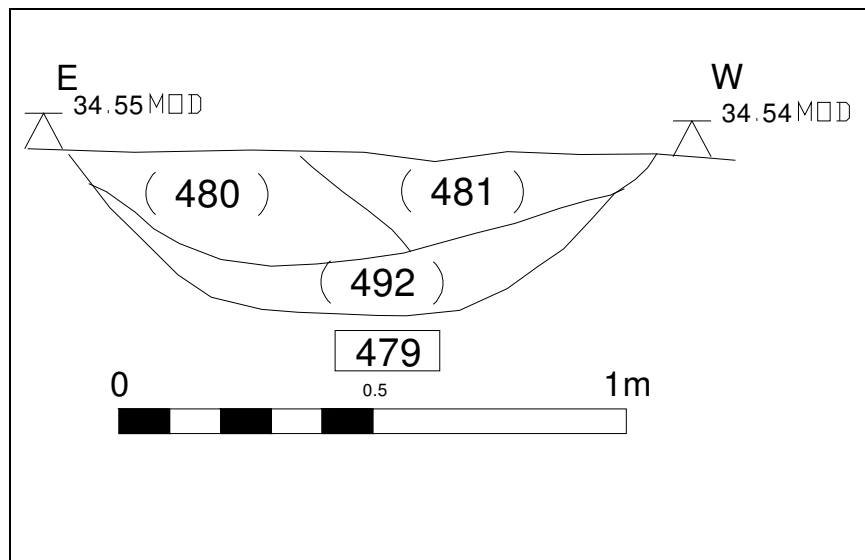
**Plate 21. The cobbled surface 627.**



**Figure 74: Sections 278 and 288 through waterhole 476.**

*Ditch 479/50 (figs 73 & 75)*

7.8.11 Ditch [479/50] was situated some 4m to the west of the waterhole and the cobble surface. It was 1.15m wide and 0.33m deep with a rounded profile. Some 13.4m was revealed. The primary fill was (492), a yellow brown clay loam which produced only burnt flint. Above it was (480), a dark grey clay loam which produced burnt flint and two sherds of Quartz 1, and (481/51) a grey brown silty clay loam with burnt flint and 15 sherds of Rowland's Castle Ware.



**Figure 75: Section 266 through ditch 50/479.**

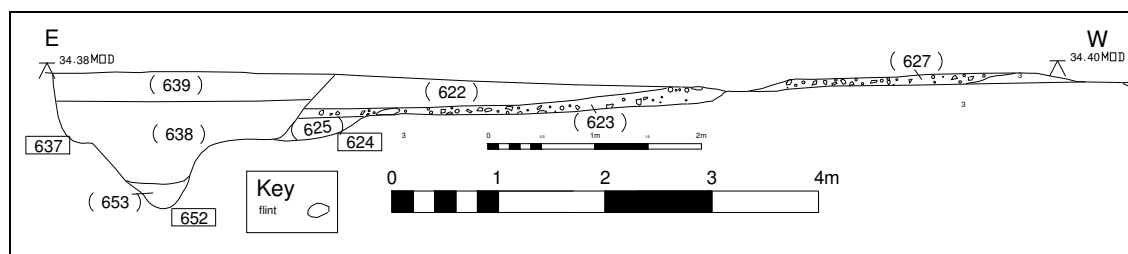


*Ditch 604 (fig 73)*

7.8.12 Ditch [604] was a small side ditch running into Ditch [50/479]. It was 1.36m long by 0.40m wide and 0.27m deep with almost vertical sides and a rounded base. It contained one fill, (605) which produced no finds.

*Waterhole 637 (fig 73 & 76)*

7.8.13 Waterhole [637] was a roughly oval shaped pit cutting through the cobbled surface some three metres to the east of waterhole [476] and into the fills of ditch [40/652]. It was 3.9m long by 2.6m wide and 1.05m deep with sloping, stepped sides and a rounded base. It contained fills (638) and (639). Finds consisted of six burnt flints, two fragments of burnt clay, a fragment of loomweight, two fragments of briquetage, four fragments of imbrex, 30 sherds of Rowland's Castle Ware, 12 sherds of Quartz 1, five sherds of Late Iron Age flint-tempered pottery, and four sherds of Late Iron Age chalk-tempered pottery. They could all have been re-deposited.



**Figure 76: Section through waterhole 637 and cobbles 623/627.**

## **7.9 Phase 9: Post-Roman activity AD400+.**

7.9.1 A number of features cut the fills of Roman features so must have been of post-Roman date and perhaps related to activities carried out within the Forest of Bere in the medieval and post-medieval periods. Undated postholes in the west part of Trench A where [136], [138], [187], and [191] (fig 77).

7.9.2 The plough soil (82 and 569 in Trench A, 311 in Trench C) which lay above the Roman spreads and features contained mainly Iron Age and Roman artifacts, including a flint flake, but also some medieval and post-medieval artifacts, suggesting that the area was ploughed and manured into the 20<sup>th</sup> century. Earlier phases of agricultural use were marked by a number of ditches that cut Roman features.

7.9.3 Three lengths of post-Roman undated ditch were revealed in Trench A. Ditches [253] (254) and [285] (286) were two parallel lengths of ditch which cut Roman ditch 235. They contained no dateable material. Ditch 253 ran for 14.78m. It was 0.45m wide and 0.14m deep. Its fill, 254, was a yellow brown silty clay with occasional charcoal flecks (a 40 litre soil sample produced a few fragments of flint). Ditch [285] was 13.14m long, 0.38m wide and 0.19m deep with steeply sloping sides coming to a pointed base. Ditch [354/355] cut Roman ditch [35] some 8.35m in length. It was 0.61m wide and 0.12m deep and contained fills (468), (448) and (449), pale red silty clay loams with charcoal.



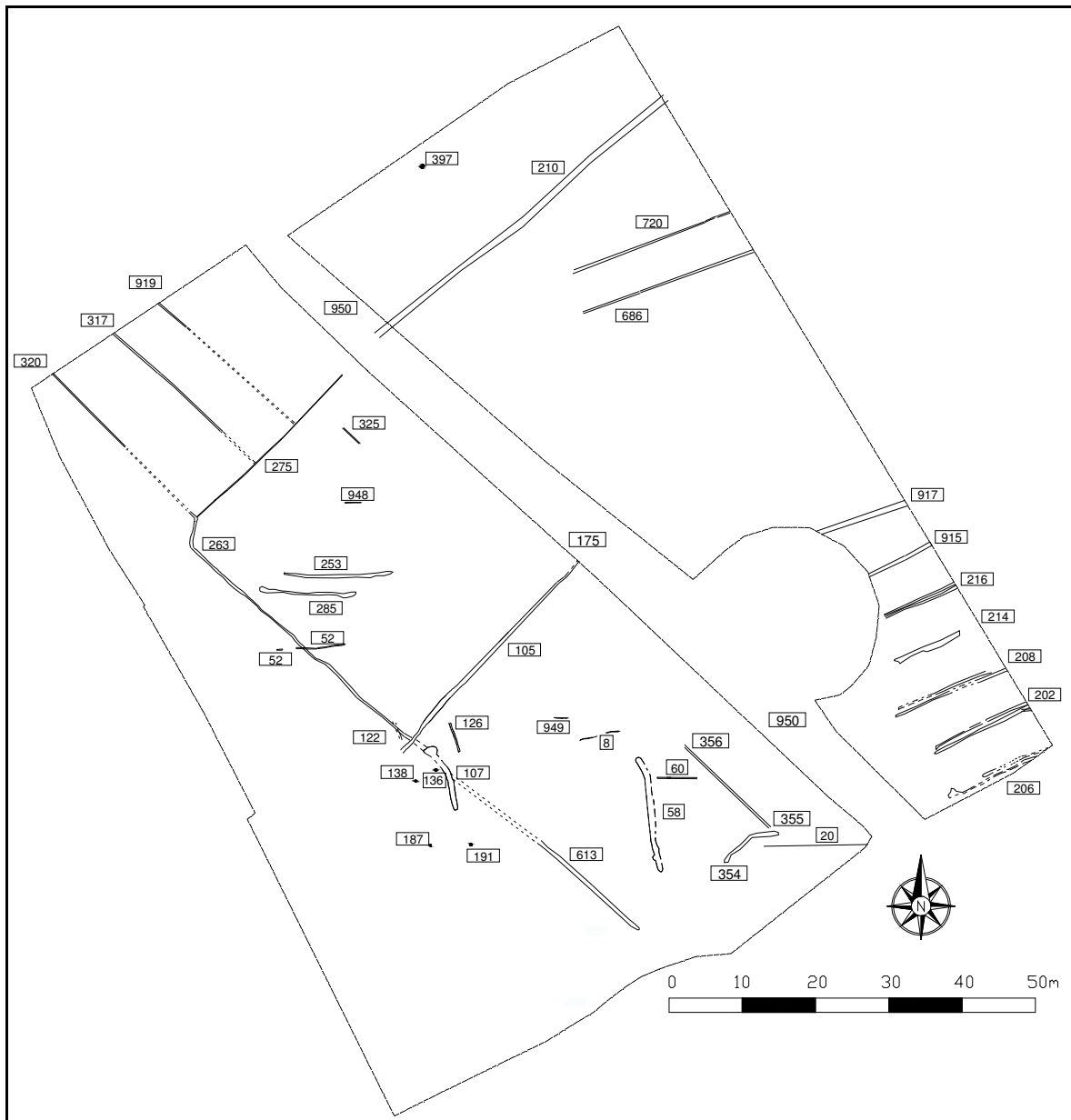
7.9.4 During the stripping of the topsoil in trench A a shallow scoop [397] containing a brown soil fill (398) above (705) with much burnt bone (399) was revealed close to the position of a post-medieval ditch and hedge. It was left upstanding while the rest of the site was stripped to the top of the Roman archaeology. It was thought to be possibly a human cremation and it was excavated in spits by quadrants. The deposit was in fact burnt animal bone, at least some of it cattle (See Hamilton-Dyer Bone Report 7.3.2 below), with 477 fragments weighing 130g. A small amount of charcoal was present. This feature would appear to have been scooped out of the topsoil and survived at a much higher layer than the Romano-British features found around it, suggesting the burnt bone had been buried since the field was last ploughed. It may have been the cremated remains of a diseased animal. A 1 litre soil sample of 399 produced a few fragments of charcoal.

7.9.5 In Trench A seven plough marks were observed that ran east-west, which did not align with 19<sup>th</sup> and 20<sup>th</sup> century field boundaries. They were [8], [20], [52], [60], [948] and [949] (not illustrated here but details in archive).

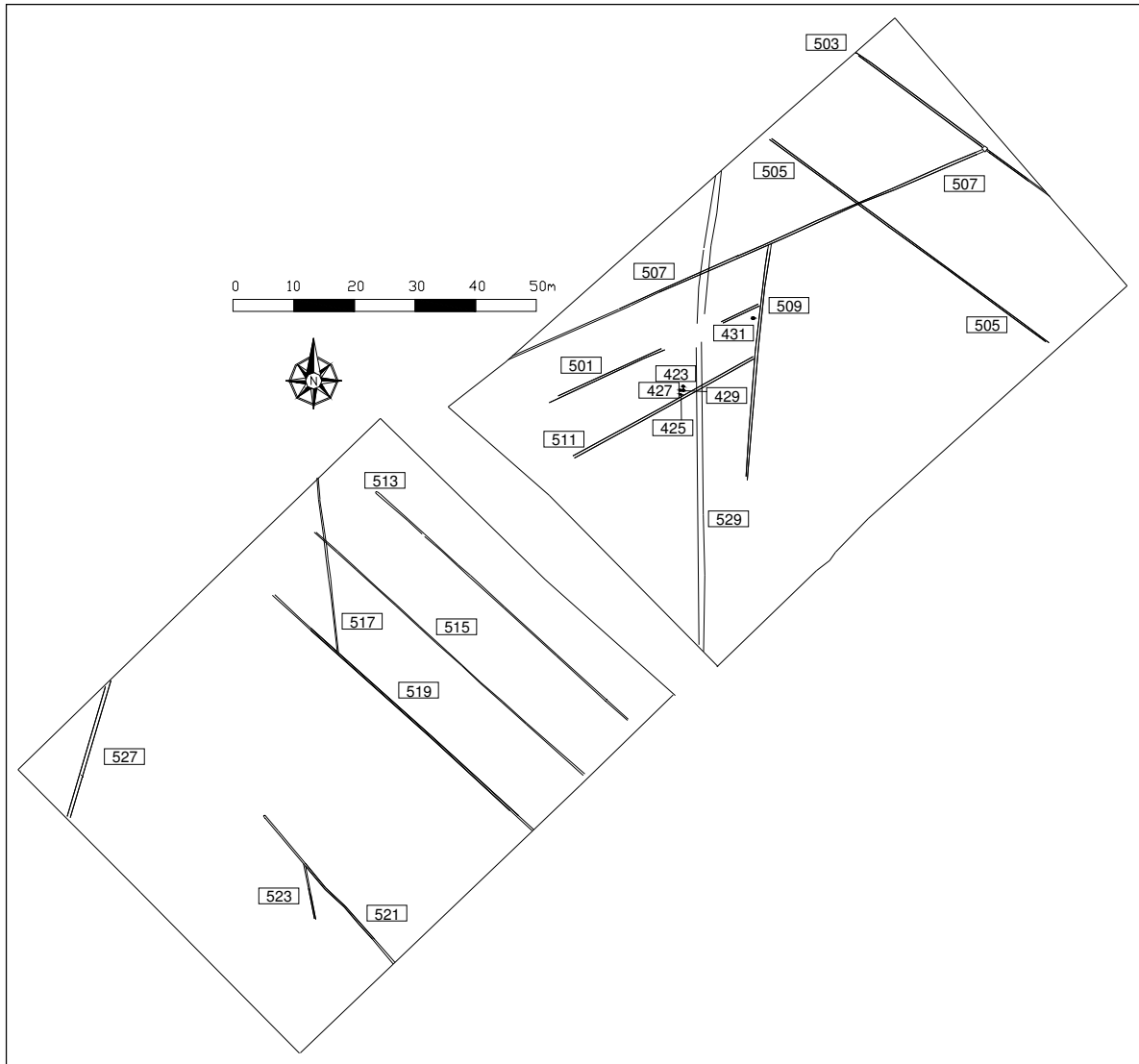
7.9.6 In Trench B five shallow features were found which have been assigned to this period. None were more than 40cm across or more than 7cm deep. Some contained charcoal. They were [423] which contained an iron nail, [425], [427], [429] and [431] which contained a rod of lead. A 1 litre soil sample from fill 424 of feature 423 produced a small amount of charcoal.

## ***7.10 Phase 10 Early Modern agricultural improvements (figs 77, 78 & 79)***

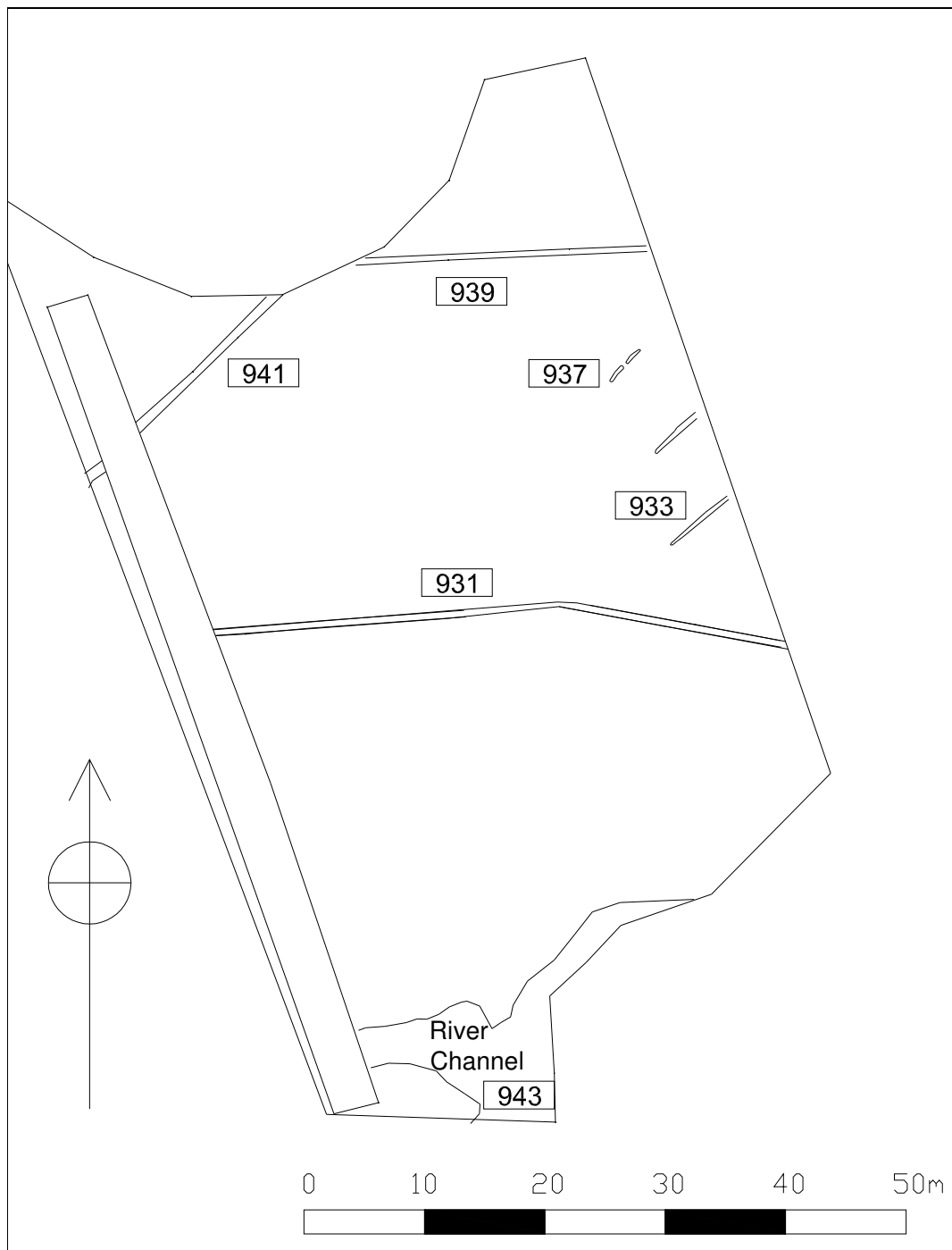
7.10.1 Many land drains were encountered across the site. Most were straight narrow trenches up to 1m deep that contained extruded clay pipes, buried beneath a mix of London Clay and soil and had probably been laid by machine. Their fills were all similar grey or brownish grey silty clay loams. Others were wider and less regular and contained numerous chalk fragments in their fills; these may have been hand dug. All probably dated from the late 19<sup>th</sup> or early 20<sup>th</sup> century, when this part of the Forest of Bere was sold, cleared of woodland, and turned back to agricultural land. The drainage plans are shown here as being of historical interest, further details are in the site archive.



**Figure 77: Plan of 19<sup>th</sup> /20<sup>th</sup> century land drains and undated posthole and post Roman plough marks and ditches in Trench A**



**Figure 78: Plan of 19<sup>th</sup> /20<sup>th</sup> century land drains and post Roman features in Trench B.**



**Figure 79: Plan of 19<sup>th</sup> /20<sup>th</sup> century land drains in Trench C.**

## 8. Specialist Reports

### 8.1 Geoarchaeological Observations

By Dr MJ. Allen

#### 8.1.1. Introduction

The site was visited on 03/09/08 to describe and sample the local soil profile, to examine a number of ditch profiles and to extract samples of the stratification in the major Romano-British ditch (ditch 184) for detailed examination. This feature was chosen as being typical of the ditches on the site. Sampling of ditch 184 was undertaken, after pumping to remove 1.3 m depth of water. Four overlapping and duplicating monoliths provided undisturbed samples of the full section (Fig 1.). Outline descriptions were made on site and these were augmented by more detailed descriptions from the cleaned faces of the undisturbed sediments in monolith tins. Notation followed terminology outlined by Hodgson (1976).

#### 8.1.2. Topography

The topography is one of low-lying relief where minor topographical variation and local stream valleys have significant effects upon the ground water situation and consequently upon the weathering of the drift geology and its consequent soils. The soils are mapped as p (clayey) pelo-stagnogley soils of the Windsor and Ragdale Association (Jarvis *et al.* 1984) over Eocene London Clay. Although this is typically a blueish grey clay, silts, sands and gravels also occur (Jarvis & Findlay 1984), and at Waterlooville the London Clay facies (or the drift deposits over it) clearly comprise silty clays and gravels. These soils are slowly permeable, seasonally waterlogged, clayey soils.

#### 8.1.3. The natural soil profile

The soils are mapped as p (clayey) pelo-stagnogley soils of the Windsor and Ragdale Association (Jarvis *et al.* 1984) over Eocene London Clay. Although this is typically a blueish grey clay, silts, sands and gravels also occur (Jarvis & Findlay 1984), at Waterlooville the London Clay facies (or a drift deposits over it) clearly comprise silty clays and gravels. These soils are slowly permeable seasonally waterlogged clayey soils.

The soils exposed in the excavated areas are formerly plough gleyed clayey pelo-stagnogley soils about 0.4m thick.

<i>Profile 1a</i>	<i>East edge of Trench A – former arable</i>
0-18cm	<u>A/Ag</u> Brown (10YR 5/3) humic stone-free silt loam, weak medium crumb structure, some medium woody roots (hedge) - and moderate diffuse mottling, clear boundary
18cm +	<u>Rw</u> Heavily mottled massive silty clay
<i>Profile 1b</i>	<i>Northern edge of Trench A – former arable</i>
0-17cm	<u>A/Ag</u> Brown (10YR 5/3) humic stone-free silt loam, weak medium crumb structure, some medium woody roots (hedge)_ and moderate diffuse mottling, clear boundary
17-22cm	<u>B/Rw</u> Light greyish brown (6/2) stone-free, sorted <u>silty</u> clay, very weak small blocky structure in places – colluvial B horizon, abrupt boundary

22cm + Rw Heavily mottled massive silty clay

*Profile 2* *Immediately east of, and on the edge of, the post-medieval hedge-line crossing Trench A*

0-26cm A/Ag Brown (10YR 5/3) mixed apedal humic silty loam with the upper 15cm strongly mottled with distinct strong brown (7.5YR 5/6) mottles,

26cm+ Rw Grey (2.5YR 5/1) stiff silty clay with mottles strong brown (7.5YR 5/8)

*Profile 3* *West edge of Trench A*

0-19cm A/Ag Greyish brown (2.5YR 5/2) stone-free humic silty clay weak structure, with strong brown distinct mottles of brownish yellow (10YR 6/8), abrupt boundary

19cm+ Rw Light yellowish brown (2.5Y 6/3) stiff massive stone-free silty clay

#### **8.1.4. The effect of the pedology on the archaeological features**

At the base of the soil the Rw horizon is in part colluvial obscuring the archaeology, but the main effect of the permeable pelo-stagnogleys is that they have a deeply weathered horizon into the parent material; the silty clay London Clay. Although this layer is in part colluvial – ploughing increasing soil depth in downslope locations thus removing some of the soil profile from the ploughshare/tine depth, the main factor is the development of a deeply weathered (15cm) parent material resulting in the biotic mixing of the upper surface of the parent material (natural) and the loss of the definition and presence of the upper portions of all archaeological cut features. Their upper horizon is subsumed into the lower profiles of the soil profile. As a result all archaeological features are essentially truncated, not only physically by ploughing, but by biotic reworking and typical pedogenesis (soil forming processes) developing into the soft parent material (natural).

Some features (e.g. infill 388) show a distinct gleying horizon with the upper grey (5Y 5/1) silty clay, but are texturally almost identical to the natural parent material but are less cohesive. This indicates

- i) that infills are largely weathered natural accumulation of the parent material (natural) in the ditch (i.e. largely primary fills *sensu* Evans 1972, 321-344; Limbrey 1975, 290-300)
- ii) that post-depositional gleying (groundwater and surface water gleying) have altered the profiles as exposed in excavation

In ditch 724, for instance, over half of the infill is due to the parent material (natural), falling into the ditch. The remaining fills are almost level with the natural ground surface, leaving only a very minor feature visible in the landscape.

We can see that in general the ditch infills largely constitute primary fills (*sensu* Evans 1972; Limbrey 1975) with relatively little secondary fills typically associated with the occupation activity and use of the ditches. The tertiary fills are, on the whole, absent or very limited indicating relatively rapid phases of ditch infill, and relatively short time sequences represented in their profiles.

### **8.1.5. Typical ditch fill and infill history**

Ditch 184/632 c. 1.3m deep and the infill history can be amplified by the geoarchaeological descriptions. The fill is predominately, though not exclusively of parent material (i.e. natural drift geology) rather than A horizon material (i.e. topsoil). Initial infills at the base of context 466 are laminated indicating deposits and settling under water. Very soon after construction of the ditch and water lain silts, there was a clear input of charcoal and burnt flints. The size of the charcoal pieces indicate that this is a clear disposal of burnt debris and not the casual accumulation of material into the ditch.

The main fill (context 461) was largely rapid infill weathering from the upper sides of the ditch, during which occasional charcoal fragments became included suggesting some general activity within the vicinity. This charcoal was 'windblown'.

At the base of the ditch re-cut (context 340/341) again there was a clear deposit of burnt material including charcoal, burnt flint and burnt soil suggesting the deliberate removal and discard of a burnt area/hearth. Above this material the main infill was weathering and collapse of the sides, but greyer hues indicate the possible presence of more soil (A horizon) material, and again there was further deposition of burnt material including twiggy charcoal material.

The upper part of the ditch fills (contexts 185 and especially 186) were affected by both the base of the present brown earth soils, but also exhibited surface gleying from passage of groundwater.

The infill of the ditch, albeit one of the largest excavated Romano-British ditches on the site, is not remarkable, and examination of other ditch sections showed it was typical of the infill history of the majority of the other ditches. The main fills were essentially clean and relatively rapid weathering (and/or collapse) of the sides. They include little evidence of anthropogenic activity apart from rare worn charcoal fragments, with the exception of clear dumps and disposal of charred and burnt material. The lack of other cultural material and palaeo-environmental macrofossils in the main deposits is a testimony to both the relatively rapid episodes, and to the general lack of intensive activity in the immediate vicinity. There was some biotic mixing of the deposits (i.e. rooting and worm working), and no major animal disturbance or burrowing was noticed; a feature common to most of the excavated ditches on site.

### **8.1.6. Ditch infilling histories**

Examination of the other exposed pit and ditch sections showed that the infill history of ditches 184 and 386 provide a good and consistent model for the infilling process of most of the ditches. By examining the present day soil profiles and the drift geology some more general statements may be made. It is clear that the initial infills were loose silty mud accumulating in the bases of the ditches and being disaggregated under water. Most sections showed signs of water sorting (laminae); that is the ditches contained muddy bottoms with standing water soon after they were dug.

There is evidence of large blocks of the sides (parent material/drift geology) falling into the ditches creating a clearly homogeneous infill with few artefacts or cultural imprint.



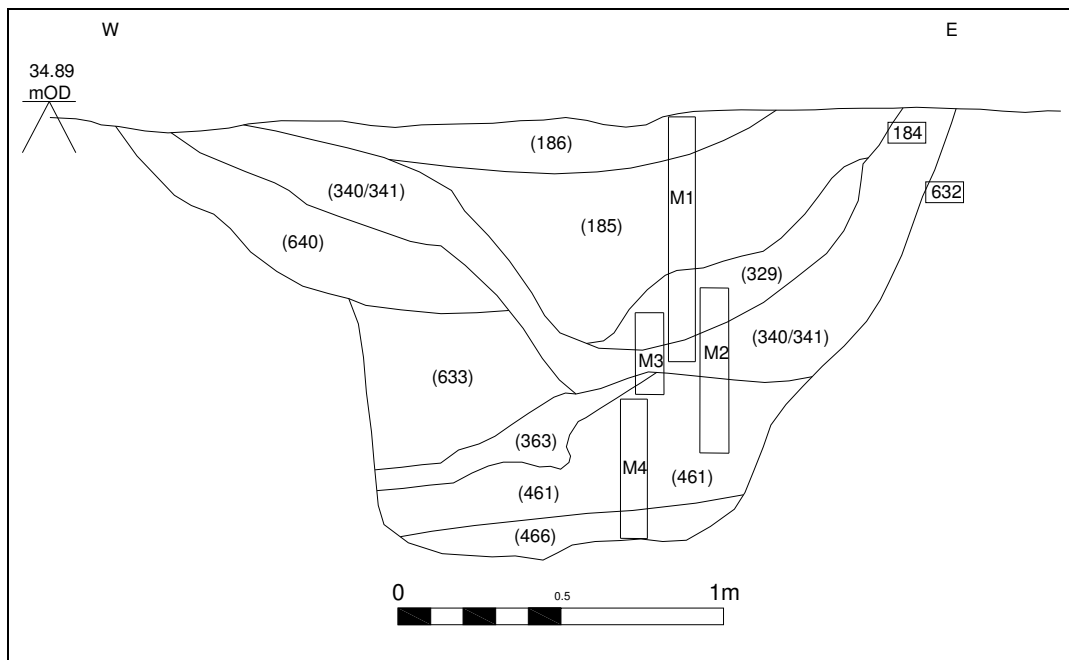


Figure 1. Section of ditches 184 and 632

There is evidence of some stabilisation of the sides after weathering, but the main infills occurred relatively rapidly, constituting weathering of the sides and probably including 'sheets' of parent material peeling off the sides and falling into the ditch.

There are clear episodes of dumping and deposition in some ditches, but in many cases (e.g. ditch 184) a relatively small amount of material was deposited, and was then further buried by natural ditch infill. No stabilisation of infill is evidenced by stabilisation horizons or buried soil horizons within the ditches. In fact the ditches are essentially primary/secondary infills with no or little tertiary deposits despite being in a formerly ploughed landscape. This indicates the almost total infilling of the ditches prior to the onset of major agricultural practices. All the profiles show evidence of groundwater gleying and evidence of surface water gleying, and the total absence of organic material is due to the water table fluctuation being so great as to preclude enable any preservation by waterlogging.

#### **8.1.7. Cultural implications**

The general low level of debris, cultural material, and cultural evidence in the sediment record implies that activity is not locally intensive and is dispersed and periodic, possibly seasonal. The infill history of the ditches is not that associated with settlement and long-term occupation activity.

**Soil description for ditch 184/632**

<b>Depth (cm)</b>	<b>Context</b>	<b>Description</b>
0-56	186+185	Grey (10YR 6/1) stone-free silty loam with many to very many (40%) medium to coarse prominent diffuse mottles of strong brown to reddish yellow (7.5YR 5/6 – 6/6) with large weak prismatic structure, rare fine charcoal flecks @ 18cm mottling >40% and more distinct and prominent @ 50-58cm some medium flints <u>Base of present soil + eroded soil + last ditch infill – gleyed</u>
56-66	329	Grey to dark grey (10YR 5/1 – 6/1) silty clay with common charcoal to 12mm diameter twigs to 21mm long, some soil reddening and few small and medium burnt flints present <u>Tip line of charcoal, burnt flint and burnt soil</u>
66-69	340/341a	Dense grey (10YR 6/1) stone-free silty loam – as above – with common to many (20-40%) medium to coarse prominent diffuse mottles of strong brown to reddish yellow (7.5YR 5/6 – 6/6), abrupt/sharp boundary <u>Rapid weathering and collapse of sides – gleyed: primary fill</u>
69-82	340/341b	Dense brown to pale brown (10YR 5/3 – 6/3) stone-free silty clay with small to medium blocky structure, common (2-20%) fine and medium strong brown (7.5YR 5/6) diffuse mottles <u>Rapid weathering and collapse of sides: primary fill</u>
82-88	461	Dark grey to grey (10YR 5/1-4/1) firm stone-free silty clay, blocky structure with some medium fire cracked flints, common charcoal pieces (c. 2 × 6mm), and evidence of reddened soil fragments (yellowish red 5YR 4/6) <u>Deposition of burnt material (charcoal, burnt flints, burnt soil)</u>
88-91	461	Transition
91-125	461	Firm brown stone-free (10YR 5/3) to light brown (10YR 6/2) stone-free stiff silty clay, weak medium prismatic structure, many medium to coarse diffuse mottles as before, rare occasional charcoal pieces (to 5mm × 7mm) <u>Rapid weathering and collapse of sides: primary fill</u>
125-128	466a	Lens of greyish brown ( 10YR 5/2) silty clay with common medium charcoal pieces (6mm × 10mm) and burnt small and medium flints <u>Deposit of charcoal and burnt flints</u>
128-133	466b	Brown (10YR 5/3) stone-free stiff silty clay as above, abrupt to sharp boundary <u>Weathering of sides: primary fill</u>
133-137+	466c	Brown (10YR 5/3) to yellowish brown (10YR 5/4) finely laminated silt wash <u>Silt wash: primary fill</u>

**Soil description for ditch 386**

<b><i>Depth (cm)</i></b>	<b><i>Context</i></b>	<b><i>Description</i></b>
0-7	717	Grey (2.5YR 5/1) silty clay with many fine – to medium distinct to prominent mottles of strong brown (7.5YR 4/6), rare small worn charcoal fragment to 4mm, abrupt boundary. <u>Gleyed base of the A horizon (i.e. topsoil)</u>
7-42	717	Grey (5Y 5/1) silty clay with common coarse prominent reddish brown (5YR 4/4) to strong brown (7.5YR 5/6) mottles, 1% macropores throughout, very rare very small pieces of charcoal, essentially stone-free (rare medium stones), weak indistinct prismatic structure, gradual boundary with next context <u>Gleyed main fill, ?primary/secondary fill</u>
42-67	761	Grey (5Y 5/1) silty clay with fine and medium distinct mottles with diffuse boundaries, 1% macropores throughout, rare medium flints, though essentially stone-free, weak prismatic/blocky structure, clear infilled vertical macropores (roots/worms). <u>Primary fill</u>
67-96	768	As above, but mottling common and less pronounced, massive silt with clearly defined disorganised structure – edge collapse covered by fine silt with fine in situ laminae – water lain/sorted <u>Primary fill</u>

## **8.2 The Animal Bone**

by S. Hamilton-Dyer

### **8.2.1. Introduction and methodology**

A small assemblage of animal bones totalling 961 fragments and weighing 880g was recovered. The contents of each bag, including sieved samples, were examined and the taxa and anatomical elements noted along with any significant features. Individual specimens were not recorded in detail.

### **8.2.2. Results**

The majority of the 961 specimens are very small fragments of bone and teeth, many weighing less than one gram. The condition of the bone is variable, many of the small fragments are calcined or charred and most of the remainder is fragile and degraded. A few specimens are in good condition; for example a sawn cattle horn core from the topsoil context 18. This could be contemporary with the other material but its condition and the clear sawing suggests that it is from a later period. Much of the material is of indeterminate, large ungulate, size. Identified taxa include cattle, horse, pig, sheep/goat and a goose-sized phalanx.

The assemblage is dominated by fragmented cattle teeth and mandible fragments. Tooth material is more resistant to attrition than bone and will survive preferentially in poor soil conditions. Definite horse remains are restricted to three (or perhaps four) fragmentary teeth from context 380, a subsoil spread in Trench B, probably all from the same mandible of a young animal. A shaft fragment from 716 may also be of horse. Pig is represented by a molar and incisor from 366. Sheep/goat molars were recovered from 831 and 874. A calcaneus of an immature sheep/goat was recovered from 706, a context that otherwise contained only fragments of cattle molar(s). A few postcranial cattle remains are present, including a scapula from 387 and a metacarpus from 670.

Deposit 398/399 is comprised entirely of calcined bone fragments. No teeth or skull fragments are present and, of those fragments large enough to distinguish, the material appears to be composed of the remains of one or more limb shafts of cattle size. One of these is possibly a left tibia fragment. No articular surfaces were observed in any of this material.

The extremely small size of this assemblage, together with its poor condition, renders it unsuitable for detailed analysis. The taxa represented are typical of Iron Age and early Roman material but the undoubted taphonomic bias is likely to have enhanced the proportion of cattle over the smaller taxa.

### **8.3 The Charred Plant Remains, Charcoal and Molluscs**

by Michael J. Allen, PhD, MIFA, FLS, FSA

#### **8.3.1. Introduction and methodology**

The aim of the soil sampling programme was to determine the presence, quantity and diversity of charred plant and charcoal and assess their value in aiding the understanding of the archaeological and economic activity at the site.

A comprehensive sampling strategy was employed on site and the resultant samples processed by flotation by Southampton City Archaeology Unit using standard procedures. A total of 220 soil samples were taken from 128 features, one layer, and a sample of the natural. The aim was to collect a 40 litre sample if possible but many contexts did not produce that much soil and the samples ranged from 0.5 litres to 40 litres (see Table 1).

#### **8.3.2. Material and Methods**

The soil samples were processed in the Southampton Archaeology Unit laboratory. The first stage of the process was to take a 5 litre sub-sample, or the whole sample if smaller than 5 litres, disaggregate with a weak solution of hydrogen peroxide and water to breakdown the clay, and then collect the flot on a 250µm mesh and the residue on a 500µm mesh. After drying, any flot and the residue were scanned and those that produced none or very few environmental remains (Category 3) were discarded. A total of 62 samples were selected for complete processing using the same methodology in order to give a representative range of feature and deposit types over time across the whole excavated area, and to provide a representative range of the presence and preservation of charred plant remains and charcoal. The 62 residues and flots were then assessed. Thirty six samples were graded Category 1 and were subject to further analysis of the charred plant and charcoal. The 26 Category 2 samples were not examined further (Table 1).

The material comprised flots recovered on the 250µm mesh, and the largely unfractionated residues including large >6mm and finer material. In most, but not all cases, both residue and flot was present. Where flots were very large (>200-300ml) in some cases only a proportion was analysed in detail.

The flots were scanned under a ×8-×40 stereo-binocular microscope, and the presence of charred plant and charcoal remains recorded (Table 2).

Table 1: details of soil samples

Sample no	context	fill of	Litres	Volume sieved	Category	Sent to specialist
1	224	223	1.5	1.5	2	
2	157	156	20	5	3	
3	161	160	1.5	1.5	1	Yes
4	168	167	1.5	1.5	2	
5	281	223	1.5	1.5	1	Yes
6	220	219	0.5	0.5	1	Yes
7	100	99	40	5	3	
8	236	235	40	40	1	Yes

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9	147	146	5	5	2	
10	131	130	10	10	2	
11	102	101	5	5	3	
12	157	156	20	5	3	
13	226	225	1	1	2	
14	228	227	1	1	1	Yes
15	240	239	5	5	3	
16	283	282	4	4	3	
17	70	69	15	5	3	
18	170	169	5	5	2	
20	98	97	40	5	3	
21	190	189	15	5	3	
22	256	255	10	10	1	Yes
23	104	103	5	5	2	
24	196	195	5	5	2	
25	312	289	4	4	2	
26	295	293	40	5	3	
27	294	293	40	5	3	
28	76	75	5	5	2	
29	238	237	40	5	3	
30	96	95	40	5	3	
31	314	313	40	5	3	
32	74	73	20	5	3	
33	264	263	40	5	3	
34	264	263	40	5	3	
35	264	263	40	5	3	
36	284	83	40	40	2	
37	316	315	40	5	3	
38	246	245	40	5	3	
39	319	315	40	5	3	
40	163	162	30	30	1	Yes
41	165	164	15	5	3	
42	43	42	30	5	3	
43	166	164	30	30	2	
44	322	83	30	30	1	Yes
45	323	83	30	5	3	
46	297	296	16	5	3	
47	400	296	0.5	0.5	1	Yes
48	401	296	40	5	3	
49	303	302	10	10	1	Yes
50	304	302	40	5	3	
51	295	293	40	5	3	
52	403	402	10	10	1	Yes
53	292	408	10	10	1	Yes
54	307	306	40	5	3	
55	299	298	40	5	3	

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56	305	n/a	40	5	3	
57	426	425	30	5	3	
58	90	89	40	5	3	
59	84	83	40	40	2	
60	185	184	40	5	2	
61	186	184	40	5	3	
62	333	245	30	5	3	
63	248	247	12	5	3	
64	332	79	40	5	3	
65	244	243	4	4	1	Yes
66	329	184	40	5	3	
67	38	37	40	5	3	
68	28	25	40	5	3	
69	254	243	40	40	1	Yes
70	47	46	15	5	3	
71	49	48	15	5	3	
72	340	632	40	40	2	
73	363	632	40	5	3	
74	268	267	40	40	2	
75	365	364	40	5	3	
76	339	338	40	5	3	
77	272	271	40	40	3	
79	286	285	40	5	3	
80	368	357	26	5	3	
81	367	79	40	5	3	
82	277	278	2	2	2	
83	145	144	1	1	3	
84	112	111	1	1	1	Yes
85	129	128	1	1	2	
86	321	320	1	1	3	
87	65	64	40	40	1	Yes
88	0					
89	369	35	40	5	3	
90	377	79	40	5	3	
91	373	372	40	40	1	Yes
92	374	35	40	40	2	
93	376	79	40	5	3	
94	63	62	40	5	3	
95	382	79	40	40	2	
96	41	40	40	5	3	
97	383	79	40	5	3	
98	450	79	40	5	3	
99	448	354	40	5	3	
100	449	355	40	5	3	
101	452	459	40	5	3	
102	467	79	40	40	1	Yes



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103	466	632	40	40	1	Yes
104	603	602	40	40	1	Yes
105	457	62	20	5	3	
106	464	62	5	5	3	
107	463	62	5	5	3	
108	481	479	40	5	3	
109	480	479	40	5	3	
110	477	476	40	40	1	Yes
111	55	54	40	40	2	
112	483	482	40	40	1	Yes
113	492	479	40	5	3	
114	600	54	40	5	3	
115	605	604	40	5	3	
116	381	40	40	5	3	
117	491	490	40	5	3	
118	493	490	40	5	3	
119	495	494	40	5	3	
120	608	490	40	5	3	
121	601	79	40	5	3	
122	614	613	40	5	3	
123	618	606	40	5	3	
124	607	606	40	5	3	
125	612	611	40	40	1	Yes
126	622	n/a	30	5	3	
127	625	624	20	5	3	
128	630	54	40	5	3	
129	638	637	40	5	3	
130	643	54	40	5	3	
131	644	611	40	40	2	
132	640	632	40	5	3	
133	633	632	40	5	3	
134	655	654	40	5	3	
135	647	646	5	5	3	
136	648	646	2	2	3	
137	649	646	1	1	3	
138	650	646	3	3	3	
139	651	646	4	4	3	
140	656	646	5	5	1	Yes
141	670	40	40	5	3	
142	668	606	40	5	3	
143	642	641	30	5	3	
144	391	390	30	5	3	
145	674	390	10	5	3	
146	681	675	8	5	3	
147	682	676	5	5	3	
148	685	684	5	5	3	

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149	441	440	20	5	3	
150	669	606	20	5	3	
151	349	388	40	5	3	
152	687	686	40	5	3	
153	671	287	20	20	2	
154	692	688	15	15	2	
155	387	386	40	5	3	
156	702	390	10	5	3	
157	703	386	40	40	1	Yes
158	391	390	20	5	3	
159	674	390	10	5	3	
160	399	397	40	5	3	
161	399	397	40	5	3	
162	399	397	40	5	3	
163	399	397	40	5	3	
164	704	684	40	40	1	Yes
165	399	397	1	1	3	
166	399	397	0.5	0.5	3	
167	399	397	0.5	0.5	3	
168	399	397	0.5	0.5	3	
169	399	397	1	1	1	Yes
170	399	397	0.5	0.5	3	
171	399	397	0.5	0.5	3	
172	399	397	0.5	0.5	3	
173	694	388	40	5	3	
174	399	397	0.5	0.5	3	
175	399	397	0.5	0.5	3	
176	399	397	0.5	0.5	3	
177	399	397	0.5	0.5	3	
178	642	641	40	5	3	
179	716	641	40	5	3	
180	441	440	10	5	3	
181	389	388	40	5	3	
182	438	723	40	5	3	
183	439	724	40	5	3	
184	733	723	10	10	1	Yes
185	716	641	40	5	3	
186	424	423	1	1	1	Yes
187	426	425	0.2	0.2	3	
188	428	427	1	1	3	
189	430	429	1	1	3	
190	563	562	20	5	3	
191	0					
192	578	576	20	5	2	
193	577	576	30	5	3	
194	579	576	10	5	3	

195	848	771	5	5	3	
196	880	599	40	5	3	
197	883	599	8	5	3	
198	884	599	20	5	3	
199	882	599	40	5	3	
200	588	535	40	40	1	Yes
201	893	891	40	40	1	Yes
202	894	890	10	5	3	
203	895	890	10	5	3	
204	896	890	20	5	3	
205	901	899	30	30	1	Yes
206	911	908	40	40	1	Yes
207	815	790	40	40	1	Yes
208	772	771	40	40	1	Yes
209	860	859	10	5	3	
210	825	824	10	10	2	
211	866	865	10	10	1	Yes
212	393	392	10	5	3	
213	719	718	10	5	3	
214	857	856	10	5	3	
215	754	752	10	5	3	
216	893	891	10	5	3	
217	779	778	5	5	3	
218	811	394	10	5	3	
219	809	808	10	5	3	
220	740	739	10	5	3	
221	645	611	5	5	3	
222	875	796	10	5	3	

### **8.3.3. Results**

Overall the samples can be divided into those which were sparse in charred remains and those which were rich, if not diverse, in charred material. A number of samples which were poor in charred remains contained a very high number of fine modern roots. The majority of the charred remains present in all samples was wood charcoal, mainly fragments of heart wood (oak and non-oak fragments), but some of the larger samples certainly contained roundwood and fine twiggy material. This included branch nodes and thorns, probably hawthorn (*Crataegus monogyna*) or possibly sloe / buckthorn (*Prunus spinosa*).

Very few charred plant remains were present and no positive identifications of chaff were made. A few broken fragments of possible charred cereal grain were present, but no well-preserved cereal caryopses were present in the scanned portion of the assessed samples. In this respect this is keeping with the evaluation of the charred remains from the evaluation of this area (Wessex Archaeology 2005, 7-8) and that at nearby Crookhorn, Waterlooille (Murphy 1989). Burnt flint was present in a number of residues (not recorded).

#### **8.3.4. Significance**

The samples analysed represents a range of feature and deposit types over the whole excavated area, and provides a representative range of the presence and preservation of charred plant remains and charcoal. The charred plant and charcoal assemblage is unremarkable. The lack of charred cereal and chaff remains from these samples is consistent with the evaluation (Wessex Archaeology 2005), and suggests the absence of typical domestic activity within the vicinity of the large excavated areas. The wood charcoal comprised mainly small heartwood fragments, but the larger assemblages (e.g. samples from pits 162 and 476, and ditch 632 and features 684 and 891) also included round wood and twiggy fragments. The larger charcoal assemblages are untypical of domestic hearths and the large presence of a wide variety of material (heartwood, brand/roundwood and twiggy and thorn elements) suggest the burning of material from the local open scrub in ditched wetter unkempt areas, or from hedges. The charcoal is, therefore, likely to be local and reflect the nature of the local woody environments, and perhaps provides evidence of management such as coppicing, pollarding, and hedge laying.

The environmental evidence does not indicate residential settlement and normal domestic food processing in the vicinity, nor does it suggest any 'industrial' activity (kilns etc). The samples seem to represent small-scale specific burning episodes possibly related to management, resource acquisition or farming in the landscape.

#### **8.3.5. Molluscs**

No other palaeo-environmental remains (i.e. bone, snails etc) were present in the sieved samples. Freshwater shells were recorded in one feature from the evaluation (Wessex Archaeology 2005, table 2), but no shells were observed in the 62 sample elements examined here. An examination of the present environments on the site revealed that specimens of the amphibious freshwater species *Anisus leucostoma* were common in the damper and wetter areas of the site today, and less common was *Lynnaea truncatula*; also amphibious. No terrestrial species were noted. The specimen(s) recorded by Wessex Archaeology in the evaluation are therefore almost certainly intrusive modern shell, and not a true part of the palaeo-environmental record.

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Phase	Type	Feature	context	sample	Sample vol (L)	Flot vol (ml)	F/R	grain	Weed seeds/ chaff	Flot charcoal > 2/4mm <	Residue charcoal >2/4mm	notes	Roots (ml)	
00	Root hole	865	866	211	10	200	FR	-	-	2	-	8	Mainly soil	10
02	Pit	891	893	201	40	75	FR	?	?+	++	+++	+	Charred wood + twig	5
02	Natural + burnt flint	408	292	53	10	-	R	-	-	-	-	3		-
02	Feature with red flints	402	403	52	10	20	FR	-	-	+	1	-		20
02	Natural + burnt flint	302	303	49	10	-	R	-	-	-	-	10		-
02	Natural + burnt flint	296	400	47	0.5	50	FR	-	-	+	3	4		50
02	Pit	482	483	112	40	300	FR	-	-	-	+	2		300
03	Ditch	64	65	87	40	150	FR	-	-	-	+	3		150
03	Ditch	83	322	44	30	15	FR	-	-	+	5	2		15
03	Ditch	235	236	8	40	100	FR	-	-	-	2	5		100
03	Posthole	227	228	14	1	-	R	-	-	-	-	10		-
03	Pit	62/646	656	140	40	500	FR	?	?+	+++	+++	+++	wood + twig charcoal 50% charred 50% soil	0
03	Posthole	219	220	6	0.5	10	F	-	-	+	6	-		1
03	Posthole	223	281	5	1.5	2	F	-	-	2	-	-		2
03	Posthole	243	244	65	4	5	FR	-	-	-	-	2		5
03	Posthole	243	254	69	40	250	FR	-	-	4	+	1		250
04	Ditch	79	467	102	40	5	FR	-	-	-	+	5		0
04	Ditch	79	366	104	40	-	R	-	-	-	+	20		-
04	Ditch	611	612	125	40	500	FR	-	?+	++	++	+		495
04	Ditch	632	466	103	40	350	FR	?	?+	+++	+++	15+	Wood and twig charcoal, burnt bone in residue	0
04	Ditch	386	703	157	40	300	FR	-	-	-	+	3		0
04	Pit	162	163	40	30	100	FR	-	-	+	20	+++	Mainly charcoal	0

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04	Posthole	111	112	84	1	5	FR	-	-	-	+	7		5
04	Posthole	160	161	3	1.5	1	FR	-	-	-	2	11		5
04	Posthole	255	256	22	10	40	FR	-	-	-	1	-		40
05	Ditch	723	733	184	10	200	FR	-	-	+	+	10		10
05	Pit	771	772	208	40	150	FR	-	-	+	+	+		0
05	Well	790	815	207	40	150	FR	-	-	++	+	3		5
06	Ditch	535	588	200	40	75	FR	-	-	-	+	8		75
06	Ditch	908	911	206	40	100	FR	-	-	1	-	10		100
06	Pit	899	201	205	30	25	FR	-	-	2	4	+	Much burnt flint	25
07	Depression	684	704	164	40	10	FR	-	-	++	+++	7	All charred wood + twig	0
08	Pit	476	477	110	40	400	FR	-	-	-	+	6		400
09	Pit	397	399	169	1	25	FR	-	-	-	+	0	Cremated bone in residue	25
09	Posthole	423	424	186	1	150	FR	-	-	1	+	++		150
09	Spread	372	373	91	40	350	FR	-	-	13	+	++	Mainly heartwood some twig	350

ELEMENTS ASSESSED: F = Flot; R= Residue ASSESSMENT QTY + = 10+; ++ = 25+; +++ = 40+

Table 2. Charred plant and charcoal assessment

## 8.4 The Flint

by M Garner

### 8.4.1. Worked Flint

A total of 103 worked flints weighing 2,874g was recovered (Table 1). In addition, two possible grain rubbers, 15 uncertain fragments, and 21 cobbles were collected. All of these flints came from normal excavated recovery. Only one worked flint was recovered from Trench C.

<b>Trenches</b>	<b>A</b>	<b>B</b>	<b>C</b>	<b>ALL</b>
Microlith	3	0	0	3
Scraper	3	1	0	4
Other flake tool	3	1	0	4
<b>Total tools</b>	<b>9</b>	<b>2</b>	<b>0</b>	<b>11</b>
Cores	10	1	0	11
Flakes	58	22	1	81
<b>All knapped flint</b>	<b>77</b>	<b>25</b>	<b>1</b>	<b>103</b>
Grain rubber?	2	0	0	2
Uncertain fragments	12	3	0	15
Cobbles	21	0	0	21

Table 1 Quantities of worked flint by trench

Two pebbles from Roman features 99 and 388 were polished on at least one face and have been interpreted as possible grain rubbers for use on saddle querns. Item 71 weighed 297g and item 72 weighed 401g and had broken after use.

The uncertain fragments included bashed pebbles and pieces with a few possible flake scars.

Fill 683 of Roman pit 675 contained 21 pieces of flint rubble weighing 11.6kg. They comprised 13 reddened fragments, 7 unburnt, and 1 shattered.

A total of eleven tools comprised 3 microliths, 4 scrapers, and 4 other flake tools.

All three microliths (items 56, 75, and 87) were obliquely blunted blades and came from Romano-British ditches in Trench A. Item 87 is uncertain but the others probably belong to Clark Group A (Clark 1934). These forms occurred throughout the Mesolithic period.

Four scrapers were recovered from Roman and later contexts in Trenches A and B. They comprised 2 side-and-end scrapers, 1 end scraper, and 1 uncertain damaged scraper. The scrapers are not particularly diagnostic but may be Neolithic.

Four possible tools were recovered from Roman and later contexts in Trenches A and B. They comprised 1 notched blade (item 58) of possible Mesolithic date and 3 flakes with retouch or use wear or both.



A total of eleven possible cores weighing 1,041g was recovered from Trenches A and B. Most of the possible cores were crude and possessed few flakes scars and several were burnt. A single platform, blade core was recovered from natural layer 3.

A total of 81 flakes and flake fragments weighing 1,690g was recovered from Roman and later contexts in Trenches A, B, and C (Table 2). They ranged in weight from less than 1g to 169g. Most of them (72%) came from Trench A. The complete flakes were classified as primary (cortical), secondary (partly cortical), and tertiary (non cortical). Similar numbers of secondary and tertiary flakes were present but few primary flakes were found. One flake had blade dimensions and four fragments probably were broken blades.

<b>Trenches</b>	<b>A</b>	<b>B</b>	<b>C</b>	<b>ALL</b>
Primary flake	4	0	0	4
Secondary flake	20	6	0	26
Tertiary flake	19	9	1	29
Uncertain flake	1	2	0	3
<b>Total flakes</b>	<b>44</b>	<b>17</b>	<b>1</b>	<b>62</b>
Proximal fragment	4	0	0	4
Medial fragment	1	0	0	1
Distal fragment	3	3	0	6
Other fragment	6	2	0	8
<b>Total fragments</b>	<b>14</b>	<b>5</b>	<b>0</b>	<b>19</b>
<b>TOTAL FLAKES &amp; FRAGMENTS</b>	<b>58</b>	<b>22</b>	<b>1</b>	<b>81</b>

Table 2 Quantities of flint flakes by trench

The raw material included nodules and water-worn pebbles/cobbles and the colour of the flint ranged from grey to brown with a few 'spotty' examples.

The worked flints were recovered from features, site layers, and unstratified contexts. Five of the flints were unstratified. The most productive features (with at least three worked flints) were Romano-British ditches 40, 79, 386, 388, and 394 in Trench A. Ditch 386 produced 1 core, 9 flakes, 1 microlith, and 3 flake tools. Site layers produced 43 flints – mainly from post-medieval layers including topsoil. Eight flints were recovered from Romano-British layers.

Most of the worked flints were residual in Roman and later contexts. The presence of primary flakes, secondary flakes, tertiary flakes, cores, and tools indicates that tool manufacture and use took place at the site but there is no evidence that these activities were contemporary. There are few diagnostic pieces and probably the flint assemblage represents a range of activities over a long period of time. The material includes Mesolithic microliths, possible Neolithic scrapers, and later prehistoric flints. Despite the limitations of the assemblage it is an important addition to the evidence for prehistoric activity in the area.

### 8.4.2. Burnt Flint

Burnt flints, often referred to as 'pot boilers', show evidence of repeated heating and cooling, and are thought to have been used in a form of prehistoric cookery, although other uses are possible. Burnt flint is not intrinsically datable.

A total of 25,694 burnt flints weighing 206,468g was recovered from the site (Table 3). This gives an average weight for a burnt flint of 8.04g. This relatively low average weight is explained by many of the flints (by number) coming from soil samples. The vast majority of burnt flints from Trenches B and C were recovered from samples and most came from just a few samples. The most productive context (by number) in each trench was as follows.

Samples from fill 228 of Romano-British post-hole 227 in Trench A contained 2,080 pieces weighing 212g with an average weight of 0.10g. Charcoal fragments were also present in the context. This is a large number of burnt flints for a post-hole 0.25m in diameter and 0.15m deep although they were very small pieces.

Samples from fill 901 of Romano-British pit 899 in Trench B contained 7,422 fragments weighing 3,294g with an average weight of 0.44g. This large pit contained only burnt flints and two loom-weight fragments and all finds were in the upper two fills.

Samples from fill 303 of feature 302, one of the natural hollows in Trench C that were filled with burnt flint contained 9,465 fragments weighing 3,793g with an average weight of 0.40g.

<b>Trenches</b>	<b>A</b>	<b>B</b>	<b>C</b>	<b>All</b>
Total number of fragments	7,771	8,303	9,620	25,694
Total weight (g)	171,030	30,334	5,104	206,468
Average weight (g)	22.01	3.65	0.53	8.04
Number of sample fragments	2,673	7,430	9,530	19,633

Table 3 Quantities of burnt flint by trench

The most productive features (by weight and in weight order) were as follows.

Romano-British ditch 79 in Trench A produced 1,724 fragments weighing 46,714g with an average weight of 27g. With the few sample flints disregarded the average weight rises to 28g.

Romano-British ditch 567 in Trench B produced 625 fragments weighing 20,643g with an average weight of 33g. None of these flints were from samples.

Romano-British ditch 83 in Trench A produced 198 fragments weighing 10,872g with an average weight of 55g. None of these flints were from samples.

Romano-British ditch 338 in Trench A produced 203 fragments weighing 10,673g with an average weight of 53g. None of these flints were from samples.

Romano-British ditch 40 in Trench A produced 204 fragments weighing 8,101g with an average weight of 40g. None of these flints were from samples.

Romano-British ditch 386 in Trench A produced 138 fragments weighing 6,524g with an average weight of 47g. With the few sample flints disregarded the average weight rises to 49g.

Romano-British ditch 54 in Trench A produced 272 fragments weighing 5,849g with an average weight of 22g. None of these flints were from samples.

Romano-British feature 684 in Trench A produced 261 fragments weighing 4,360g with an average weight of 17g. None of these flints were from samples.

The most productive feature in Trench C was natural feature 302 with 3,793g – see above. All of the features in Trench C with burnt flints probably were natural hollows into which burnt flint had been dumped.

Burnt flints were present in many features at the site but the greatest weights of burnt flint were in the largest features on the site (Romano-British ditches) indicating that scatters of burnt flint accumulated in open features across the area. Trench C produced little burnt flint but contained no Romano-British ditches. A prehistoric ditch and a Romano-British feature were the only other features with more than 4kg of burnt flint. Only one prehistoric feature had more than 2.2kg of burnt flint and very few burnt flints were recovered from post-Roman contexts. The evidence indicates that the flints were heated in the prehistoric and Roman periods.

Flint rubble including ‘reddened’ pieces was recorded from Roman pit 675 but they are not included in this report.

Generally the average weight of a burnt flint was less than 1g from samples and greater than 16g from normal excavated recovery. The average weight of burnt flints is often taken to indicate the intensity of activity and the number of times the flints were heated. The marked difference in average weight between certain assemblages at the current site probably results from different methods of recovery rather than different activities or intensity of use.

## **8.5 The Pottery**

by Dr AD Russel

### **8.5.1. Introduction and methodology**

The excavations at Waterlooville produced 19,551 sherds weighing 222,888g. The sherds were often soft and abraded and in some cases had to be left to dry before being carefully washed, dried, marked with their context and divided into fabrics. The Samian had been badly affected by the ground water and slipped surfaces had mostly dissolved. The local wares were defined as 17 fabrics, of which only three, Rowland’s Castle Ware, Rowland’s Castle Flint-Tempered and Wiggonholt Ware have known provenances. Four English non-local fabrics were present: Alice Holt, Dorset Black Burnished, Nene Valley and New Forest. Seven major imported types were present: Spanish Amphora, Samian, North Gaulish flagons, North Gaulish Mortaria, Gauloise amphora, Terra Nigra and Central Gaulish Black Samian. The sherds were assigned a fabric code and entered into an Access database. Full details of context, sherd type, and form by context and phase will be deposited with the site archive.

A brief discussion of the wares is given here.

### **8.5.2. Continental Wares**

#### *North Gaulish (Pas-de-Calais) flagons (Fabric NOGWH1 and 2)*

194 fragments of North Gaulish flagons in sandy fabric NOGWH1 (Tomber and Dore 1998) were recovered, weighing 825g. One had an out-turned vertically flattened rim, a second had a pulley wheel rim and twin deeply grooved handles. Three sherds, weighing 58g, of a hard inclusion free fabric, NOGWH2, were recovered, including an out-turned vertically flattened rim. Out-turned rim flagons in a 'hard, white and brittle fabric' were found at Fishbourne in pre-75AD deposits, and NOGWH flagons are generally considered to be a typical vessel of the second half of the 1<sup>st</sup> century AD.

#### *Samian (Fabric TS)*

A total of 155 sherds of Samian weighing 1356g were recovered. In most cases the sherds had suffered from the fluctuating ground water and the sherds had dissolved away, in some cases to thin slips of ceramic only 1mm thick. Very few sherds retained the original gloss surface slip, but even badly dissolved sherds still retained identifiable rim and body forms.

Vessels were present from South and Central Gaulish kilns with a small amount of East Gaulish products.

117 sherds weighing 998g represented the South Gaulish La Graufesenque products, dated mid-1st to late 1st century. The following forms were present: plates 15/17, 18, and 18R; dishes 18/31, 18/31R and 36; cups 27 and 33, decorated vessels 30 and 37. Their rims totalled 1.6 EVEs. The Central Gaulish vessels, probably to be dated to the first half of the 2<sup>nd</sup> century, were represented by 34 sherds weighing 339g, from form 18/31 dishes and a form 33 cup. One sherd was in the rare micaceous Lezoux fabric which marked the commencement of the Central Gaulish industry and dates to 90-120AD. Their rims totalled 0.81 EVEs. The East Gaulish vessels, of the late 2<sup>nd</sup> and 3<sup>rd</sup> centuries, were represented by 4 sherds weighing 19g; only form 18/31 was present. Their rims totalled 0.1 EVEs.

#### *Spanish Amphora (Fabric BATAM)*

A total of 119 sherds of amphora weighing 2800g were recovered. The sherds were heavily dissolved and stained by groundwater. They were from Baetica, the olive oil producing area of southern Spain. Dressel 20 olive oil amphorae are the most common amphora type in Roman Britain and are dated 0-250AD (Tyers 1996, 87-8). All the sherds were recovered from Trench A, either from the few features inside the sub-circular enclosure or in the fills of the ditches that made up the sub-circular enclosure.

Table 1: Quantities of pottery present

Origin	Fabric	No of sherds	Wt g
Imported			
	North Gaulish flagons	194	825
	Samian	155	1356
	Spanish Amphora	119	2800
	North Gaulish Mortaria	2	325
	Terra Nigra	2	14
	Central Gaulish Black Samian	2	12
	Gauloise Amphora	1	18
English non-local			
	Alice Holt	9	80
	Dorset Black Burnished	4	50
	Nene Valley	4	18
	New Forest	1	2
English local Sussex/Hampshire			
	Rowland's Castle	9,132	118,668
	Quartz 1	6,845	51,841
	Southern Atrebatian Overlap Ware	951	7,795
	Flint-tempered coarse sandy FCS	536	10,997
	Flint-tempered silty clay FS	451	6,431
	Rowland's Castle flint-tempered	353	10,387
	Flint-tempered fine sandy FFS	300	8,473
	Oxidised flagons	186	744
	Quartz 4	117	864
	Chalk-tempered	87	554
	Whiteware Flagon	38	204
	Terra Nigra copies	28	99
	Wiggonholt	10	213
	Gallo-Belgic copies	8	60
	Grog	8	37
	Quartz 2	5	16
	Quartz 3	3	5
Total		19,551	222,888

The majority of the sherds were from the lower part of a single vessel probably of Dressel 20 form which had been broken into small pieces and packed into pit 282 along with a pair of greensand quern stones, also broken into small pieces. The other sherds recovered were in a very similar fabric and could have been from the same vessel.

*North Gaulish Mortaria (Fabric NOGWH 4)*

These vessels were imported in the second half of the first century. Three sherds weighing 325g, were recovered. The fabric was soft and powdery with flint trituration grits that suggests a North Gaulish source but the rim forms match better with the Rhone Valley kilns (Tyers 1996, 125-7, and 130-131). A spout was recovered from spread 353, a body sherd was recovered from spread 844, and a large rim sherd was found in well 771.

*Terra Nigra (Fabric TN)*

Two joining sherds of Terra Nigra from northeast Gaul were recovered, weighing 14g, one from context 774, the other from context 847. They came from a bowl of CAM form 16, 0.06 EVEs, conventionally dated to AD 40-85 (Tyers 1996, 164).

*Central Gaulish Black Samian (Fabric CGBS)*

Two sherds of Central Gaulish Black Samian ware weighing 12g were recovered. Ditch 724 produced a body sherd with applied decoration in the form of a human head. Similar wares in the style of the potter Libertus are known from mid-2<sup>nd</sup> century deposits at Fishbourne Roman palace (Dannell in Cunliffe 1971, 293). Part of a base was recovered from ditch 388.

*Gauloise Amphora (Fabric GALAM)*

A single sherd from ditch 79 was an abraded body sherd, weighing 18g, from a wine amphora of Gauloise 4, the most common type of Gauloise amphora found in Britain. The Gauloise 4 amphora travelled widely across Europe and is found in Britain from the late first century until the mid-3<sup>rd</sup> century (Tyers 1996, 95).

### **8.5.3. English Non-local wares**

*Alice Holt (Fabric AH)*

Nine sherds weighing 80g were found. Four sherds in Alice Holt coarse sandy ware, all from Surrey bowls were recovered, one from each from spreads 360 and 361, and two from fill 607 in ditch 184/632, the west ditch of the sub-circular enclosure. The fabric is long lived, from late 1<sup>st</sup> century to c.AD 200 (Lynne and Jeffries 1979), but these are probably first century products. Four sherds of a fine sandy Alice Holt jar with burnished lines on the neck were recovered from fill 659, and a shouldered body sherd was recovered from fill 603, both from ditch 79, the north ditch of the sub-circular enclosure. Both are probably late first century AD.

*New Forest Ware (Fabric AH)*

A single sherd of New Forest beaker, weighing 2g, with an iron-rich slip and fired to a near stoneware temperature was recovered from layer 385, a spread of pottery and burnt flint in the northeast part of Trench A. This was the only piece of New Forest ware recovered from the site, and the latest piece of pottery to be recovered.

*Black Burnished Ware (Fabric BB1)*

Four sherds of Dorset BB1 were recovered, weighing 50g. They comprised a flared rim from a cooking pot from context 712, 0.04 EVEs, a rim from a flat-rimmed bowl, 0.08 EVEs from spread 349, and a sherd from a flat-rimmed bowl from spread 360. BB1 is not a common find in southern England until c.120AD (Tyers 1996, 182-5) and both these examples are probably mid-2nd century.

*Nene Valley Colour Coat (Fabric NVCC)*

Four sherds were recovered, weighing 18g. Three came from the ditches of the sub-rectangular enclosure including a cornice rim from a beaker, 0.04 EVEs, from fill 439, and one sherd of a rouletted beaker from fill 738, both in a hard well-fired fabric. A beaker base from spread 362 was in a soft white fabric. Nene Valley products are dated from the mid-2<sup>nd</sup> century to the late 4<sup>th</sup> century.

**8.5.4. Local Wares***Rowland's Castle Ware (Fabric RC)*

This distinctive wheel-thrown and kiln-fired fabric made up the majority of the assemblage, 9,132 sherds weighing 118,668g. The clay was tempered with well-sorted sub-rounded quartz grains up to 0.3mm in size, with scattered small black patches of reduced haematite. The rim sherds were classified according to Dicks' recent work on the pottery recovered from the Rowland's Castle kilns (Dicks 2009, and quantities were present as follows:

Form Type	Form	No of sherds.
A	Dishes	49
B	Bowls	38
C	Jugs	6
D	Jars	963
E	Lids	5
F	Beakers	7

The Rowland's Castle potters manufactured a full range of wares, but the occupiers of the site seem to have had little use for beakers, lids or jugs, with the assemblage dominated by jars for storage and cooking, followed by dishes and bowls for preparing and serving food.

*Quartz 1 (Fabric Q1)*

This well sorted, quartz-rich, handmade, and low fired fabric was represented by 6,845 sherds of pottery weighing 51,841g. The fabric ranges from Atrebatian types (bead rim jars 12cm to 18cm in diameter, pedestal based jars, and carinated platters) to the more Romanised forms (everted rim jars and lids) seen in the wheel-thrown and well-fired products of the Rowland's Castle kilns (Dicks 2009). It is likely that this fabric represents the local handmade and clamp-fired tradition, present pre-Conquest and continuing after it, which was developed by the Rowland's Castle potters into an industry revolutionised by the use of wheels and kilns. This fabric was present in large quantities throughout the occupation of the site so its makers do not seem to have been put out of business by the Rowland's Castle industry.

*Late Iron Age Flint-tempered (Fabrics FCS, FFS, FS)*

This ware is present in three fabrics forming a distinctive local ware: Flint-with-coarse-sand (Fabric FCS), Flint-with-fine-sand (Fabric FFS), and Flint-with-no-sand (Fabric FS). No vessels or fabrics in the Middle Iron Age flint-tempered 'saucepan pot' tradition were recovered, so this ware certainly dates to after 50BC, and probably belongs in the 1<sup>st</sup> century AD.

The Flint-with-coarse sand fabric used the local London clay with added crushed calcined flint fragments up to 5mm in size, mixed with coarse quartz sand. A total of 537 sherds weighing 10,997g were recovered, with just over half by weight coming from ditch 388. The pots made in this fabric appear to be mostly bead-rim storage jars with flat bases. Most rim sherds were from large vessels, ranging from 32cm to 64cm in diameter, although most measurable sherds were grouped around 45cm dia. One vessel, in ditch 388, had a more Romanised necked rim. No decorated examples were found.

The Flint-with-fine-sand fabric also used the local London clay with added crushed calcined flint fragments up to 5mm in size, but the added quartz was finer, and a different type of vessel was produced. A total of 300 sherds weighing 8,473g were recovered. The vessels made in this fabric appear to be mostly large storage jars with necked or upright rims, although one faceted bead rim was recovered from ditch 611. All the bases were flat, with simple basal angles, but two examples were present where the base had been formed into a flattened pad, reminiscent of 1<sup>st</sup> century flagons. Most rim sherds were from medium to large vessels, ranging from 20cm to 48cm in diameter, although most measurable sherds were grouped around 35cm dia. The vessels were thus appreciably smaller than those produced in the Flint-with-coarse sand fabric. No decorated examples were found.

The Flint-with-no-sand fabric used a fine silty clay with added crushed calcined flint fragments up to 2mm in size, and no added quartz sand. A total of 451 sherds weighing 6431g were recovered. The pots made in this fabric were a range of bead rim jars from small examples with rim diameters of 16cm, up to large storage jars with rim diameters of 40cm. Seven of the jars had simple bead rims, eleven had upright bead rims and one was a faceted bead rim. One necked rim was present. Decoration was present but rare with one body sherd having two burnished lines and another having two incised lines.

*Southern Atrebatian Overlap Ware (Fabric SAW)*

This type of pottery has been recognised on a number of Sussex sites. It seems to span the period 20-70AD, and is a handmade Late Iron Age type that continues to be made into the second half of the 1st century AD when it is replaced by wheel-made vessels, in similar fabrics (Lynne 2006). The excavation yielded 951 sherds weighing 7,795g. The vessels were all handmade in a well-sorted sandy fabric, and most vessels were finely made with thin walls and were well fired in a heavily reducing atmosphere. The forms present are mostly small jars/bowls, 12cm to 20cm rim diameter, some with pronounced shoulders. Rim forms included bead rims (21 examples), simple everted rims (8 examples) and a more Romanised form with a neck and out-turned bead (7 examples). Twenty-six bases were present, of which 21 were flat and five were of pedestal form. The two most complete vessels were small globular jars with upright rims from context 387, which appeared to have been buried whole. There was one decorated vessel, probably a girth beaker, that had two incised horizontal lines at the maximum girth and had been stabbed with a small



comb above the girth, in imitation of Gallo-Belgic form Cam 91. This was found in the primary fill of the sub-circular enclosure ditch. An abraded rim may have come from a dish or platter.

*Rowland Castle Flint tempered (Fabric RCF)*

A subset of the Rowland's Castle industry, the flint-tempered fabric was present as a total of 353 sherds weighing 10,387g. The fabric was a fine clay with well-sorted sub-rounded quartz grains up to 0.3mm in size and rare to common crushed calcified flint 1mm to 3mm in size. The forms present were mostly large thick-walled jars with rim diameters ranging from 22cm to 36cm. All the vessels appeared to have been handmade, probably on a turntable as the rims were well finished, often with finely burnished areas on the rim and neck. Three faceted-bead rims were present but most of the rim forms were simple everted or out-turned rims of Dicks' forms D2 (five examples) and D5 (11 examples) from the Rowland Castle kilns (Dicks 2009, 60-62). The bead rims are unlikely to be later than 120AD, but the Rowland's Castle potters seem to have been very conservative in their forms and the other types could be as late as the late 3<sup>rd</sup> century.

*Oxidised flagons (Fabric FOX)*

186 sherds in oxidised fabrics were recovered, weighing 744g. They are probably local copies of the North Gaulish flagons imported during the mid to late 1<sup>st</sup> century. The few diagnostic sherds come from red or cream coloured vessels with globular bodies, flat bases, ring or pulley wheel rims, and short strap handles. Thirteen sherds came from vessels in red fabrics with cream slips imitating whiteware flagons. The Fishbourne Palace site contained similar vessels from pre-AD 75 deposits.

*Quartz 4 (Fabric Q4)*

117 sherds weighing 864g were recovered. The fabric was a well-made, reduced sandy fabric that had been used to make the distinctive carinated 'Hampshire bowl', small beakers, and bead rim jars. A mid-to-late 1<sup>st</sup> century or early 2<sup>nd</sup> century date is likely. The fabric occurred in the ditches of the sub-circular and the sub-rectangular enclosures.

*Late Iron Age chalk-tempered (Fabric V 1-3)*

87 sherds weighing 554g were in chalk-tempered fabrics marked by a vesicular fabric where the chalk has dissolved. Three fabrics were distinguished by the presence/absence of sand and flint but all were made using a clay with abundant small, rounded chalk inclusions, and it is likely that they represent a continuum from sand-chalk-flint-gritted vessels (fabric V1, 71 sherds) through sand-and-chalk vessels (V2, 10 sherds) to those with no sand or flint temper, just chalk (V3, four sherds).

The rounded nature of the chalk inclusions suggests a riverine environment where the parent chalk has been re-worked and redeposited. The high proportion of chalk in the fabric suggests a source close to the chalk; the ridge of Portsdown hill lies some 4km to the south, the chalk downs lie a similar distance to the north. Similar fabrics have been found at Wickham (Helen Rees pers.comm.).

Only one diagnostic sherd is present, a necked rim from a globular jar of 16cm diameter. A sherd from context 842 had two incised lines.

*Whiteware Flagons (Fabric FWW)*

38 sherds of whiteware flagons weighing 204g were recovered. The fabrics ranged from smooth with red streaks to sandy, mostly the latter. Two pulley-wheel rims and a ring neck rim were present; both forms have been found at Fishbourne in pre-75AD deposits, and they were present into the late 2<sup>nd</sup> century.

*Terra Nigra copies (Fabric TNCOPY)*

28 Sherds weighing 99g were recovered. These seem to be well-made, locally produced wares imitating first century continental forms, including a CAM 1 carinated bowl and a CAM 16 platter. Similar vessels have been found at Fishbourne in the pre-75AD levels.

*Wiggonholt (Fabric WIGG)*

Ten sherds of a Wiggonholt Mortaria weighing 213g were recovered from context 436 in ditch 435. The vessel was 26cm in diameter (0.25 EVE) and was heavily abraded but a few trituration grits survived on the flanged rim. The Wiggonholt kilns produced vessels from the first to fourth centuries AD (Evans 1974). Other Wiggonholt sherds were present as a flanged bowl in context 781 and a flagon in context 436.

*Gallo-Belgic copy (Fabric GBCOPY)*

Eight sherds weighing 60g were recovered. The fabric was a smooth quartz-tempered fabric that had been used to make copies of continental Gallo-Belgic imports. Two sherds came from copies of CAM 16 forms of mid-late 1<sup>st</sup> century date.

*Grog (Fabric GROG)*

Grog-tempered wares in the Late Iron Age/early Roman tradition were recovered from four contexts, 185, 358, 387, and 439. This was a total of eight sherds weighing 37g. All were body sherds.

*Quartz 2 (Fabric Q2)*

Five sherds weighing 16g were recovered. The fabric was an undistinctive, quartz tempered fabric, and no forms were recognisable.

*Quartz 3 (Fabric Q3)*

Three sherds of an oxidised red soft fabric weighing 5g were recovered. No forms were recognisable

### **8.5.5. Discussion**

The pottery from the site provides useful evidence for dating the different phases and for throwing some light on the activities that took place. The sequence of fabrics over time fits with the well-established typologies established in west Sussex to the east of the site, rather than with the limited assemblages excavated locally, although the contemporary excavations to the south at Plant Farm have produced a similar assemblage (Wessex Archaeology 2009).

The Late Iron Age flint-tempered, chalk-tempered and quartz-tempered wares do not include examples of the Middle Iron Age flint-tempered 'saucepan pot' tradition, suggesting occupation did not start before 50BC, and probably began shortly before the Roman conquest. The forms range from Late Iron age types such as bead rim jars, pedestal base jars, and carinated platters to the more Romanised forms (everted rim jars and lids), suggesting this handmade tradition continued into the Roman period,

gradually adopting new influences. Very similar fabrics and forms have been found to the south at Plant Farm (Wessex Archaeology 2009, 30).

Further work on a Late Iron Age/early Roman site with a better stratified sequence of pottery producing features will be needed before these wares are fully understood (Manley 2008, *passim*), but the flint-tempered wares are probably the genesis of the Rowland's Castle flint-tempered ware, and the Quartz 1 fabric probably becomes the sandy Rowland's Castle Ware.

The other major early fabric is the Southern Atrebatian Overlap Ware, a Sussex-based tradition that only survives until c50AD (Lynne 2006). This appears not to have been identified at Plant Farm (Wessex Archaeology 2009, 29), but may have been included there amongst the 'sandy' wares. The presence of this type suggests closer links to the east than to the west.

The Roman period is marked by the presence of imports, or local copies of imports. The finding of North Gaulish flagons, Samian, Spanish oil jars, and mortaria is to be expected on a 1<sup>st</sup>-2<sup>nd</sup> century site in this area, but the low quantities of such wares suggests the people who lived on the site either had no need for, or lacked the resources to acquire such Romanised wares/vessels. Samian wares made up 0.79% of the pottery assemblage. Manley has written of this period that "elite members of communities in southern Britain were tasting extraordinary foods and drinks, and possessed the appropriate vessels with which to consume them". It appears that the inhabitants of this site must have been at the bottom of the social pyramid (Manley 2011, 120). The inhabitants of the Plant Farm site to the south seem to have been of a similar status; Samian formed 0.37% of the assemblage there (Wessex Archaeology, 29).

The largest component of the pottery assemblage (48.5%) is formed by products of the Rowlands Castle kilns, either in a coarse flint-tempered fabric that seems to be used for large storage jars, or in the classic 'grey-ware' quartz-tempered fabric used for dishes bowls, jugs, jars lids and beakers. The Rowlands Castle kilns were only 6.5km distant, and must have provided all the pottery that the inhabitants needed. At the Plant Farm site the equivalent fabrics comprised 42.6%. Fishbourne Roman Palace also drew on the Rowlands Castle kilns for much of the pottery used there, but the Fishbourne storage jars all lack the internal thumbing which is present on most of the vessels from Old Park Farm, and was also found at Plant Farm (Wessex Archaeology 2009, 31) suggesting different kilns within the Rowlands Castle industry supplied the two sites.

The latest diagnostic vessels to reach the site were Dorset Black Burnished ware and Nene Valley ware, both probably to be dated to the mid- 2<sup>nd</sup> century. They comprised 0.04% of the assemblage suggesting the site did not remain occupied much past that date. At Plant Farm Black Burnished ware was present in larger quantities (0.32%), suggesting that settlement was longer lived (Wessex Archaeology 2009, 31).

## 8.6 The Stone

by Dr AD Russel with assistance from Prof DPS Peacock

The site produced 461 fragments of stone weighing 94.176kg. The stone was washed and marked and identified using the Southampton Archaeology type series. Professor DPS Peacock of Southampton University assisted with the identifications.

The stone could be divided into five categories as follows:

Type	No of fragments	Wt in gram
Querns	414	90576
Whetstones	13	1131
Fragments	32	2441
Palette	2	28
	461	94176

### 8.6.1. The Querns

Of the 414 fragments of quern weighing 90.57kg, all but three had been manufactured from Greensand.

58 fragments weighing 34.9kg (38.5% by weight) are in Lodsworth Greensand, 353 fragments weighing 54.6kg (60.3%) are in other greensands and three fragments weighing 1.1kg (1.2%) are from unprovenanced sandstones/gritstones. Lodsworth Greensand has a distinctive lithology and has been sourced to a West Sussex quarry that was a major supplier of saddle and rotary querns in the Iron Age and Roman periods (Peacock 1987). The other greensand querns did not have the distinctive root burrows of the Lodsworth Bed, but probably were quarried in the same area. Lodsworth querns have been found at sites up to 50 miles distance from the quarry; so Waterlooville at only 20 miles away was relatively local.

The querns were very fragmented but enough pieces retained some distinctive traits that showed that three types were present, the 'saddle' quern, the 'Sussex' quern and the Late Iron Age/Roman flat quern.

#### *Saddle querns*

A rubbing stone a greensand saddle quern was recovered from context 603. Saddle querns are generally considered more typical of the Bronze Age or early Iron Age (Cunliffe and Poole 2000, 69), but this example has been made from a half of the lower stone of a Late Iron Age/Roman flat quern. It was complete, weighing 4825g, and was in Greensand. Fragments of rotary querns re-used as saddle querns has been reported on other Roman sites to the east (Rudling and Gilkes 2000, 24). Two flint rubbers were also recovered from the site (see section 7.3.5).

#### *Sussex type querns*

Curwen defined the Sussex type of quern as beehive in shape, with a hopper in the upper stone, and a slot on the upper surface of the upper stone that took the handle (Curwen 1937). More recent work has suggested they are predominantly Middle and Late Iron Age in date (Fasham 1985, 76-80; Qualmann, Rees, Scobie and Whinney 2004, 65-6). Four examples were recovered from the site. Three were in Lodsworth Greensand, from contexts 387, 756, and 834, and one was in Greensand from context

768. If the suggested Iron Age date is correct then they all were residual, coming from contexts that contained Roman pottery.

*Late Iron Age/Roman flat querns*

Curwen defined his early Romano-British quern as having a 'flat horizontal top, a perforation that is at first oval and later rectangular, and a grinding surface that sloped at not more than 15 degrees' (1937, 144). The majority of the Waterlooville querns fall into this class being wide, flat querns 360mm to 430mm in diameter, each consisting of a lower stone with central spindle socket, (four examples) and an upper stone with a slot for a wooden handle, although only one handle slot was present. Five fragments bore the edge of the hopper hole in the upper stone; all might have been oval or circular. Peacock's extensive survey of querns in Southern England has further refined the dating (Peacock 1987, 71). This type is now recognised as Late Iron Age when the spindle holes are sockets, and continued to be made into the Roman period, when the spindle holes were drilled completely through the lower stone. The distinctive handle slot was no longer used after 150 AD (Peacock 1987, 69).

One complete lower stone is more definitely Roman. This is 430mm in diameter, thus slightly larger than the Late Iron Age/Roman querns and has a spindle hole that was drilled completely through the stone. Underneath the stone a rectangular area of stone some 110mm by 160mm has been recessed some 18mm deep. A number of upper stones with rectangular recesses are known, dated to the mid-2<sup>nd</sup> century (Peacock 1987, 69); but a recess beneath the lower stone is very unusual (David Peacock pers. comm.) It may have assisted in holding the spindle and possibly centering the upper stone.

One fragment from a very large, roughly made, upper stone had enough outer rim present for the diameter to be calculated at some 840mm. A stone this size would have been difficult to turn by hand, so it may have been a millstone. Similar large stones are known from Fishbourne Roman Palace (Peacock 1987, 66) and Winchester (Shaffrey 2010) where Roman mills would be a possibility but it would be an unlikely piece of apparatus to find at Waterlooville.

Tool marks could be seen on many of the querns; a chisel with a 20mm or 25mm wide blade appears to have been the tool used. In some instances the chisel had been applied roughly with marks set 30mm apart, in other instances the tooling was closely set and side by side, often in small groups at a right angle to each other, in herringbone fashion.

Of the non-Lodsworth stones 15 fragments (10.0kg) were from lower stones and 35 fragments (17.0kg) were from upper stones. Of the Lodsworth stones three (15.4kg) were from lower stones and 33 (16.3kg) were from upper stones. Most groups of published querns have a preponderance of upper stones. The weight of an upper stone, based on the three-quarters complete example from context 332 was at least 11kg; the weight of a lower stone based on the half-complete example from context 748 was also at least 11kg.

Some of the querns at Waterlooville were used until they wore out, some were reduced to 25mm at the rim, others were up to 93mm thick when broken. Once the querns were of no use for producing flour some of the remnants were used for other grinding purposes, others, to judge by heat marks, were used as hearth stones. Examples of re-use include:

- A fragment of worn lower stone in greensand with central spindle hole from context 361. Originally from a quern of 350mm diameter, the stone was then re-used for polishing or grinding, then turned over and the lower face of the stone was used as a mini-saddle quern creating a wide and long groove up to 27mm deep. The stone was then broken again and the edge of the rim was used for grinding/rubbing, creating a smooth facet.
- A quern stone in Greensand some 400mm in diameter from context 306 turned into a an oval rubbing stone, some 307mm by 203mm and a maximum of 66mm thick. After use as a rubbing stone it was then recycled by pecking a shallow oval hole 75mm by 85mm and 22mm deep into the rubbed surface, which was then subject to some wear, perhaps as a small mortaria.
- A lower stone in Lodsworth Greensand from context 748 which was turned into a mortaria by expanding the spindle hole into a bowl-shaped hollow 120mm in diameter and 50mm deep. The deep hollow weakened the stone and it later broke in half.

#### *Other querns*

Context 16 produced a fragment of gritstone that appeared to have been used as a rubber, possibly on a saddle quern.

Context 380 produced a fragment of a quern stone in a desert sandstone, probably from a Tertiary deposit.

Context 635 produced a fragment of a quern stone in Old Red Sandstone, probably from the Forest of Dean or the Bristol Area.

#### Partial catalogue of Querns

Context 332. Weight 8240g. 75% of a well-worn upper stone in Lodsworth greensand. 408mm dia, with central hole 122mm dia. Rectangular channel at least 49mm wide and 27mm deep cut in upper surface for a handle that spanned from outer edge to inner hole. Outer edge worn down to 78mm thick. Worked with a 20mm chisel.

Context 342. Weight 2030g. A fragment of greensand quern. Evidence of working using a 25mm chisel.

Context 349. Two fragments weighing 68g and 349g. Two fragments of greensand, one a lower stone with spindle hole, and other an upper stone with handle slot.

Context 351. Weight 3600g. Eight fragments, some joining, of a well-worn upper stone in greensand. 400mm dia, with central hole. Outer edge worn down to 43mm thick. Worked with a 20mm chisel.

Context 361. Weight 1297g. Fragment of worn lower stone in greensand with central spindle hole. Original diameter 350mm. The stone was then re-used for polishing or grinding, then turned over and the lower face of the stone was used as the lower stone of a saddle quern, creating a groove 27mm deep. The stone was then broken and the edge of the rim was used for grinding/rubbing, creating a smooth facet.

Context 387. Weight 1727g. Item 61. Fragment of a thick, conical, upper stone of 'Sussex' type in Lodsworth greensand. Diameter 320mm, outer edge 105mm thick.

Context 603. Weight 4825g. An oval rubbing stone in greensand, some 307mm by 203mm and a maximum of 66mm thick. Appears to have been made from a broken quern some 400mm in diameter. Punched tool marks and part of original edge of quern survive. After use as a rubbing stone it was then recycled by pecking a shallow oval hole 75mm by 85mm and 22mm deep into the rubbed surface, which was then subject to some wear.

Context 607. Weight 901g. Fragment from central part of a lower stone in Lodsworth greensand. Possible central hole for spindle. At thickest 79mm thick.

Context 670. Weight 650g. Fragment of a well-worn upper stone in Lodsworth greensand. 400mm dia, with central hole. Outer edge worn down to 24mm thick at thinnest. Worked with a 20mm chisel and a punch.

Context 714. Weight 5115g. Fragment of the central portion of a lower stone in a dense greensand. Maximum thickness 84mm. Conical hole 59mm deep and 28mm deep for spindle. After quern broke it was recycled as a saddle quern resulting in a groove 98mm wide, 178mm long and 25mm deep.

Context 635. Weight 317g. a fragment of a ?saddle quern/rubber in Old Red Sandstone from the Forest of Dean or the Bristol area. No rotary action visible

Context 568. Weight 466g. A rubbing stone 11 mm by 88mm in Lodsworth greensand. One side is worn completely flat.

### **8.6.2. The whetstones**

The thirteen fragments of probable whetstones, representing 10 whetstones, came from the site. One, a shattered fragment of mica-schist, a type of stone used for whetstones from the 11<sup>th</sup> century onwards, is probably medieval (Pritchard 1991, 155), giving a total of nine that are probably Late Iron Age/early Roman. These whetstones are in all hard sandstones or quartzites and eight were probably locally sourced as suitable stones such as sarsen and other erratics can be picked up from the Quaternary beach deposits around the Solent and Chichester areas (Cordiner 2006). One whetstone in glauconitic sandstone, recovered from the topsoil, is from further afield, being of Kentish ragstone. There was a sizeable industry in such ragstone whetstones in the Roman period as they are the most common type of hone in Roman London (Rhodes 1986, 240-1). The nearest source, the Sevenoaks area of Kent, is some 70 miles from Waterlooville. The ragstone whetstones were probably superior products and probably harder to obtain; and this example was cut down the centre to make two whetstones.

Context 2. Weight 34g. A secondary hone now consisting of two split fragments of micaceous sandstone, max length 51mm. The two main surfaces are well worn.

Context 15. Weight 118g. A secondary hone utilising a rectangular pebble of hard, grey, fine-grained sandstone 55mm wide and 15mm thick. A maximum length of 73mm survives. Both sides exhibit high polish.

Context 55. Weight 4g. A small fragment of Old Red Sandstone, probably utilised as a whetstone.

Context 113. Weight 21g. A thin, rectangular slab of fine-grained, slightly micaceous buff sandstone, possibly a purpose made hone. Although only 70mm long both edges are dished from use as a hone. The two larger flat surfaces are smooth but show no signs of use.

Context 204. Weight 208g. A primary hone consisting of a rectangular piece of fine-grained glauconitic sandstone, possibly from Kent. 23mm thick, 40mm wide, and 83mm long, but broken at both ends. Originally a larger whetstone, it has been scored along its length on both sides with a chisel and broken to make two whetstones. Three sides exhibit polish; the fourth has a broken hackly fracture and shows no further sign of use.

Context 324. Weight 398g. A rectangular piece of fine-grained micaceous sandstone, 28mm thick, 87mm wide, and 76mm long, but broken. Only the narrow edges have been used.

Context 342. Weight 60g. A rough fragment of mica-schist 79mm in length. No signs of use.

Context 412. Weight 130g. A fragment of sarsen utilised as a hone. All surfaces smooth, one is highly polished. Max length 61mm but broken.

Context 717. Weight 36g. A fragment of rounded pebble of quartzite. One surface smoothed. Max size 38mm but broken.

Context 821. Weight 122g. A secondary hone utilising an elongated pebble of hard, grey, fine-grained quartzite sandstone of triangular cross-section. The whole surface is smooth and there are a number of specific facets. 75mm long but broken.

### **8.6.3. The Palette**

Context 360 produced a slightly dished, thin palette of micaceous sandstone, some 58mm by 68mm. Both sides and the edge were ground down to a fine finish.

### **8.6.4. Fragments**

Thirty- two fragments of stone fragments weighing 2.4kg were recovered. They included chalk, ironstone, and sarsen and were probably naturally occurring.

### **8.6.5. Discussion**

The whetstones include rock types from Kent and further afield which were probably deliberately made but the majority are of types that could have been picked up locally rather than traded.

The quern stones include examples of 'saddle' querns, 'Sussex' querns and the Late Iron Age/Roman flat quern, suggesting quern were used throughout the period of occupation. It is probable that the site was occupied on a seasonal basis, perhaps during the summer months, so the inhabitants would have to have brought querns and grain (probably in the large Rowlands Castle storage jars) to the site on each visit.

The majority of the querns from the Old Park Farm site were brought to the site as ready-made querns to grind grain to produce flour. The stones were sourced either from Lodsworth or nearby, probably no more than a day's travel, but the distribution of greensand querns in the Late Iron Age/Roman period has lead Peacock to suggest that quarrying and transport of the querns was a specialised craft, so others may well have brought the querns to the settlement. The querns were mostly heavily used, and the re-working of the fragments into saddle querns or into mortaria is testimony to the ingenuity of the inhabitants, but also points to the lack of other implements to carry out those tasks, certainly ceramic mortaria seem to have been in short supply.

Quern fragments were found in 32 features. The feature with the greatest amount of quern fragments was pit 282, a feature only 770mm across and 110mm deep. It was packed with 245 fragments of quern stones weighing 18.4kg, possibly a pair of querns, together with 112 fragments forming the base of a Dressel 20 amphora weighing 2.6kg, plus other pottery sherds and burnt flints. The quern stones and the amphora showed signs of burning, possibly a fire was used to shatter both items, but there was no sign of burning *in-situ*. The feature looks to be more ritual than rubbish disposal.

Studies of querns in the West Sussex-East Hampshire area (Peacock 1987, 61–85; Seager Thomas 1999) suggest either that over many centuries people from different communities exploited a common resource at Lodsworth, or that quern producers worked there and supplied multiple communities with the products. In either case, the resources and the products can be seen as focal points for the mediation of social



relationships in the late prehistoric period and into the Roman period (Hamilton and Gregory 2000, 57-74).

It is probable that the site was occupied on a seasonal basis, perhaps during the summer months. The inhabitants would have to have brought querns and grain (probably in the large Rowlands Castle storage jars) to the site on each visit.

## **8.7 The Beads**

by R Broadley

The complete glass bead (Item 11) from topsoil clearance in the west half of Trench A is a complete thick annular blue glass bead with a loose horizontal wave trail in opaque white (Guido Group 5A, Guido 1978, 62). Beads of this type span a broad territory and were popular for many centuries, from as early as the Iron Age through to the 7<sup>th</sup> century AD (Guido 1999, 53). Therefore, it is impossible to date individual examples accurately by visual examination alone, and unfortunately in this case the bead was unstratified. However, a Roman date is supported by the fact that the bead is from a Roman site, and by the general observation that beads of this type dating to the Roman period usually feature waves that are loose and do not follow a regular pattern (Birley and Greene 2006, 38), as is the case here. Beads of this kind usually have an overall diameter of approximately 16-17mm, a perforation diameter of 5-6mm, and a thickness of approximately 10mm, and this bead fits that standard very closely. It is most likely that this bead was worn on a necklace.

The second bead (Item 8) is a fragment of a large faience melon bead, dating to between the late 1<sup>st</sup> and the early 3<sup>rd</sup> century AD. It was recovered from context 360, a spread of 1<sup>st</sup> to 2<sup>nd</sup> century material found at the base of the ploughsoil. Melon beads are amongst the most common bead form found on Roman sites in Britain and across much of the former Roman Empire. Their distinguishing feature is a convex profile with vertical or slightly diagonal grooves scored into the outer surface. The majority are made from faience, although much smaller examples are also found made from glass and even jet. Faience is a mixture of soda, lime and quartz similar to glass, which is shaped and then usually glazed, and originated in Egypt c. 2500 BC. Faience melon beads are found in a range of shades from blue to turquoise, and condition varies from those with most of the glaze surviving to those with none at all. In this case, the original turquoise colour is preserved in the vertical grooves on the exterior surface of the bead, and to a lesser extent inside the broken perforation. Faience melon beads vary in size, and when whole this bead would have been amongst the largest known at 25mm in diameter. As a point of comparison, a study of 72 faience melon beads from the Roman Fort at Vindolanda showed two common sizes, with the smaller ranging from 8-15mm in diameter, and the larger from 16-25mm (Birley and Greene 2006, 43). Guido provides an excellent summary of other notable comparative material in her seminal work on Romano-British glass beads (1978, 228-30).

It has been suggested that the larger melon beads are of a size and weight that would have been impractical if worn at the neck, and numerous alternative functions have been proposed. The most prevalent is the idea that they were used in the decoration of military horse harnesses, the inspiration for which seems to have been images of such horses in carved tombstone reliefs in Germany and Iberia (Birley and Greene 2006, 39), supported by the fact that unlike most bead types, these show a strong

association with military contexts. However, the latter point really only indicates a potential male and military sphere for the use of such beads, and they may have been employed in a variety of ways.

To summarise, it is likely that both of the beads from this site are Roman in date, with the melon bead dating more specifically to between AD 50 and 200. Melon beads are usually found in military contexts, while annular wave beads are known from a wide variety of sources.

### The catalogue

Item 11, context 2, ploughsoil

Complete wave bead, translucent deep blue glass decorated with a horizontal irregular opaque white wave trail. Guido Group 5A. Diameter 17.1mm; aperture diameter 5.2mm; Th 9.8mm. Weight 3.2g.

Item 8, context 360 finds spread:

Fragment of a faience melon bead. Originally coated in turquoise glaze, which survives in between raised segments. Approximately 25% of original bead (six segments) remain. L 18.7mm; W 16.2mm; Th 5.8mm. Estimated bead diameter 25mm; estimated aperture diameter 10mm. Weight 2.1g.

## **8.8 The Iron**

by Dr AD Russel

Ten iron objects were recovered from contexts of possible Roman date and many more were recovered from the ploughsoil. All of the iron work was x-rayed. Most of the ploughsoil finds were post-medieval to modern horseshoes, nails or fragments of machinery, and it is probable that most of the iron recovered from Roman contexts is intrusive. Potentially the earliest ironwork is a nail and an unidentifiable fragment recovered came from the upper fill of a pre-enclosure ditch, but this was just beneath the ploughsoil and is not a secure context. A fragment of a sickle and an unidentifiable fragment were recovered from the upper fills of the sub-circular enclosure ditch, but again these were just beneath the ploughsoil. The sub-rectangular enclosure ditches produced three nails and a possible blade fragment, and the closing dumps and spreads produced a nail and an iron strip. However this area of the site must have been subject to disturbance as a post-medieval horseshoe and horseshoe nails were found in the upper levels of ditch [440/709], so none of the ironwork can be securely dated to the Roman period.

## **8.9 The Glass**

by Dr AD Russel

Two fragments of a prismatic bottle in blueish glass were recovered from fill 381 of ditch 40, together with Samian of the second half of the first century. Square bottles are a very common Roman form from the last quarter of the 1<sup>st</sup> century onwards (Price and Cottam 1998, 194-9). This is the only fragment of Roman glass from the site, and for such a common material to be so under-represented suggests the inhabitants were low down the social scale.

## 9. Revisiting the Research agenda

The project aimed to provide further information to contribute to the research agenda as set out in the Solent-Thames Archaeological Research Framework (see above).

As far as Inheritance is concerned it is likely that the site began in the Late Iron Age so the Roman period of occupation did inherit the Iron Age settlement pattern, but the Late Iron Age did not inherit from earlier generations, and after perhaps three or four generations the Roman settlement ceased to exist. The settlement was not unenclosed so does not contribute to research into such settlement types.

As far as the Role of Material Culture is concerned there is little evidence for social change or for emergence of new identities and behaviours. The settlement remained in its Iron Age form during the first 100 years of the Roman period, and used few 'Roman' artifacts.

In terms of chronology and ranking of settlement forms the site provides a good example of a small rural settlement of the 1<sup>st</sup> and early 2<sup>nd</sup> century AD. It probably lay at the lower end of the social hierarchy. The very similar settlement at Plant Farm to the south would appear to be contemporary.

Environmental evidence was present but only in the form of charred material. It suggested the site was probably predominantly pastoral in its agricultural regime and was probably occupied on a seasonal basis. The settlement must therefore have been linked to another permanent settlement, perhaps that at Plant Farm or further afield. One would have expected more evidence of 'Romanisation' if the site had been linked into a Roman villa estate.

The low quantities of imports and fine wares and the high amounts of pottery that continues the Late Iron Age tradition suggests that the settlement lay at the bottom end of any ranking system. Old Park Farm and Plant Farm appear to be very similar rural settlements providing food for higher levels in society who enjoyed the benefits of Romanisation, such as those at nearby Fishbourne.

In terms of settlement the Old Park Farm site has provided useful baseline data to assist in understand the intra-settlement character and economic role of enclosure settlements in the later Iron Age and early Romano-British periods, and their relationships to *oppida*.

As far as material culture was concerned the only sizeable groups of artifacts were pottery and querns. Both groups show evidence of the changes brought about by Roman culture, with a change in pottery types and quern types during the life of the settlement. Whether the inhabitants would have considered themselves Romanised is a harder question to answer. They used the artifacts that were produced by local producers who had adopted Roman forms

## 10. Conclusions

The site was divided into the following phases:

Phase	Description	Definition	Date	Report Section
1	Natural			7.1
2	Mesolithic to Late Iron Age		7000BC-AD40	7.2
3	Romano-British 1	Pre-enclosure activity	AD40-AD75	7.3
4	Romano-British 2	Sub-circular enclosure	AD75-AD110	7.4
5	Romano-British 3	Sub-rectangular enclosure	AD75-150	7.5
6	Romano-British 4	Activity at north end of site	AD40-AD150	7.6
7	Romano-British 5	Abandonment	AD150	7.7
8	Romano-British 6	Waterhole	AD150+	7.8
9	Post-Roman		AD400-1750	7.9
10	Early modern	Agricultural improvements	AD1750-AD1900	7.10

These will be discussed below in phase order.

The earliest evidence of human activity is in Phase 2 which produced a small group of Mesolithic flints and a few flint scrapers of Neolithic date.

The main phase of occupation would seem to have begun in Phase 3. This has been dated to the Late Iron Age, certainly after 50BC, probably in the 1<sup>st</sup> century, and possibly just before the conquest. This phase involved long, but interrupted ditches that divided the landscape up, perhaps into fields for cattle ranching, as the ditch fills showed no signs of filling with ploughsoil. A small enclosure with an antenna-like entrance may have assisted in the corralling of animals, and deep holes in the fields were used to collect and store water. The ditch fills contained a mix of Late Iron Age and early Roman pottery. Sites of similar types have been found to the west at Dowd's Farm, Hedge End (Clelland 2012) but other examples exist in Hampshire such as that at Danebury Road, Hatch Warren, Basingstoke (Howell and Durden 2005).

The landscape was re-organised in Phase 4, with the digging of ditches to establish a sub-circular enclosure. The ditches were substantial, but the 10m wide opening into the enclosure suggests they were not for defence; instead animal husbandry is the most likely explanation. Hampshire has produced many examples of such enclosures, but they are more mostly known on the chalk such as at Owslebury (Collis 1970) or Winnall (Fasham 1985), and they usually contain evidence of permanent occupation.

The pottery dumped in the ditches shows the people using the site did have access to imported wares, demonstrating that the influence of the Roman conquest did reach into rural Hampshire, even if only at a low level. The presence of continental imports and copies of other continental wares suggests that a herding community could access the new pottery forms and fabrics, as has been seen at rural sites further east around the Chichester area where Samian, amphora and Gallo-Belgic platter copies start to

reach rural sites in the Claudian period (Manley 2008, 53). At Old Park Farm there is evidence that at least one Gauloise wine amphora reached the site, but the Dressel 20 olive oil jar buried in the centre of the sub-circular enclosure may not have arrived full of oil. Only the lower half of the vessel is present, and it may have been a cut down container that was being re-used by its new owners.

The enclosure system grew to the north in phase 6, probably in the first half of the 2<sup>nd</sup> century with the addition of further ditches in a sub-rectangular form; perhaps in response to the rapid filling of the sub-circular enclosure, and the area of occupation perhaps moved there within a generation, certainly the pottery shows very subtle changes in form and date. The area around the sub-rectangular enclosure showed evidence of larger amounts of rubbish being deposited, possibly reflecting greater wealth of the users, but fine ware pottery was few and far between, the vast majority of pottery being made locally and providing a basic assemblage of storage jars, cooking pots and bowls. Roman influence can be seen in the use of Samian pottery throughout the period of occupation but on a sherd count it forms 0.79% of the pottery assemblage.

The presence of large numbers of greensand querns, some heavily worn, shows that grain was turned into flour at the site, but the absence of crop detritus suggests the grain was taken to the site ready processed, and just required milling. The large numbers of heavy duty Rowlands Castle storage jars perhaps provided rodent proof storage. The other item of interest is the presence of loom weights, weaving of cloth was presumably being undertaken. The presence of sherds of briquetage salt containers suggests links, perhaps by simple exchange, with salt works on the coast.

The Old Park Farm site shows little evidence of permanent occupation and the geoarchaeological analysis of the ditch fills suggests they silted up with rapid erosion of the sides, with occasional dumps of burnt flint and pottery. Animal bone probably accompanied the other refuse, but the soil conditions mean that almost none survived. The few robust fragments include horse, cattle, sheep and pig, mostly their teeth. The ditches and other features were sampled for environmental remains and the absence of chaff, burnt grain or other foodstuffs suggests this was not a normal settlement with the full breadth of domestic activity being undertaken. Heated flints seem to have been an important part of the cooking process, and the charcoal that drifted into the ditches suggests that trimmings from scrub and small trees, possibly from maintenance of field hedges, was the main source of fuel.

No clear plans of structures could be seen among the few postholes and other features, and it is likely that the site was used seasonally, with the detritus of the camp being collected and dumped into the ditches at the end of the occupation. Given the sticky nature of the subsoil, a fairly impervious London Clay, it is possible that the enclosures represent the focus of summer and autumn pastoral activities, where stock was fattened before being driven back to the main settlement for slaughter and processing. Specialization of agricultural sites during the Late Iron Age and early Romano British period, especially with regard to seasonally occupied pastoral sites has been effectively demonstrated in certain areas in southern Britain such as the Upper Thames Valley (Lambrick and Robinson 2009), where ditched sites produce moderate quantities of artefactual material, but few structures or evidence of permanent, year round settlement such as the complex around Coln Gravel, Thornhill Farm, Fairford, Gloucestershire (Jennings *et al* 2004; Stansbie *et al* 2008). This pattern is reflected in Hampshire at nearby sites such as Late Iron Age Dowd's Farm, Hedge

End (Clelland 2012) or early Romano-British Dairy Lane, Nursling (Adam *et al* 1997). The use of the Waterlooville area for specialized pastoral exploitation during this period may be supported by the identification of the contemporary banjo enclosure to the west of Waterlooville (Wessex Archaeology 2009). Banjo enclosures often show a complex and agglomerated development (e.g. Perry 1974) but due to their morphology and landscape setting they are usually linked to a specialized role within stock management (*ibid.*, Hingley and Miles 1984) something that has been borne out in Hampshire by detailed excavation (e.g. Micheldever Wood - Fasham 1987; Blagden Copse – Stead 1968).

The use of the site seems to have ceased in Phase 7, about AD 150, and the final dumps of artifacts spread across the old land surface perhaps reflect a change in the lives of the users; they presumably had no further use for the assemblage of artifacts. The date of the abandonment is intriguing; one might have expected major changes at the time of the Roman conquest, or with the end of Roman rule. It is a pattern identified at a similar site at nearby Shedfield where the site was abandoned or relocated to an unknown neighbouring location in the mid-2<sup>nd</sup> century (Holmes 1989, 39). Presumably some more local vector came into play, perhaps the re-organisation of the landscape under a villa system for instance, as has been seen at Chilgrove in Sussex (Down 1988, 87ff.) where the villa began life in the early 2<sup>nd</sup> century, increasing in wealth until it was rebuilt in stone by the 4<sup>th</sup> century.

The ongoing work at Plant Farm to the south of the present site, together with the work at Old Park Farm should allow the Waterlooville area to play a prominent part in the understanding of the influence of the Roman invasion and the changes it made to the rural communities in Southern England.

## 11. Publication Proposals

It is proposed to publish the results of the excavation in Hampshire Studies, the journal of the Hampshire Field Club and Archaeological Society, which has carried articles on Hampshire's archaeology for over a century and will be a primary source for future researchers. The journal will soon exist as a digital publication, making the results available to researchers worldwide.

The report will synthesise the archaeology of the different phases of occupation and will include the results of the finds and environmental analyses. This present report together with the site database will be made available through the Archaeology Data Service, which will have a link to the Hampshire Studies website and *vice versa*.

### Draft Publication Synopsis

Introduction	c.300 words
Geology, soils and topography	c.200 words
Archaeological background	c.300 words
<b>Results</b>	
Mesolithic to Late Iron Age	c. 200 words
Romano-British pre-enclosure activity	c. 200 words
Romano-British Sub-circular enclosure	c. 800 words
Romano-British Sub-rectangular enclosure	c.800 words
Romano-British Activity at north end of site	c. 500 words
Romano-British Waterhole	c. 250 words
Post-Roman and Early modern	c. 150 words
Environmental report	c.500 words
Pottery Report	c.500 words
Stone report	c.200 words
Beads and glass report	c.100 words

The report will be illustrated with line drawings and photographs. Tabulated material will be kept to a minimum as full catalogues will be available online.

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