

# ANDOVERSFORD

## SEWAGE TREATMENT WORKS

### Archaeological Watching Brief

prepared by

**NETWORK ARCHAEOLOGY LTD**

on behalf of

**BLACK & VEATCH**

for

**THAMES WATER**

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## **NON-TECHNICAL SUMMARY**

This report presents the results of an archaeological watching brief undertaken at Andoversford Sewage Treatment Works, Gloucestershire (NGR 402770 219980, centre). Monitored works comprised construction of a new public footpath and temporary yard for contractors' cabins and parking; erection of a new inlet works and installation of an associated bypass pipeline; installation of a new permanent SAF unit, associated ducting and pipe-work; installation of pipe-work associated with the existing MCC; installation of new 150mm and 200mm siphon pipe-work; and construction of a new humus tank and associated pipe-work.

A small number of dispersed archaeological features were revealed, including occupation / cultivation layers, a limestone concrete surface and associated wall footing, vestiges of a second stone wall or surface, possible ditches, pits and postholes, as well as a quantity of Roman pottery and other material finds. Both features and finds were suggestive of on-site activity throughout the Roman period, with a focus during the 2<sup>nd</sup> and 3<sup>rd</sup> centuries. A background level of Iron Age and Post-Medieval / Early Modern occupation was also in evidence.



# **1 INTRODUCTION**

## **1.1 Purpose of this Report**

This report presents the results of an archaeological watching brief undertaken during installation of new facilities at Thames Water's Andoversford Sewage Treatment Works (STW), Gloucestershire.

## **1.2 Commissioning bodies**

The archaeological works were commissioned by Black & Veatch on behalf of Thames Water Utilities. The archaeological contractor was Network Archaeology.

## **1.3 STW and new facilities**

### **1.3.1 Description of the STW**

Andoversford STW is located on the western edge of the Cotswolds, on the eastern bank of the River Coln (NGR 402770 219980, centre). The compound is immediately north-east of the A40, south of the decommissioned Banbury and Cheltenham direct railway line and a short distance north-west of the A436. The surrounding landscape comprises undulating farmland typical of the Cotswold fringe. Andoversford itself sits to the south-west, on the opposite side of the A40, while Syreford Quarry sits atop an escarpment to the north.

The STW occupies a roughly N-S oriented compound, delineated by a metal fence-line. A concrete access track runs lengthways across the interior, proximate to the eastern boundary. The majority of the work's structural elements are located along the western edge of this access road, including the storm and sludge holding tanks, the primary settlement tanks and the SAF units, associated pipe-work and infrastructure. The western edge of these elements represents the approximate centre of the site, to

the east of which, the land is flat. To the west, the land slopes steeply downwards towards the humus tanks and the western boundary.

### **1.3.2 New facilities**

The new facilities at Andoversford STW comprised:

- new public footpath, outside the main compound;
- temporary yard, for contractors' cabins & parking, outside main compound;
- new inlet works and associated bypass pipeline;
- new permanent SAF unit, associated ducting and pipe-work;
- new pipe-work associated with the existing MCC;
- new 150mm and 200mm siphon pipe-work;
- new humus tank and associated pipe-work, and
- Various minor "keyhole" excavations.

### **1.3.3 Archaeological monitoring**

The watching brief was undertaken by a single archaeological supervisor on 24 separate site visits between 14<sup>th</sup> December 2010 and 4<sup>th</sup> May 2011.

## **1.4 Legislation, regulations and guidance**

The MCC Kiosk required planning permission. A request for an EIA Screening Opinion was submitted to the local planning authority (Gloucestershire County Council) with regard to the other installations. The Council concluded that the majority of the works (including the temporary construction compound) were permitted development and therefore that EIA was not required.

The watching brief was implemented in response to a request by Gloucestershire County Council Environment Department.

## **1.5 Archaeological background**

### **1.5.1 Previous stages of archaeological investigation**

In 1991, a programme of watching brief, trial excavation and salvage excavation was implemented prior to extensive refurbishment of the present works (Hoyle 1992). The investigations identified a number of features including several Romano-British gravel quarries and linear gullies, an adult burial within a coffin, a Roman cultivation soil and a spread of stone, possibly representing either a road surface or the remains of stone yards. The full excavation report remains pending.

A rapid archaeological desk-based assessment, included within the Written Scheme of Investigation for the watching brief reported herein, is presented in Appendix A.

## **1.6 Aims and objectives**

The general objectives of the latest watching brief were to:

- identify, appropriately manage and fully mitigate the archaeological resource potentially affected by the proposed works;
- consider, in all cases of archaeological discovery, whether preservation in situ is desirable or achievable as the foremost response;
- determine, where preservation in situ is not desirable or achievable, an appropriate strategy for preservation by record;
- develop, where possible, knowledge and understanding of the historic landscape and archaeological resource through recording of threatened remains;

- determine and understand the nature, function and character of any archaeological remains in their cultural and environmental setting;
- establish the ecofactual and environmental sequence and context of archaeological deposits and features;
- engage in a programme of post excavation, archiving, synthesis and study, leading to publication and dissemination of results; and
- ensure the long-term survival of the information through deposition of a project archive.

### **1.6.1 Regional Research Frameworks**

All archaeological work has considered existing and developing research frameworks from the surrounding regions, in particular the South West Archaeological Research Framework.

## **2 PROCEDURES**

### **2.1 Standards**

All archaeological work was undertaken in accordance with:

- Professional codes, standards and guidance documents (English Heritage 1991; IfA 2008);
- The methodology laid out in the Written Scheme of Investigation (Network Archaeology November 2010);
- Brief for an archaeological watching brief (Gloucestershire County Council, 2010); and
- Relevant H&S legislation and guidance (Allen & Holt 1986; HSE 1974, 1994, 2002; Network Archaeology 2008, SCAUM 1991).

### **2.2 Fieldwork**

#### **2.2.1 Construction**

The Principal Contractor, Adroit Construction Services, used a 360<sup>0</sup> mechanical excavator to excavate all foundation, ducting and pipe trenches as listed in section 1.3.2. Hand-excavation took place in the vicinity of known/suspected subterranean services.

#### **2.2.2 Watching brief**

Archaeological monitoring was targeted on any mechanical/hand excavation undertaken by Adroit where there was potential for archaeological impact. In such instances, monitoring was by permanent-presence.

#### **2.2.3 Hand-excavation, recording and sampling**

Archaeological excavation and recording was undertaken in accordance with the methodology laid out in the Written Scheme of Investigation (Network Archaeology 2010).

## 2.3 Project codes and number allocations

### 2.3.1 Project Codes

Network Archaeology's project code for the archaeological watching brief is AND16. The accession number for this project, allocated by Gloucestershire City Council and Museums Service, is **OXCMS: 2011.4**.

### 2.3.2 Context numbers

The development area was sub-divided into 7 zones each of which was assigned a unique block of context numbers (Table 2.1).

**Table 2.1: Context number allocations by area**

Area	Description	Context range
1	Public footpath	1000-1999
2	Contractor's compound	2000-2999
3	Bypass Pipeline trench	3000-3999
4	SAF Unit	4000-4999
5	MCC Kiosk	5000-5999
6	Siphon Pipeline trench	6000-6999
7	New Humus Tank	7000-7999

### 2.3.3 Drawings

Permatrace drawing sheets were numbered sequentially from 01 as were site plans and individual archaeological sections.

### 2.3.4 Photographs

Black and white films were numbered sequentially from 01 and individual photographs were numbered in accordance with their developed negative number.

## 2.4 Assessment of archive and finds

Upon completion of the fieldwork, the finds and stratigraphic information were assessed by appropriate specialists so as to

ascertain their significance and potential for further analysis. A table detailing the finds specialists employed can be found below (Table 2.2). The specialist technical reports can be found in Appendix D and a finds catalogue is presented in Appendix E.

**Table 2.2 Summary of material types and specialists**

<b>Material type</b>	<b>Assessment by</b>
Animal bone	Jennifer Wood
CBM	Rachel Hall
Clay pipe	Mike Wood
Environmental	Val Fryer
Fired clay	Rachel Hall
Glass	Kevin Leahy
Metalwork	Kevin Leahy
Plaster	Rachel Hall
Post-Roman pottery	Paul Courtney
Roman pottery	Jane Timby

## **2.5 Data management and presentation**

### **2.5.1 Summary context table**

Summary context data can be found in Appendix B.

### **2.5.2 Matrix**

The site matrix is presented in Appendix C.

### **2.5.3 Figures**

Eight figures are presented in Appendix G. There is one overall location plan showing the development area within its geographical context (Figure 1), a plan showing the development area in relation archaeological sites in the surrounding region (Figure 2), a plan showing areas of archaeological investigation within the STW (Figure 3) and a sequence of drawings showing archaeological findings by area (Figures 4 - 8).

#### **2.5.4 Accuracy of Displayed Data**

Data was captured from two sources:

- 1:2500 OS base plan provided by the client, and
- permatrace drawings at 1:100, 1:50 and 1:20 scale. The figures have a positional accuracy of c.  $\pm 0.1\text{m}$  and the archaeological remains within them the same level of c.  $\pm 0.1\text{m}$ .



## **3 RESULTS & INTERPRETATION**

### **3.1 Introduction**

The watching brief revealed a small number of dispersed archaeological features including occupation / cultivation layers, a limestone concrete surface and associated wall footing, vestiges of a second stone wall or surface, possible ditches, pits and postholes, as well as a quantity of Roman pottery and other material finds. Due to the constraints imposed by the construction methodology, and the complex nature of the site stratigraphy, many of these features were revealed in section only.

### **3.2 Soil profile**

#### **3.2.1 Topsoil**

The topsoil (1000, 2000, 3000, 4009, 5000, 6000, 6009, 7002) comprised 0.10m – 0.70m of mid-to-dark grey-brown loam, topped with turf and containing a quantity of natural limestone chips. It was observed to cover the entire development area, with the exception of the access road and other 'hard-standing' areas associated with the STW.

The topsoil produced finds of: animal bone (2 fragments weighing 12g); ceramic building material (CBM) (2 fragment weighing 805g); clay pipe stem (1 piece weighing 2g); fired clay (6 fragments weighing 23g); blast furnace slag (1 chunk weighing 70g); 2 iron nails (19g); Roman pottery (35 sherds weighing 295g); and Post-Medieval pottery (7 sherds weighing 78g). A 4<sup>th</sup> century AD copper alloy coin (2g) was also recovered.

#### **3.2.2 Natural substrate**

Across the eastern half of the STW, the natural substrate comprised sandy gravels, which varied in colour from pale orange

to yellow to cream (3012, 4007, 5001, 6001). The western half of the site was instead underlain by a dark blue-grey silty clay, with a high moisture content (7000). This represented a very stark change across the STW. The clay was proven to be at least 3.14m deep and was probably alluvial. Its formation is almost certainly the result of flooding from the River Coln which runs just outside the western boundary of the STW. Interestingly, a small assemblage of Roman pottery was recovered from within alluvium 7000 (6 sherds weighing 11 g), indicating proximate Roman activity at the time of its formation.

### **3.2.3 Made ground**

Any naturally developed subsoil appeared to have been removed across virtually the entire STW. Instead, varying quantities of made ground underlay the topsoil in most areas (3024, 4001, 4003, 4006, 4018, 4019, 6010, 7003). This comprised up to a metre of grey-brown gravelly clay with patches of re-deposited natural substrate and occasional lenses of clay. It almost certainly related to both the initial construction and subsequent upgrading of the STW.

Made ground was particularly evident in the excavations around the new SAF tank in the centre of the site, as well as around the Siphon Pipe trench running inside the NE boundary. Finds recovered comprised: animal bone (11 fragments weighing 197g); modern and Roman CBM (7 fragments weighing 145g); 2 iron nails (23g); plaster (3 chunks weighing 251g); Roman pottery (27 sherds weighing 242g); and Post-Medieval pottery (8 sherds weighing 101g).

A more distinctive layer of made ground was observed in the west of the STW, where the ground dropped steeply towards the western boundary. Here, the alluvial clay (7000) appeared to have been cut into, with the excavated material then having been replaced with a large quantity of very clean, cream-coloured

gravel (7001), possibly re-deposited natural substrate. This material was observed running up the slope immediately north of the Filter Beds, terminating approximately in line with the eastern side of the SAF Feed-Pump Station. It was evidently a modern development, perhaps representing an attempt to consolidate the ground prior to construction in this area.

The only true subsoil remnant to be identified, was located in the area of the new SAF tank (4008) (Plate 1). Sitting directly atop the natural substrate, it was overlain by made ground deposit 4001, and comprised a maximum of 0.46m of mid-to-dark brown firm silty clay with infrequent rounded stones. The layer appeared to reduce in thickness towards its northern extent, wherein it also became less consistent. It was found to contain a single fragment of animal bone (2g) and 2 fragments of fired clay (2g), as well as small assemblages of Roman and Post-Medieval pottery (15 sherds weighing 100g and 1 sherd weighing 3 g respectively).

### **3.3 Archaeological remains**

#### **3.3.1 Area 1 - Public footpath**

Only c.0.08m of topsoil (1000) was stripped in this area to create a new public footpath (c.35m long x c.1.2m wide). No archaeological features were revealed.

#### **3.3.2 Area 2 - Contractors' compound**

Removal of c.0.10m of topsoil (2000) across this area revealed the vestiges of a former surface, comprising compacted oolitic limestone chunks (2001). This represented an area of temporary hard-standing associated with modern works at the STW. No archaeological features were located.

### **3.3.3 Area 3 - Bypass Pipeline trench**

Prior to construction of the new inlet works, a c.0.65m wide trench was excavated along the eastern edge of the access track. At either end, the trench was extended at right angles towards the eastern boundary, resulting in an exaggerated 'magnet-shaped' cut in plan.

Eight features were revealed in section within this trench, comprising: 3 ditches, a gully, a cultivation layer, 2 pits, and the remains of a stone surface (Figure 4). In all cases the dating remains insecure, and so it has not been possible to apply strict phasing.

#### ***Ditches 3003, 3008, 3010***

Possible linear ditch **3003** was located beneath the access track, a short distance to the north of possible pit **3001**. It had a gently sloping southern edge and a curving base (1.15m wide x 0.15m deep), while the northern edge was entirely truncated by possible pit **3005** (Plate 2). Though its shape in plan was not revealed, its profile was suggestive of linearity, in the manner of a shallow W-E oriented ditch or gully.

Single fill 3004 was observed, comprising 0.15m of dark brown firm coarse sandy clay with limestone granules throughout. A small quantity of animal bone (1 fragment weighing 12g), modern CBM (2 fragments weighing 23g) and Roman pottery (1 sherd weighing 0.25g) was recovered.

The 2 fragments of Modern CBM may have been introduced during mechanical excavation. However, they provide a fair indication that **3003** is a recent feature, probably associated with construction of the access road. If earlier, then the ditch is most likely to have been Roman, and to have served an agricultural function. Its insubstantial, shallow nature would preclude it having

formed any manner of boundary, and it would more likely have been related to drainage.

Possible linear ditch **3008** was located beneath the access track, truncating possible pit **3005** to the north. It had a steep, near-vertical, southern edge, and a more moderately sloping, c.60°, northern edge (1.96m wide x 0.60m min deep). The base was not revealed, but may have extended for quite some distance below that of the trench. Though it was not possible to record the feature's shape in plan, its nature and profile suggested a linear, W-E oriented, form.

Single fill 3009 was observed, comprising at least 0.60m of dark grey firm coarse sandy clay with patches of re-deposited natural substrate and limestone granules throughout. The upper extent of fill 3009 was cut by W-E oriented modern pipe cut **3026**, which was located centrally, directly below the access road. Cut **3026** contained the extant metal service pipe itself and dark surrounding fill 3027.

Despite the lack of dateable archaeological finds recovered from ditch **3008**, stratigraphically, it could be seen to cut pit **3005**, which was likely modern. This provides a good indication that it too represented a recent feature, probably associated with a previous phase of development at the STW.

Large cut **3010** was located beneath the access track, in the northern end of the pipe trench. It had a steep, near-vertical southern edge, while neither the base nor the northern edge was revealed. The feature may have been substantial, possibly well in excess of the 3.65m width and 0.95m depth revealed. Though it was not possible to observe its shape in plan, its nature and profile were suggestive of linearity.

Three fills were recorded within cut **3010** (fills 3011, 3018 and 3019). Primary fill 3011 and secondary fill 3018 both comprised

0.65-0.70m of grey firm coarse sandy clay with patches of re-deposited natural substrate, limestone granules and lenses of thick dark blue-grey clay. Upper fill 3019 comprised 0.60m of orange-white re-deposited natural substrate with streaks of grey-brown loose sandy clay. Fills 3011 and 3019 contained no archaeological finds, while secondary fill 3018 produced a sherd of Roman pottery (3g).

The single recovered sherd provides insufficient evidence for both the dating and function of **3010**. However, the considerable scale of the cut does suggest a number of possibilities. If a Roman feature, then **3010** may have represented either a substantial ditch or, alternatively, the result of gravel quarrying activity. If a later feature, then it may well have resulted from modern landscaping activities associated with development of the STW.

### ***Gully 3015***

Possible N-S oriented gully **3015** was located adjacent to remnant stone surface 3013, to the east. It had steep edges rounding into a flat base (1.0m wide x 0.40m deep), and though its shape was not revealed in plan, its nature and profile suggest that it was probably linear. It contained single fill 3016, comprising 0.40m of dark grey firm silty clay with coarse sandy gravel granules throughout.

The lack of recovered material finds hinders both the dating and functional interpretation of gully **3015**. However, its removed location and N-S orientation, are at variance with clustered, seemingly W-E oriented, likely recent features **3003**, **3005** and **3008**, and may suggest an earlier date. As for function, as a gully it is likely to have provided drainage, perhaps in an agricultural sense; its proximity to possible cultivation layer 3017 may be of significance in this regard.

### ***Layer 3017***

Layer 3017 was located beneath the eastern boundary in the eastern end of the northern pipe trench return. It comprised 0.22m of dark grey-brown friable silty clay with some sand inclusion. Unfortunately, as it lay within proximity to live cabling, it was not possible to examine the feature in further detail, and no archaeological finds were recovered for dating purposes.

The rich, silty composition of layer 3017, distinguished it from the majority of other soils in the vicinity, and it may have represented the remains of an agricultural ploughsoil, a garden soil, or other form of cultivation layer. Located on the very perimeter of the modern STW, 3017 may not have been disturbed to the same extent as those archaeological features positioned more centrally within the compound. This increases the potential for it to be of some antiquity, as does its depth below the current ground surface (0.6m).

### ***Pits 3001, 3005***

Possible pit **3001** was located beneath the access track in the southern end of the trench. It had shallowly sloping, uneven sides and an uneven base (1.26m wide x 0.36m deep). Though its shape in plan was not revealed, its profile was more suggestive of a discrete, possibly sub-oval, rather than linear, form. It contained single fill 3002, comprising 0.36m of mid-grey coarse firm sandy clay with limestone granules throughout. Fill 3002 was found to contain Roman CBM (1 fragment weighing 1g) and pottery (1 sherd weighing 5g).

Given both the finds and the known Roman presence in this area, a Roman date is plausible for pit **3001**, though the limited nature of the dateable finds assemblage cannot be taken as firm evidence of this, and may well be residual. The feature might actually be much later in date, possibly associated with recent development of

the STW. The overall paucity of finds, and the fact that the pit was not observed in plan, makes interpreting its function equally problematic. However, if it was a Roman feature, then it is likely to have served either as a refuse pit, dug to contain dumps of domestic waste, or a small gravel extraction pit.

Possible pit **3005** was located beneath the access track, truncating possible linear **3003** to the south (Plate 2). It had a steep, near-vertical, southern edge, and a flat base (1.54m wide x 0.60m deep). The northern edge sloped unevenly at approximately 45°, and was truncated towards the top by probable linear ditch **3008**. Though its shape in plan was not revealed, the nature and profile of **3005** was more suggestive of a discrete pit-like feature, than of a linear feature such as a ditch or gully.

Two fills were observed within pit **3005** (fills 3006 and 3007). Primary fill 3006 comprised 0.60m of light-to-mid grey firm coarse sandy clay with limestone granules throughout, while secondary fill 3007 comprised 0.14m of dull light blue-grey firm coarse sandy clay, also with a limestone granule content. No archaeological finds were recovered from either fill.

Though there was a lack of dateable archaeological material recovered from pit **3005**, stratigraphically, it appeared to cut probable modern ditch **3003**. This would indicate that it too was most likely a recent feature, perhaps associated with construction of the surmounting access road.

### ***Surface 3013***

Remnant stone surface 3013 was located below the topsoil to the south of the northern W-E pipe trench return (Plate 3). It comprised a small arrangement (1.15m wide x 0.50m revealed width) of small, horizontally laid, amorphous slabs of local honey-coloured oolitic limestone (c.0.05m max thickness). The surface was associated with the remains of a vertical Fe pipe.



The state of preservation of the stone slabs, and their clear association with the remains of metal pipe-work, are a strong indication that 3013 was a more recent feature. In terms of function, the surface itself suggests that whatever superstructure was originally attached to the pipe was intended to be accessible via a stone yard or path. In this regard, one possibility is that it formed the remains of a pump, perhaps even pre-dating the STW. Alternatively, it may have been associated with an earlier phase in the historical development of the plant.

### **3.3.4 Area 4 - New SAF Unit**

Cumulatively, a roughly L-shaped area was excavated to the east and south of the N-S aligned permanent SAF tank, west of the access track. This was for the purposes of installing a new permanent SAF tank, associated ducting, pipe-work and other structural elements. A total of three archaeological features were identified, comprising a limestone concrete surface, a stone wall, and a shallow linear gully (Figure 5). In all cases the dating remains insecure, and so it has not been possible to apply strict phasing.

#### ***Surface 4000 and Wall 4010***

Large surface 4000 was located centrally within the STW compound, immediately west of the access track, between the SAF Blower Kiosk to the north and the Temporary SAF tank to the south (Plate 4). It was approximately 0.90m below ground level and comprised a relatively thin layer, c.0.05m, of oolitic limestone concrete, laid directly over the natural substrate (4007) to create a smooth, even surface (c.5.90m min length x c.5.50m wide).

Only the northern edge of surface 4000 was revealed during the ground-works, this being relatively straight but otherwise unremarkable. The western edge appeared to have been removed by the line of the N-S aligned modern de-sludge pipe trench, the

eastern edge also appeared to have been cut through (**4004**), while the south-east corner had either badly deteriorated or been largely removed. The southern edge of the surface was never exposed and continued, likely only a short distance, beyond the limit of the southern baulk. Though its full extent was not revealed, the surface was probably rectilinear in plan. Evidence of its construction came in the form of regular W-E oriented tamping marks, a series of faint striations left by the timber used to flatten the surface.

Remnant wall 4010 lay directly on top of surface 4000, running W-E, 0.40m from the northern edge (2.0m min length x 0.95m wide) (Plate 5). It comprised roughly hewn chunks of local oolitic limestone, the largest of which were c.0.50m long, the smallest of which were chunks of rubble, no longer than c.0.01m.

Though the wall appeared to have been robbed out / extensively damaged by subsequent construction activities, the original pale cream, granular lime mortar was in evidence, still binding certain of the lower stone chunks. In particular, the mortar was observed affixing the very base of the wall to the underlying surface. A considerable quantity of limestone masonry was recovered from the made ground layers (4001 and 4003) overlying the concrete surface (Plate 6), to which further traces of mortar adhered in certain areas.

Surface 4000 almost certainly formed the base for a structure, of which remnant wall 4010 is the only surviving *in situ* element. Beyond this, it is not possible to say what the structure would have looked like or what function it might have served. The fact that the concrete surface itself was only c.0.05m thick, suggests that it was probably not intended to be particularly robust, in the manner of a house or other more durable building. This is supported by the fact that wall 4010 appears to have been only thinly mortared down. As such, it is more likely to have formed

some kind of outbuilding or temporary structure, perhaps even an enclosed yard.

In terms of dating, it is tempting to assign a recent date to concrete structures that are not otherwise securely stratified. Both surface 4000 and wall 4010 did seem to respect the same overall alignment observable within the present STW, and they may well have represented an earlier phase thereof. However, concrete was first incepted during the Roman era (*opus caementicium*), when it shared much in common with modern-day Portland cement (Adam & Matthews 1994). Given both the proximity of Roman Wycomb, and the depth of 4000 (0.90m) below ground level, a Roman origin, while unlikely, is not implausible.

### **Gully 4011**

The only other feature revealed in this area was linear gully **4011** (Plate 5). Oriented W-E and appearing to abut surface 4000 to the north, it was cut directly into natural substrate 4007 and had a shallow U-shaped profile (2.95m min length x 0.85m wide x 0.32m deep). It contained single fill 4012, comprising 0.32m of grey-brown moist friable sandy clay, which yielded a small assemblage of Roman pottery (4 sherds weighing 340g), as well as a quantity of charred cereal grains, charcoal and other burnt residue recovered from the environmental sample.

Though the ceramic assemblage from gully **4011** was limited, the recovered sherds were comparatively large, averaging 85g each, and coming in stark contrast to the much more diminutive sherds recovered elsewhere. This increases the likelihood that the Roman sherds from fill 4012 were undisturbed and securely stratified, providing a reasonably secure Roman date for gully **4011**.

As a gully, **4011** probably functioned as a drainage channel. Though its relationship with surface 4000 was not entirely clear, the two features *appeared* to abut one another, and they certainly

respected the same W-E alignment. This raises the possibility that they may have been associated. It also adds weight to the suggestion of an early date for surface 4000, though there remains the possibility that its placement was merely coincidental.

### **3.3.5 Area 5 - MCC Kiosk**

Construction in this area entailed the removal of topsoil across a roughly rectangular area between the MCC and the MCC Main Control Kiosk, east of the access track, and the excavation of a narrow, dog-legged pipe trench running N-S. A total of four features were revealed, comprising 2 possible linear ditches, a possible pit and a possible posthole (Figure 6).

#### ***Ditches 5002, 5009***

Possible linear ditch **5002** ran NE-SW across the stripped area (Plate 7). Cut straight into natural substrate 5001, it had very shallow uneven sides and an uneven base (5.50m min length x 1.0m wide x 0.20m deep). The NW edge was very clear and conspicuously straight, while the SE edge proved much more diffuse. It contained single fill 5003, comprising 0.20m of mid brown sandy clay with frequent chunks of gravel, and containing a small assemblage of animal bone (3 fragments weighing 14g), Roman CBM (1 fragment weighing 3g) and Roman pottery (10 sherds weighing 24g).

Being only 0.20m deep, **5002** is likely to have represented only the very base of a ditch. Beyond this, its function was unclear, though it may well have been a field boundary ditch and/or drain. The very precise line formed by its NW edge lent **5002** the appearance of a modern feature. However, no modern detritus was observed within fill 5003, and the recovered finds assemblage, though limited, provided a reasonably secure Roman date.

Possible ditch **5009** was located towards the NE end of **5002** (Plate 8). In plan it appeared to form part of the same feature, but upon examination it was found to be deeper (0.41m) and on a contrary alignment (NW-SE). It had a 45° western side, while the eastern side and the base were not revealed. A single fill (5010) was identified, comprising 0.41m of dark grey-brown friable sandy clay. Ditch **5009** was not fully excavated as it was not under threat from further construction activity.

Depth-wise, **5009** appeared much more substantial than ditch **5002**. There is little more that can be said about it, and no date can be assigned as fill 5010 yielded no material finds.

#### ***Pit 5004***

Small pit **5004** was revealed in profile in the NW facing section of the pipe trench and appeared to be cut straight into the natural substrate. It is possible that **5004** may either have cut fill 5003 or been cut by possible linear ditch **5002**, though any relationship had been removed by the excavation of the pipe trench. It was likely sub-circular in plan, with an uneven sloping NE side, an uneven near-vertical SW side and an uneven base in profile (0.52m wide x 0.36m deep). It contained single fill 5005, comprising 0.36m of mid brown friable sandy clay.

Pits of this size are not typical modern features, and **5004** may well be Roman in origin. This is particularly the case, given its association with probable Roman ditch **5002**. If **5004** is a Roman feature, then one possibility is that it served as a refuse pit, dug to contain deposits of organic, possibly domestic, waste. Another possibility is that **5004** was actually a large posthole, though its uneven profile makes this a less convincing interpretation.

#### ***Posthole 5006***

Possible posthole **5006** was located to the west of ditch **5002** and was cut straight into the natural substrate. It was sub-oval in plan,

and U-shaped with a relatively flat base in profile (0.35m long x 0.30m wide x 0.28m deep). It contained two fills (5008 and 5007). Primary fill 5008 comprised 0.15m of loose murky sand and gravel, possibly representing discoloured natural substrate, while secondary fill 5007 comprised 0.13m of dark-mid brown friable sandy clay. No finds were recovered from the primary fill, though secondary fill 5007 yielded an assemblage of animal bone (2 fragments weighing 2g), Roman CBM (1 fragment weighing 3g), an iron nail (6g), and Roman pottery (9 sherds weighing 7g), as well a quantity of charcoal and other burnt residue recovered from the environmental sample.

Being in proximity to a known Roman settlement, it is possible that **5006** may have been structural. The lack of any similar, associated postholes suggests otherwise, though such a lack may as well be due to either the limited extent of the area examined, to post-depositional processes such as truncation, or to both. Alternatively, **5006** may have supported part of a former fence line, perhaps associated with agricultural practices on the periphery of the settlement. Though limited in number, the finds from fill 5007, do suggest a Roman date, as does the posthole's spatial association with probable Roman features **5002** and **5004**.

### **3.3.6 Area 6 - Siphon Pipeline trench**

A siphon pipeline trench, c.0.80m wide, was excavated from the northern extent of the new inlet works, along the eastern edge of the access track to a point just short of the northern perimeter. Two further trenches diverged from the main trench towards its northern end. Both cut through the access track on a NW-SE orientation, with the more southerly designed to accommodate the 150mm pipeline and the more northerly to accommodate the 200mm pipeline. A total of 7 features were identified, comprising a possible ditch terminus, three layers, a possible stone wall or

surface, a probable foundation cut, and a more recent truncation event (Figure 7).

### ***Ditch terminus 6007***

Possible ditch terminus **6007** was located just north of the current washout chamber and pipe, against the west-facing section of the trench (Plate 9). It was semi-oval in plan, with a gradually sloping N side, a steep S side and a rounded base in profile (2.30m wide x 0.40m deep). It contained single fill 6008, comprising 0.40m of pale brown moist sandy clay, and no archaeological finds.

Though no dateable finds were recovered from **6007**, it appears to have been cut straight into the natural substrate (1.04m below present ground level), and is unlikely to be a particularly recent feature. The upper extent was probably removed during landscaping associated with construction of the STW, leaving only the base preserved. With so little of the feature revealed, it is difficult to assign any meaningful interpretation of function, though it likely provided drainage.

### ***Layers 6011, 6012, 6015***

Layers 6011 and 6012 were located between the eastern end of the divergent 150mm pipe trench, and the eastern end of the divergent 200mm pipe trench to the north. Layer 6011 overlay 6012 and comprised 0.38m of dark grey-brown friable silty clay, containing a small quantity of limestone pebbles. Finds recovered from layer 6011 comprised: animal bone (3 fragments weighing 3g) undated CBM (1 fragment weighing 1g) and a fired clay object of probable Roman date (1 fragment weighing 45g), as well as assemblages of Iron Age (2 sherds weighing 14g) and Roman (34 sherds weighing 134g) pottery, as well as a quantity of charcoal and small coal fragments recovered from the environmental sample.

Layer 6012 comprised 0.42m of mid grey coarse sandy clay (Plate 10). This layer was firm and gritty, and contained a comparatively large quantity of conspicuous stone chunks. These were distinct from the natural substrate limestone inclusion within all other contexts by virtue of being smooth, flat and grey. Layer 6012 also contained a comparatively large assemblage of archaeological finds, comprising animal bone (11 fragments weighing 56g); undated CBM (1 fragment weighing 1g); undated fired clay (8 fragments weighing 24g); probable Roman glass (1 sherd weighing 2g); Early Modern blast furnace slag (1 chunk weighing 117g); an undated iron chain link (23g); 2 Early Modern iron nails (14g); an undated iron tack (1g); probable Roman painted plaster (2 chunks weighing 430g); Roman pottery (32 sherds weighing 490g); a single sherd of Post-Medieval pottery (3g); and a quantity of cereal grain, charcoal, small coal fragments and other burnt residue recovered from the environmental sample.

Only a relatively small proportion of 6011 / 6012 was formally excavated. Yet the two layers provided the most convincing evidence of *in situ* Roman activity to be identified during the current scheme of works. The comparatively large quantity of finds and the variety of find 'types' recovered, would indicate a concentration of different activities taking place in the vicinity over a considerable period. These finds are overwhelmingly Roman in origin. It is likely that the few Post-Medieval and Early Modern finds recovered from 6012 were intrusive, not least as a modern pipe cut (containing fill 6017) passed directly through the excavated area. Similarly, while it may also have derived from this intrusive material (6017), the presence of a small quantity of coal is not inconsistent with a Roman date, as coal was widely exploited in Britain by the 2<sup>nd</sup> century AD.

There are two possible interpretations for 6011 / 6012. Firstly, they may have represented two discernible strata within the same occupation surface; gradual accumulations of trampled settlement



detritus, including structural and industrial residues, food preparation and other domestic waste, resulting from sustained, localised activity. Secondly, they may have represented elements of a single cultivation layer; a plough soil, garden soil, or other form of agricultural layer, with finds perhaps having been introduced as component of manure.

If 6011 / 6012 represented an occupation surface, then the two separate strata may reflect a change in the nature of occupation, e.g. in the types of activity being undertaken at the time of their formation. Alternatively, if a cultivation layer, then the poor sorting of 6011 / 6012 is suggestive of a lack of, or at least limited, ploughing activity, making their use in any form of intensive agriculture unlikely. In this sense, they are perhaps more likely to have been associated with small-scale cultivation or horticultural activity.

Towards its northern extent, layer 6012 was found to overlie a further layer 6015, comprising 0.14m of compacted orange-yellow-white, gravel, sand and stone, from which no archaeological material was recovered. This layer (6015) may well have represented a band of indurated natural substrate. Given its association with overlying Roman layers 6011 / 6012, however, there is also the possibility that it was intentionally compacted, either as *in situ* or re-deposited material, perhaps in order to provide a surface or walkway of some description. If archaeological, then its location below 6012 indicates that it was at least Roman in date, with the potential to be even earlier.

### ***Truncation event 6013***

A short distance to the south of the 150mm pipeline, substantial steep-sided cut **6013** could be seen to entirely remove layers 6011 and 6012 and continue on into the natural substrate. It either contained, or was overlain by, made ground 6010. Both its scale and association with modern made ground indicate that

**6013** probably represented an episode of modern landscaping associated with earlier development of the STW.

***Stone wall / surface 6014 and probable foundation cut 6019***

Possible stone wall / surface 6014 was located just south of the eastern end of the divergent 200mm pipe trench (Plate 10). It comprised a concentration of oolitic limestone chunks and blocks (c.1.20m wide x c.0.39m thick). The feature had been largely obliterated in plan by the laying of the modern access track and by the cutting of a previous N-S oriented pipe trench running just east of the current siphon pipe alignment; chunks of previously *in situ* masonry (6014) were evident within the fill of this former trench (6017).

A small assemblage of archaeological finds were recovered from amongst the remains of 6014, comprising an Early Modern iron nail (8g), a further undated iron nail (3g), a quantity of Roman pottery (6 sherds weighing 1g) and a single Post-Medieval sherd (3g).

Masonry 6014 appeared to sit within a 0.57m thick deposit of mid-brown clay (6016), firm and conspicuously inclusion free. This formed the primary fill within probable foundation cut **6019**. Layer 6011 had been entirely removed by **6019**, which could also be seen to cut into underlying layer 6012. The lowest stratum of the modern access track, pale Type 1 gravels 6006, had been laid across the top of the masonry, preserving what remained of it in this area *in situ*.

The survival of stone surface 6014 and its associated contexts, as well as underlying Roman layers 6011, 6012 and 6015, may well have been due to their location on the very NE edge of the STW compound. This was the area seemingly least affected by modern ground-disturbing activity. Of greater significance perhaps,

archaeological monitoring of the STW refurbishment in 1991 may well have identified the same complex of features, guaranteeing their partial preservation:

*'The latest phase, which overlay [a dark brown] Roman soil, consisted of a spread of stones...exposed in the NE corner of the sewage works...The refurbishment works were redesigned to ensure the preservation of the stone spread and the range of stratified deposits which it sealed.'* (Hoyle 1992:214).

Though the full excavation report remains to be published, in his interim summary, Hoyle interpreted the spread of stones as *'the remains of either stone yards, or a rough roadway running along the western edge of the settlement.'* He does not ascribe a date to the stones, though by describing them in the context of the settlement (Wycomb) he seems to tacitly suggest a Roman date. By contrast, he is much more confident in his assertion that the underlying soils – in all likelihood equating to 6011 / 6012 – represented a second phase of on-site Roman activity.

Interestingly, the finds assemblage recovered during the current investigation raises the possibility that 6014 may actually be of later, Post-Medieval / Early Modern date, though again, any later material finds associated with this context may have been intrusive.

### **3.3.7 Area 7 - New Humus Tank**

A new humus tank was constructed in the NW of the compound, abutting the existing two tanks to the north. Associated pipe work was also installed, including a washout pipeline to the west of the new tank and two larger pipelines running upslope towards the SAF and SAF feed-pump station.

No archaeological features were identified within the latter two pipe trenches, though they did reveal the interesting geological

change from gravel to alluvial clay described in section 3.2.3 (Figure 8). Though no certain archaeological features were revealed within the humus tank foundation either, several layers were identified towards its western edge.

### ***Layers 7005-7009***

Underlying topsoil 7002, layer 7005 comprised 0.13m of light brown friable fine sandy clay. This overlay layer 7006, comprising 0.30m of mid-grey silty clay with orange streaks. Layers 7005 and 7006 appeared to have been removed further to the east and replaced by a c.0.36m thick layer of re-deposited natural substrate (7008).

Underlying both 7006 and 7008, deposit 7007 comprised 0.32m of dark grey very moist silty clay, containing a single sherd of Roman pottery (3g). This material may have formed a fill within a shallow-sided cut rather than a layer. However, the stratigraphy was unclear and it is considered more likely to represent a build-up of sediment atop a natural break of slope, perhaps associated with a former bank of the River Coln.

Within the shallow washout pipe trench to the west of the new humus tank, re-deposited clay 7008 overlay a possible preserved subsoil (layer 7009), comprising an unknown depth of mid-to-dark brown silty clay. Both 7008 and 7009 yielded small assemblages of Roman pottery (3 sherds weighing 88g and 4 sherds weighing 7g respectively), but no definite archaeological features were identified.

## **3.4 Finds**

### **3.4.1 Introduction**

This section provides a summary description and quantification of the recovered finds by material type.

### **3.4.2 Finds quantifications**

Nine find types – animal bone, CBM, clay pipe, fired clay, glass, metalwork, plaster, Post-Roman pottery, and Roman pottery – were recovered during the watching brief. A summary of these is given below. A summary count and weight of all find types appears in Appendix D and the full technical reports appear in Appendix C.

### **3.4.3 Animal Bone (Jennifer Wood)**

Thirty-four fragments (140g) of animal bone were recovered, all in relatively good condition. The stratified remains were recovered from ditch fills 3004, 5003, post hole fill 5007, and possible occupation surfaces 6011 and 6012. With the possible exception of 3004, all of these contexts were of likely Roman date. Faunal remains were also recovered from topsoil and modern made ground deposits 4001, 4008, 6010 and 7002.

Sheep / goat and cattle remains were most common, though pig was also represented. Overall, the assemblage was typical of a butchery discard deposit. In particular, part of a cattle jawbone recovered from 6010 displayed evidence of cut marks consistent with disarticulation of the carcass. Further evidence for livestock processing might be inferred from a fragment of charred juvenile sheep / goat radius also recovered from 6010.

### **3.4.4 CBM (Rachel Hall)**

Sixteen fragments (982g) of CBM were recovered, 5 of tile, 1 of brick, and 10 undiagnostic. The fabrics were all coarse sandy and oxidised, and their condition ranged from fair to poor. An abraded roof tile from made ground layer 4001, two further undiagnostic fragments, from ditch fill 5003 and posthole fill 5007, and single fragments from 3002, 3004, 6011 and 6012 were all dated to the Romano-British period. The remaining assemblage comprised

modern brick and tile fragments recovered from topsoil, made ground layers and ditch fill 3004.

#### **3.4.5 Clay Pipe (Mike Wood)**

A single piece of clay tobacco pipe stem (2g) was recovered from topsoil 1000. On the basis of the bore diameter, it is likely that the pipe was manufactured no earlier than the mid 18th century.

#### **3.4.6 Environmental remains (Val Fryer)**

Environmental samples were taken from post-hole **5006** (sample 003), from possible occupation surfaces 6011 and 6012 (samples 004 and 005 respectively) and from the fill of gully **4011** (sample 007). Subsequent to flotation/washover processing, the content and preservation of the plant macrofossil assemblages was evaluated under microscope. The density of recovered material was very low and most of the remains were poorly preserved.

Barley, wheat and spelt grains were present within the assemblage from gully **4011**, while further grains unidentifiable to species were recovered from both **4011** and 6012. All plant remains were found to be charred, suggesting their possible processing either for the table or the market stall.

A very low density of charcoal/charred wood fragments was present throughout. Some of this material possibly derived from activities involving very high temperature combustion. Some was likely to be coal burning residue, and this was particularly common within the assemblage from layer 6012. This is not inconsistent with a Roman date, as Roman exploitation of coal was widespread in Britain by the 2<sup>nd</sup> century AD.

Several abraded bone fragments were also recorded from posthole **5006** and layer 6012.

### **3.4.7 Fired Clay (Rachel Hall)**

Seventeen fragments (95g) of fired clay were recovered from remnant subsoil 4008, topsoil 5000, made ground layer 6010, and possible occupation layers 6011 and 6012. The fabrics were all coarse sandy and oxidised, with sparse organic and flint inclusions.

The only diagnostic object was recovered from possible occupation layers 6011/6012. It had three surfaces and an edge, and may possibly have formed part of a loom-weight or kiln brick, likely of Roman date. The assemblage otherwise comprised small, abraded, undiagnostic fragments.

### **3.4.8 Glass (Kevin Leahy)**

A single fragment of translucent, pale green glass (1.52g) was recovered from possible occupation layer 6012. It was found to be in excellent condition and likely represented a body sherd from a glass vessel; the fact that it is curved in two planes suggests a globular form. The fragment may have derived from a soda-glass vessel of Roman date, though the absence of stylistic features prevents more accurate dating and a later date is possible.

### **3.4.9 Metalwork (Kevin Leahy)**

Fifteen metal items were recovered, 14 iron (303.34g) and 1 copper alloy (2g). The recovered iron items comprised 10 iron nails, 2 pieces of slag, an iron chain link, and an iron tack, all corroded but relatively well preserved. The copper alloy object comprised a coin in a good patinated condition.

Fe nails were most numerous and were recovered from 6 contexts: made ground 3024, posthole fill 5007, ditch terminus fill 6008, possible occupation layer 6012, stone wall / surface 6014 and topsoil 7002. The 2 pieces of slag, recovered from possible occupation layer 6012 and topsoil 7002, were identified as blast furnace by-product.

Two of the three nails and the lump of slag from 6012 were identified as Early Modern, which is at odds with the remaining stratigraphic and finds evidence for this as a Roman feature. However, it is entirely possible that they are intrusive, as a modern pipe cut containing fill 6017 cut through the excavated area.

The copper alloy coin was recovered from topsoil 1000. It comprised a Roman Nummus, minted during the reign of Constantius II (AD 355-61). The obverse bore a bust of the emperor and the translated text 'Our lord Constantius dutiful and wise Augustus Emperor', while the reverse bore the image of a horseman spearing a fallen soldier and the translated text 'Restoration of Happy Times'.

#### **3.4.10 Rachel Hall (Plaster)**

Five fragments (681g) of wall plaster were recovered, 3 from topsoil 4000 and 2 from possible occupation surface 6012. All fragments were found to have large sub-rounded flint and Iron Oxide inclusions in a sandy/limestone matrix. Of interest, the two pieces from 6012 had the remains of red paint along one edge, and may date to the Romano-British period.

#### **3.4.11 Post-Roman Pottery (Paul Courtney)**

Eighteen post-Roman sherds (187g) were recovered from 6 contexts. All were dateable to the Post-Medieval period, with their production spanning the late 16<sup>th</sup> to 20<sup>th</sup> centuries. With the exception of two sherds of c.19<sup>th</sup> century pottery from possible occupation layer 6012 and possible stone wall / surface 6014, all finds were recovered either from topsoil, subsoil or made ground deposits.

Topsoil layers 1000, 6009 and 7002 produced a sherd of 20<sup>th</sup> century Developed Whiteware, possibly from a casserole dish; an internally slipped base sherd of Welsh Borders Red Earthenware



(possibly Newent Ware) of the late 17<sup>th</sup> to 18<sup>th</sup> century; a sherd of bowl rim of late 16<sup>th</sup> to 17<sup>th</sup> century Stroath-Type Red Earthenware; and 4 further sherds of c.19<sup>th</sup> century ceramic.

Remnant subsoil 4008 produced a single sherd of c.19<sup>th</sup> century pottery, while made ground layers 4001 and 6010 produced a sherd from the base of a White Salt-Glazed Stoneware bowl of probable early 18<sup>th</sup> century date; 6 sherds of Rockingham Ware teapot spout (c.1830 to 1930); and a sherd of blue-tinged Pearlware (c.1780 to 1830), possibly deriving from a small bowl.

### **3.4.12 Roman Pottery (Jane Timby)**

Roman pottery formed the most frequently encountered material type and produced the largest recovered assemblage (189 sherds weighing 1747g). The material appears to span the 2nd to 3rd/4th centuries, comprising a mixture of continental and regional imports, and local wares.

Principal amongst the continental imports were a Dragendorff type 31 dish and a large base-sherd from a Dragendorff type 18/31 dish, both recovered from possible occupation layer 6012. Of interest, the latter sherd bore the remnants of a centrally positioned potter's stamp, reading 'TRI-', with the form of the vessel indicating an early Hadrianic date (early 2<sup>nd</sup> century).

Other continental imports included six sherds of probable Dressel 20 olive oil amphorae, the form most commonly imported from Baetica during the 1st to the 3rd centuries. Eleven sherds of Samian Ware were also recovered from nine contexts. Ten of these sherds could be provenanced to central Gaul. The other, recovered from 6012 / 6014, is considered more likely to be South Gaulish in origin.

Regional imports included 14 sherds of Dorset and South-West Black Burnished Ware, with 2nd century-type jars from 6012 and 6010, and a plain-rimmed dish from 5000. A further 10 sherds of

Oxfordshire Ware, including White-Ware mortaria and Colour-Coated Ware, 2 sherds of Savernake Ware from North Wiltshire, Pink Grog-Tempered Ware from the Midlands, and South-West White-Slipped Ware were also recovered. Locally sourced pottery included 57 sherds of Severn Valley Ware of varying type.

A small quantity (2 sherds weighing 14g) of Iron Age pottery was also recovered from possible occupation layers 6011 / 6012. One of these comprised a coarse quartz sand-tempered body-sherd, the other a tiny fragment of Fossil Shell-Tempered Ware.

Though a significant proportion of the assemblage comprised re-deposited finds recovered from modern contexts, 2<sup>nd</sup> and 3<sup>rd</sup> century Roman wares were predominant, suggesting a focus of activity at this time. This is to be expected, given the location of the site on the periphery of Wycomb scheduled Roman town.

### **3.5 Confidence rating of the results**

A confidence rating in the reliability of the results of the watching brief has been undertaken. There is a moderate confidence in the descriptions, interpretations and relationships of the deposits and features recorded by the watching brief. A greater confidence might have been expressed had the majority of the archaeology not been visible in section only.

## 4 DISCUSSION

Both the features and finds unearthed at Andoversford STW are consistent with its location on the periphery of a considerable urban settlement. As a thriving Roman town, Wycomb would have provided a regional residential, industrial and social hub, as well as a trading nexus for dispersed satellite communities. As such, we would expect it to have received a wide array of imports; continental, regional and local, fine and coarse. Though a comparatively small assemblage, this is precisely what the finds recovered during the recent works have revealed.

In terms of early activity, the two Iron Age sherds recovered from 6011 / 6012, demonstrate some degree of late prehistoric settlement in the vicinity, though the nature and extent of this activity remain uncertain. Earlier excavations a short distance to the south of the STW, identified Late Pre-Roman Iron Age (LPRIA) pottery and coins, amongst other things. This led the excavator to suggest the existence of some form of planned settlement, certainly prior to AD 70 (Rawes 1980:21). On the basis of the topography, he further speculated that this may have been some kind of fort, though this remains unproven.

It is also worth mentioning Hoyle's (1992) observation that the earliest Roman phase identified on the site of the STW itself '*was represented by a series of amorphous and interconnected shallow scoops... backfilled with domestic refuse*'. These he interpreted as gravel quarries, and he further noted that they were found in association with '*a series of linear gullies generally leading westwards*'.

It is hard to ignore the similarity between these first phase Roman features, as described by Hoyle, and some of those identified within the Bypass Pipeline trench during the course of the current investigation (i.e. **3001**, **3003**, **3005**, **3008** and **3010**). It is

even possible that they constituted the same features, backfilled following the previous excavation; this would account for the residual quantities of mixed modern and Roman material recovered from their fills. Either way, both gravel quarrying and agricultural activity (as suggested by the E-W gullies), might be anticipated just beyond the limits of a nascent town.

Being on the margins of the primary settlement, it is perhaps unsurprising that the *majority* of the Roman material recovered during the watching brief dated to the 2<sup>nd</sup> to 3<sup>rd</sup> centuries. This was the Romano-British heyday. Occupation of towns such as Wycomb is likely to have been at its greatest extent, with the outskirts of the core settlement expanding into peripheral areas such as that now occupied by the STW.

The question of what exactly was taking place in this area during the height of the Roman occupation remains moot. However, the observation of occupation surfaces / garden soils, possible stone yards, and a range of imported wares, suggests a certain level of 2<sup>nd</sup> and 3<sup>rd</sup> century domestic activity; the apparent localisation of this activity within the north-eastern corner of the STW, may be due to the differential survival of remains. The possible kiln brick from 6012 might suggest a level of small-scale industrial activity, while the recovery of possible Romano-British painted wall plaster may even indicate the presence of high status architecture.

The recovered coin of Constantius II (AD 355-61) suggests some level of Roman activity continuing on into the 4<sup>th</sup> century, and this is attested to by the abundance of latest phase Roman coins recovered during the excavation of the main town in antiquity (Lawrence 1864). Beyond this, there is no physical evidence for subsequent Saxon or Medieval activity. However, the name *Wycomb* derives from *Wickham*, itself deriving from *vicus* (Rawes 1980:13), and this at least suggests the Saxon recognition of a Roman town.

Despite the persistent background finds of Post-Medieval / Early Modern material, no definite features were revealed. Neither did the review of early mapping and texts give any indication of settlement at this time. There is the possibility that the stone surface in the north-east of the site was a Post-Medieval / Early Modern construction, and the small quantities of iron-working slag recovered in this area may also suggest some small-scale Post-Medieval / Early Modern industrial activity. Overall, however, it appears that subsequent to the withdrawal of Rome, the site of the modern-day STW has remained in continued agricultural use.

## 5 CONCLUSION

The watching brief at Andoversford STW identified a number of archaeological features, including occupation / cultivation layers, a limestone concrete surface and associated wall footing, vestiges of a second stone wall or surface, possible ditches, pits and postholes, as well as a quantity of Roman and Post-Medieval pottery and other material finds. Both features and finds were suggestive of on-site activity throughout the Roman period, with a focus during the 2<sup>nd</sup> and 3<sup>rd</sup> centuries. A background level of Iron Age and Post-Medieval / Early Modern occupation was also in evidence.

The small number of archaeological features identified during the watching brief, means that the overall impact of the STW development on the local heritage resource was low. However, the significance of the findings, in conjunction with those of the 1990s excavations, may be heightened due to their association with the scheduled Roman town of Wycomb. It is also worth noting that, due to the construction methodology adopted, only a comparatively small proportion of the STW was investigated. Given both the results of the watching brief, and the richness of the local archaeological record, further Roman features almost certainly exist within the compound.

Successful completion of the watching brief at Andoversford STW, the data and interpretations presented in this report, and the submission of the project archive satisfy the stated project objectives (section 1.6).

## 6 ARCHIVE

The documentary archive comprises:

- a copy of this report
- relevant and non confidential documents and correspondence relating to the site held by Network Archaeology
- original notes relating to the finds or post excavation assessments
- site records, as detailed in the table below:

**Table 6.1 Archive summary**

<b>Archive</b>	<b>Count</b>
<b>Number Record</b>	1
<b>Context Registers</b>	7
<b>Context Sheets</b>	93
<b>Drawing Registers</b>	2
<b>Drawing Sheets</b>	14
<b>Sample Registers</b>	1
<b>Sample Sheets</b>	10
<b>Special Finds Registers</b>	1
<b>Photographic Registers</b>	5
<b>Black and White Photographs</b>	99
<b>Colour Slide Photographs</b>	8
<b>Digital Photographs</b>	273
<b>Plan drawings</b>	9
<b>Section drawings</b>	32

Corinium Museum, Park Street, Cirencester, Gloucester, GL7 2BX (telephone number: 01285 655 611) will receive the archive generated from the archaeological work. The Accessions Number for this project will not be issued until the point of deposition.

Prior to the deposition of the archive, the necessary arrangements will be made with the site owners regarding the transfer of ownership of any archaeological finds to Corinium Museum.

In the event that deposition of the archive cannot be concluded, Network Archaeology will store the archive to a suitable standard until deposition can be arranged. In this event, Network Archaeology will retain ownership of the document archive until the document archive and its ownership are passed to Corinium Museum, or until a suitable alternative repository can be found.



## 7 ACKNOWLEDGEMENTS

Network Archaeology Ltd. would like to thank the following for their contribution to the project:

Organisation	Name	Position	Contribution
Black & Veatch	Paul Gibbs	Environmental Scientist	Client project management
	Richard Featherstone	Sub-Agent	Client project management
Freelance	Paul Courtney	Specialist	Post-Roman Pottery analysis and reporting
Freelance	Val Fryer	Specialist	Environmental analysis and reporting
Freelance	Rachel Hall	Specialist	CBM, fired clay and plaster analysis and reporting
Freelance	Kevin Leahy	Specialist	Metalwork and glass analysis and reporting
Freelance	Jane Timby	Specialist	Roman pottery analysis and reporting
Freelance	Jennifer Wood	Specialist	Animal bone analysis and reporting
Gloucestershire CC Environment Directorate	Charles Parry Senior	Archaeological Officer	Independent review & monitoring
Network Archaeology	David Bonner	Company Director	Archaeological project management
	Chris Morley	Project Supervisor / Reports Officer	Watching brief, archive consolidation, report compilation
	Jacqueline Harding	Illustration Officer	Report figures (CAD)
	Adam Holman	GIS Officer	Report figures (GIS)
	Mike Wood	Acting Finds Officer	Finds processing and specialist liaison; clay pipe analysis and reporting
Thames Water Utilities	Claire Hallybone	Heritage Advisor	Client review

## 8 REFERENCES

Author	Year	Title	Journal/Publisher
ACAO	1993	Model briefs and Specifications for Archaeological Assessments and Field Evaluations	ACAO
Adam, J-P. & Matthews, A.	1994	Roman Building	Indiana University Press
Allen, J. L. & Holt, A. St-J.	1986 (with later updates)	Health & Safety in Field Archaeology	Standing Conference of Unit Managers, London
Aylesbury Vale District Council	2009	Planning Application: 09/01356/APP	Planning application 2009
Brown, N. & Glazebrook, J.	2000	Research and Archaeology: A Framework for the Eastern Counties – 2 Research Agenda and Strategy	East Anglian Archaeology Occasional Paper 8
Buckinghamshire County Archaeological Service	2007	The Solent Thames Archaeological Research Framework, covering the counties of Berkshire, Buckinghamshire, Oxfordshire, Hampshire and the Isle of Wight	STRF's web pages, hosted by Bucks CC
Department for Communities and Local Government	2010	Planning Policy Statement 5: Planning for the Historic Environment	<a href="http://www.communities.gov.uk/documents/planningandbuilding/pdf/1514132.pdf">http://www.communities.gov.uk/documents/planningandbuilding/pdf/1514132.pdf</a>
EAA	2005	Standards for Field Archaeology in the East of England	Occasional Paper 14
English Heritage	1991	The Management of Archaeological Projects, 2nd edition	London
English Heritage	1999	Guidelines for the care of waterlogged archaeological leather	<a href="http://194.164.61.131/default.asp?wci=WebItem&amp;CE=558">http://194.164.61.131/default.asp?wci=WebItem&amp;CE=558</a>
English Heritage	1997	Sustaining the historic environment: new perspectives on the future	English Heritage
English Heritage	2002	Environmental Archaeology: A	English Heritage

		Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-Excavation	
English Heritage	2008	Historic Town Assessment Report	Consultation report
Ferguson, L. M. & Murray, D. M.	1997	Archaeological Documentary Archives: Preparation, Curation and Storage, Paper 1	Institute of Field Archaeologists' Manchester
Harris, E.	1993	Principles of Archaeological Stratigraphy	Academic Press
Hoyle, J.	1992	Note on Andoversford Sewage Treatment Works Excavations, Archaeological Review 1991: Andoversford	Glevensis 110: 214
HSE	2002 (As amended)	Control of Substances Hazardous to Health Regulations (COSHH)	Government legislation
HSE	1994	Construction (Design and Management) Regulations	Government legislation
HSE	1974	Health and Safety at Work Act	Government legislation
IFA	2008 (194, revised 2001)	Standard and guidance for the collection, documentation, conservation and research of archaeological material	IfA guidance document
IFA	2008 (194, revised 2001)	Standard & Guidance documents (Desk-Based Assessments, Watching Briefs, Evaluations, Excavations, Investigation and Recording of Standing Buildings, Finds, Waterlogged Wood)	IfA guidance document
IFA	2008 (194, revised 2001)	Code of Conduct	IfA guidance document
IFA	2000b	Code of Approved Practice for the Regulation of Contractual Arrangements in Field Archaeology.	IfA guidance document
Lawrence, W. L.	1864	Roman Remains at Wycomb	Excavations reported in two articles: 1) Proceedings of the Society of

			Antiquaries (June): 1-5; 2) The Gentleman's Magazine
MGC	1992	Standards in the Museum Care of Archaeological Collections	Museums and Galleries Commission London
Network Archaeology	2006 (2003, revised 2004, 2005, 2006)	Health, Safety and Welfare Policy	Internal document
O'Neil, H. E.	1952	Whittington Court Roman Villa, Whittington, Gloucestershire	Transactions of the Bristol and Gloucestershire Archaeological Society 71: 13-87.
O'Neil, H. E.	1959	Wycombe Roman Site, Andoversford	Transactions of the Bristol and Gloucestershire Archaeological Society 78: 161- 162.
Rawes, B.	1980	The Romano-British Site at Wycomb, Andoversford: Excavations 1969-1970	Transactions of the Bristol and Gloucestershire Archaeological Society 98: 11-56.
Soil Survey of England and Wales (SSEW)	1983	Soils of England and Wales; Sheet 5, South West England	Scale 1:250,000
Society of Museum Archaeologists	1995	Towards an accessible archaeological archive - the transfer of archaeological archives to museums: guidelines for use in England, Northern Ireland, Scotland and Wales	Society for Museum Archaeologists, London
Walker, K.	1990:00:00	Guidelines for the preparation of excavation archives for long-term storage.	United Kingdom Institute for Conservation, Archaeology Section (London)
Wantner, A.	1714	History of Gloucestershire.	Microfilm manuscript

			M2/2GSMF213. Gloucestershire Archives.
Watkinson, D. & Neil, A. V.	1998	First Aid for Finds	Rescue Publications, Hertford

**APPENDIX A**

# **Rapid Assessment**

## Rapid desk-based assessment

The proposed development area (PDA) was the subject of a rapid archaeological desk-based assessment, the results of which were presented within the Written Scheme of Investigation (Network Archaeology 2010).

Background archaeological data up to 500m from the STW was collected from the following sources:

- Gloucestershire County Council Sites and Monuments Record;
- English Heritage's Schedule of Ancient Monuments of England, Register of Historic Battlefields, Register of Parks and Gardens of Special Historic Interest in England and World Heritage Sites;
- National Monuments Register's Monarch database of registered archaeological sites and Events database of archaeological works; and
- RCHME's aerial photographic survey (1994)

Additional documentary research included:

- Hoyle, J. 1992. Note on Andoversford Sewage Treatment Works Excavations, *Archaeological Review 1991: Andoversford, Glevensis 110: 214.*
- Lawrence, W. L. 1864. Roman Remains at Wycomb. Excavations reported in two articles: 1) *Proceedings of the Society of Antiquaries (June): 1-5;* 2) *The Gentleman's Magazine (October): 1-3.*
- O'Neil, H. E. 1952. Whittington Court Roman Villa, Whittington, Gloucestershire, *Transactions of the Bristol and Gloucestershire Archaeological Society 71: 13-87.*
- O'Neil, H. E. 1959. Wycombe Roman Site, Andoversford. *Transactions of the Bristol and Gloucestershire Archaeological Society 78: 161-162.*
- Rawes, B. 1980. The Romano-British Site at Wycomb, Andoversford: Excavations 1969-1970, *Transactions of the Bristol and Gloucestershire Archaeological Society 98: 11-56.*
- Wantner, A. 1714. *History of Gloucestershire.* Microfilm manuscript M2/2GSMF213. Gloucestershire Archives.

## Summary of archaeological findings

The development area is located on the periphery of Wycomb Roman town, a scheduled ancient monument (SM 31927 and SM 54). Original mid-nineteenth century excavations by Lawrence revealed much of the central town, including substantial stone-built structures, pavements and tombs. These remains now lie beneath the relict railway embankment north-east of the PDA.

Subsequent large-scale excavation, prior to construction of the A40 Bypass, revealed a concentration of Roman activity to the south of the PDA, while further Roman features were discovered within the PDA itself during refurbishment works in 1991.

The potential for Roman archaeology to be encountered during the present development was assessed as being very high. Potential for Post-Medieval / Early Modern archaeology was also considered high, while a moderate potential was expressed for later prehistoric and medieval remains.



## **APPENDIX B**

# **Table of contexts**

Context Number	Type	Filled by	Fill of	Description	Interpretation
1000	Layer	n/a	n/a	Mid to dark brown friable loam, limestone chips	Topsoil
2000	Layer	n/a	n/a	Mid to dark brown friable loam, limestone chips	Topsoil
2001	Layer	n/a	n/a	Cream Type 1 gravels	Former gravel surface
3000	Layer	n/a	n/a	Mid grey-brown moist firm silty clay	Topsoil
3001	Cut	3002	n/a	Fairly shallow, uneven sides and uneven base; not seen in plan but poss sub-circular, 1.26m wide x 0.36m deep	Possible pit
3002	Fill	n/a	3001	Mid-grey coarse firm sandy clay with limestone granules throughout, 0.36m thick	possible pit fill
3003	Cut	3004	n/a	Shallow, gently sloping southern edge and curving base; not seen in plan but poss linear, 1.15m wide x 0.15m deep	Possible linear ditch
3004	Fill	n/a	3003	Dark brown firm coarse sandy clay with limestone granules throughout, 0.15m deep	possible ditch fill
3005	Cut	3006	n/a	Steep southern edge, sloping northern edge and an uneven base, 1.54m wide x 0.60m deep	Possible pit
3006	Fill	n/a	3005	Light to mid grey firm coarse sandy clay with limestone granules throughout, 0.60m thick	Primary fill of possible pit
3007	Fill	n/a	3005	Dull light blue-grey firm coarse sandy clay with limestone granules throughout, 0.14m	Secondary fill of possible pit
3008	Cut	3009	n/a	Steep southern edge, moderately sloping northern edge; base not revealed; not seen in plan but prob linear, 1.96m wide x 0.60m revealed depth	Probable linear ditch
3009	Fill	n/a	3008	Dark grey firm coarse sandy clay with patches of re-deposited natural and limestone granules throughout, 0.60m min depth	Fill of probable linear
3010	Cut	3011	n/a	Steep southern edge; northern edge and base not revealed; not seen in plan but prob linear, poss in excess of 3.65m wide x 0.95m min depth	Possible large linear ditch / quarry pit
3011	Fill	n/a	3010	Dark to mid grey firm coarse sandy clay with patches of re-deposited natural and limestone granules throughout, 0.65m thick revealed	backfill of possible quarry pit
3012	Layer	n/a	n/a	Yellow-brown coarse sandy gravel	Natural substrate
3013	Masonry	n/a	n/a	Small amorphous slabs of local honey-coloured oolitic limestone associated with the remains of a vertical Fe pipe, 1.15m wide x 0.50m revealed width	Remnant stone surface
3014	Masonry	n/a	n/a	Concrete surface	Concrete access road surface
3015	Cut	3016	n/a	Steep edges rounding into a flat base; not seen in plan but possibly linear, 1.0m wide x 0.40m thick	Possible gully
3016	Fill	n/a	3015	Dark grey firm silty clay with coarse sandy gravel granules throughout, 0.40m	Fill of possible gully

Context Number	Type	Filled by	Fill of	Description	Interpretation
				thick	
3017	Layer	n/a	n/a	Dark grey-brown friable silty clay with some sand inclusion, 0.22m thick	Possible cultivation layer
3018	Fill	n/a	3010	Dark-grey firm coarse sandy clay with patches of thick dark blue-grey clay and limestone granules throughout, 0.70m deep	Fill of possible quarry pit / large linear ditch / made ground
3019	Fill	n/a	3010	Orange-white re-deposited natural with streaks of grey-brown loose sandy clay, 0.60m deep	Final layer of fill in possible quarry pit
3020	Layer	n/a	n/a	Blue plastic sheet	Part of access track
3021	Layer	n/a	n/a	White Type 1 gravels	Part of access track
3022	Layer	n/a	n/a	Terram	Part of access track
3023	Layer	n/a	n/a	White Type 1 gravels	Part of access track
3024	Layer	n/a	n/a	Mid grey gravelly clay with patches of re-deposited natural and patches of thick blu and yellow mottled clay	Made ground
3025	Layer	n/a	n/a	Dull cream rounded stone chips, consistent size and appearance; loose	Stone packing around pipe
3026	Cut	3027	n/a	U-shaped	Modern pipe cut
3027	Fill	n/a	3026	Dark brown coarse sandy clay	Fill of modern pipe cut
4000	Masonry	n/a	n/a	Oolitic limestone concrete surface	Stone surface / foundation for structure
4001	Layer	n/a	n/a	Grey-brown sandy clay with patches of orange sandy gravel	Made ground
4002	Layer	n/a	n/a	Purple/burgundy Tyoe 1 gravels	Type 1 gravel surface
4003	Layer	n/a	n/a	Grey-brown sandy clay with patches of orange sandy gravel and grey clay	Made ground
4004	Cut	4003	n/a	Uneven W side + uneven base; E side not revealed if it exists	Poss. cut for mod. road / edge of concrete surface
4005	Layer	n/a	n/a	Terram	Terram
4006	Layer	n/a	n/a	Grey-brown sandy clay	Made ground
4007	Layer	n/a	n/a	Sand and gravel	Natural substrate
4008	Layer	n/a	n/a	Mid to dark brown silty clay; firm, 0.46m max thickness	Former / remnant subsoil
4009	Layer	n/a	n/a	Grey-brown loam topped with grass	Topsoil
4010	Masonry	n/a	n/a	Roughly hewn chunks of oolitic limestone in a linear arrangement, mortared to underlying limestone concrete surface	Remains of stone wall
4011	Cut	4012	n/a	W-E oriented shallow linear gully; U-shaped, 2.95m min length x 0.85m width x 0.32m depth	Linear gully

Context Number	Type	Filled by	Fill of	Description	Interpretation
4012	Fill	n/a	4011	Grey-brown sandy clay; moist and friable	Fill of gully
4013				Void Context	
4014	Layer	n/a	4020	Modern tarmac surface	Tarmac surface
4015	Layer	n/a	4020	Red type 1 gravels	Modern surface layer
4016	Layer	n/a	4020	Terram	Modern surface layer
4017	Layer	n/a	4020	Pale type 1 gravels	Modern surface layer
4018	Layer	n/a	n/a	Grey sandy moist clay	Made ground
4019	Layer	n/a	n/a	Blue-grey silty clay; firm	Made ground
4020	Cut	4014, 4015, 4016, 4017	n/a	Near-vertical edge, flat base	Cut for mod. surface
5000	Layer	n/a	n/a	Grey-brown loam topped with grass	Topsoil
5001	Layer	n/a	n/a	Sand and gravel	Natural substrate
5002	Cut	5003	n/a	Linear in plan, with very shallow uneven sides and an uneven base in profile, 5.50m min length x 1.0m wide x 0.20m deep	Poss. base of linear ditch
5003	Fill	n/a	5002	Mid-brown sandy clay with chunks of gravel, 0.20m deep	Fill of poss. linear
5004	Cut	5005	n/a	Sub-circular in plan, uneven sloping NE side, uneven near-vertical SW side and uneven base in profile, 0.52m wide x 0.36m deep	Small pit / posthole
5005	Fill	n/a	5004	Mid-brown sandy clay; friable, 0.36m thick	fill of small pit / posthole
5006	Cut	5008, 5007	n/a	Sub-oval in plan, U-shaped with a flatish base in profile, 0.35m long x 0.30m wide x 0.28m deep	Posthole / small pit
5007	Fill	n/a	5006	Dark-mid brown sandy clay; friable, 0.13m deep	Secondary fill of prob. posthole
5008	Fill	n/a	5006	Murky sand and gravel; loose, 0.15m deep	Primary fill of prob. posthole
5009	Cut	5010	n/a	Linear in plan, 45 degree western side, eastern side and base not seen	Poss. linear ditch
5010	Fill	n/a	5009	Dark grey-brown sandy clay; friable, 0.41m thick	Fill of poss. linear ditch
6000	Layer	n/a	n/a	Grey-brown loam topped with grass	Topsoil
6001	Layer	n/a	n/a	Sand and gravel	Natural substrate
6002	Masonry	n/a	n/a	White concrete	Access road surface
6003	Layer	n/a	n/a	Blue plastic sheet	Part of access track
6004	Layer	n/a	n/a	Pale type 1 gravels	Part of access track

Context Number	Type	Filled by	Fill of	Description	Interpretation
6005	Layer	n/a	n/a	Terram	Part of access track
6006	Layer	n/a	n/a	Pale type 1 gravels	Part of access track
6007	Cut	6008	n/a	Sub-oval in plan, gradually sloping N side, steep S side and rounded base in profile, 2.30m wide x 0.40m deep	Poss. ditch terminus
6008	Fill	n/a	6007	Pale brown moist sandy clay, 0.40m deep	Fill of poss. ditch terminus
6009	Layer	n/a	n/a	Grey-brown loam topped with grass	Topsoil
6010	Layer	n/a	n/a	Grey-brown sandy clay with patches of orange sandy gravel	Made ground
6011	Layer	n/a	n/a	Dark grey-brown silty clay; friable, 0.38m max thickness	Possible occupation surface / garden soil
6012	Layer	n/a	n/a	Mid grey coarse sandy clay containing conspicuous smooth, flat grey stone chunks; gritty; firm; 0.42m max thickness	Possible occupation layer / former surface
6013	Cut	6010	n/a	Flat base, dropping steeply to the south in profile, 0.61m min depth	Possible terracing prior to laying of made ground
6014	Masonry	n/a	n/a	Concentration of oolitic limestone chunks and blocks, 1.20m wide x 0.39m deep	Remains of stone wall / stone surface
6015	Layer	n/a	n/a	Compacted orange, yellow, white, gravel, sand and stone, 0.14m thick	Poss. compacted gravel surface / indurated natural
6016	Fill	n/a	6019	Mid-brown clay; firm and conspicuously inclusion free, 0.57m thick	Clay packing around poss. wall / surface
6017	Fill	n/a	n/a	Dark grey-brown loam containing chunks of masonry; friable	Fill of modern pipe cut
6018	Layer	n/a	n/a	Pale orange sand, poss. assoc. with road construction	Modern sand
6019	Cut	6016, 6014	n/a	Plan + sides in profile not observed, flat base, 0.57m deep	Cut for wall / surface
7000	Layer	n/a	n/a	Dark blueish-grey, firm, plastic, silty clay	Natural clay, poss. stained by leaching
7001	Layer	n/a	n/a	Pale creamy yellow loose sandy gravel; very clean	Made ground / natural gravels
7002	Layer	n/a	n/a	Mid-dark brown fine sandy clay; friable	Topsoil
7003	Layer	n/a	n/a	Grey-brown sandy clay with patches of orange sandy gravel	Made Ground
7004	Void context				
7005	Layer	n/a	n/a	Light brown fine sandy clay; friable	Natural build up of sediment
7006	Layer	n/a	n/a	Mid-grey silty clay with orange streaks	Natural build up of sediment
7007	Layer	n/a	n/a	Dark grey silty clay; moist	Natural build up of sediment

<b>Context Number</b>	<b>Type</b>	<b>Filled by</b>	<b>Fill of</b>	<b>Description</b>	<b>Interpretation</b>
<b>7008</b>	Layer	n/a	<b>n/a</b>	Grey-brown clay	Re-deposited clay
<b>7009</b>	Layer	n/a	<b>n/a</b>	Mid-to-dark brown silty clay	Poss. subsoil

**APPENDIX C**

# **Matrices**

**Public footpath:**

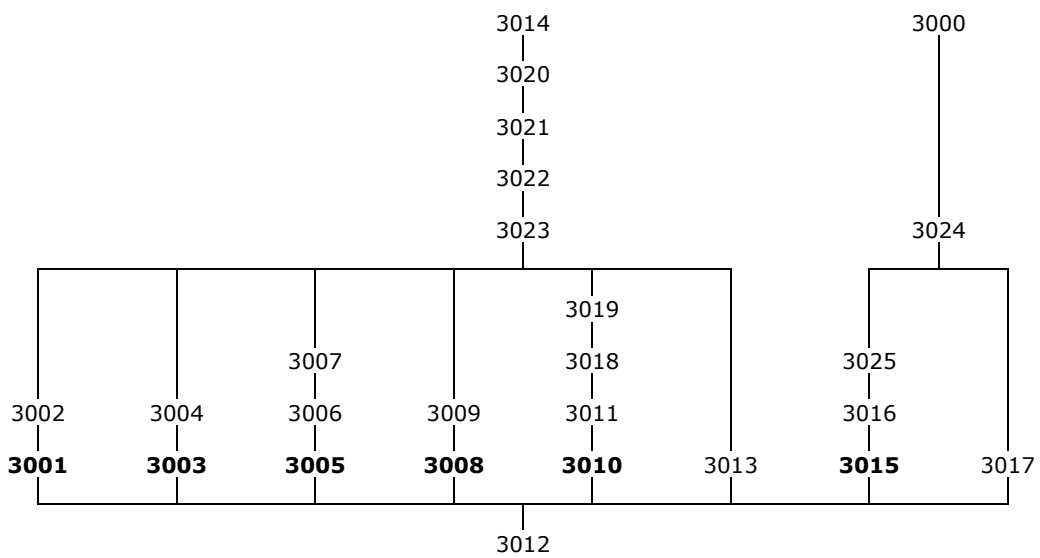
1000

**Contractors' compound:**

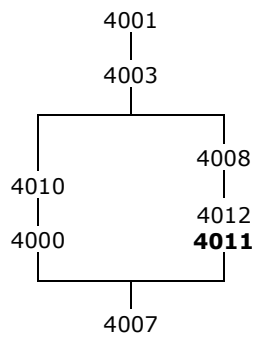
2000

2001

**Bypass pipeline trench:**

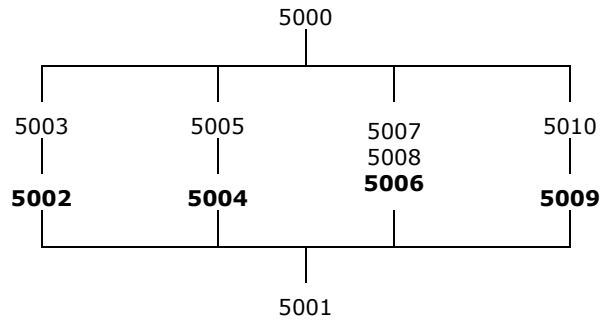


**Area of new SAF unit:**

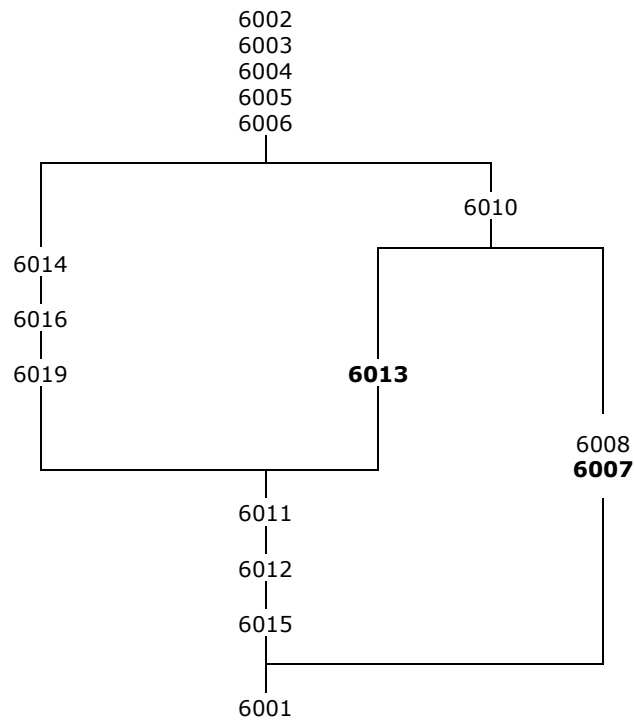




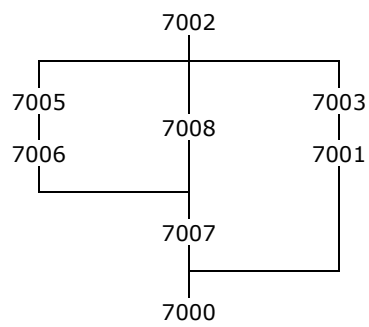
MCCA Area:



Wash-out pipe trench:



Area of new humus tank:



**APPENDIX D**

# **Specialist Reports**

## **Animal Bone**

*Jennifer Wood*

### **Introduction**

A total of 34 (140g) fragments of animal bone were recovered during archaeological monitoring works undertaken by Network Archaeology Ltd at the Andoversford Sewage Treatment Works, Gloucestershire. The remains were recovered from possible Roman ditches [3003], [5002], [6007], possible Roman post hole [5006], possible Roman surfaces (6011) and (6012). The remaining assemblages were recovered from topsoil and modern made ground deposits (4001), (4008), (6010) and (7002).

### **Results**

The remains were generally of a good to moderate overall condition, averaging between grades 2 and 3 on the Lyman criteria (1996). A single fragment of charred juvenile sheep/goat radius was recovered from (6008). A cattle mandible condyle recovered from (6010) displayed evidence of cut marks on the goneal angle below the condyle, consistent with disarticulation of the carcass. No evidence of gnawing or pathology was noted on any of the remains.

As can be seen from Table 1 (overleaf), the assemblage consists predominantly of Sheep/Goat and cattle remains, with a single fragment identified as pig. The remaining assemblage is unidentifiable to species beyond size category. From the features that are dated possibly from the Roman period sheep/goat remained the most predominant species. The skeletal elements within the assemblage appear to represent remains typically associated with butchery discard.

Due to the limited size of the assemblage, little further information can be gained, beyond the presence of the remains on site.

No further work is required on this assemblage.

### **References**

Lyman, R L, 1996 *Vertebrate Taphonomy*, Cambridge Manuals in Archaeology, Cambridge University Press, Cambridge

Table 1, Summary of Identified Bone

Cut	Context	Taxon	Element	Side	Number	Weight	Comments
3003	3004	Sheep/Goat	Humerus	L	1	12	Distal shaft fragment
N/A	4001	Cattle	Metatarsal	R	1	68	Proximal shaft, Bp=40
N/A	4008	Sheep/Goat	Tooth	R	1	2	Lower M1=g
5002	5003	Large Mammal Size	Skull	X	1	6	
		Medium Mammal Size	Long Bone	X	1	2	Shaft fragment
		Sheep/Goat	Metacarpal	L	1	6	Shaft fragment
5006	5007	Large Mammal Size	Long Bone	X	2	2	Shaft fragments
6007	6008	Sheep/Goat	Radius	L	1	2	Juvenile distal shaft, unfused, charred black
		Sheep/Goat	Humerus	L	1	7	Distal shaft, broken distal condyle
		Cattle	Tooth	L	1	11	Upper PM
N/A	6010	Cattle	Mandible	R	1	22	Mandibular condyle, knife cuts below the condyle
		Pig	Skull-occipital	L	1	12	
		Medium Mammal Size	Skull	X	2	5	
		Medium Mammal Size	Rib	X	1	<1g	Blade fragment
		Cattle	Metacarpal	L	1	38	Distal condyles, Dd=28mm, Bd=52mm
N/A	6011	Large Mammal Size	Skull-frontal	X	1	2	
N/A	6012	Unidentified	Unidentified	X	2	1	
N/A	6012	Large Mammal Size	Mandible	X	1	6	Body fragment
		Large Mammal Size	Long Bone	X	3	19	Shaft fragments
		Medium Mammal Size	Long Bone	X	1	1	
		Sheep/Goat	Innominate	R	1	5	Ilium fragment
		Unidentified	Unidentified	X	3	22	
Large Mammal Size	Long Bone	X	2	3			
N/A	7002	Medium Mammal Size	Long Bone	X	1	4	Shaft fragment
		Sheep/Goat	Ulna	L	1	8	Proximal shaft, unfused

**CBM, Fired Clay & Plaster***Rachel Hall***CBM**

A total of 12 fragments of CBM, weighing 978g were recovered from seven contexts (see Table 1). The assemblage comprises 5 tile fragments, 1 brick fragment and 6 undiagnostic fragments. The fabrics are all coarse sandy and oxidised. The condition of the assemblage ranges from fair to poor.

Three fragments were recovered that date to the Romano-British period. An abraded roof tile, recovered from layer (4001), and two further undiagnostic fragments, from ditch [5002] and posthole [5006], which have similar fabrics.

The remaining assemblage comprises modern brick and tile fragments recovered from topsoil, made ground layers and ditch [3003].

**FIRED CLAY**

A total of 15 fragments of Fired Clay weighing 92g were recovered from six contexts (see Table 1). With the exception of one object, the assemblage comprises small and abraded, undiagnostic fragments.

The object was recovered from possible occupation surface (6011/6012). It has three surfaces and an edge. It may possibly form part of a loomweight or kiln brick and may be Roman in date.

The fabrics are all coarse sandy and oxidised, with sparse organic and flint inclusions. The condition of the assemblage ranges from fair to poor.

**WALL PLASTER**

Five fragments of wall plaster were recovered from topsoil (4000) and the remains of a stone wall (6012/6014). All fragments have large sub-rounded flint and Iron Oxide inclusions in a sandy/limestone matrix. The three fragments from (4000) have rough surface. The two pieces from (6012/6014) have the remains of red paint along one edge and both have two surfaces and an edge. They are in fair condition but otherwise are undiagnostic. They possibly date to the Romano-British period.

### Recommendations

The small amount of material offers little potential for further research. No further work is required.

Context	Material	Form	Number	Weight (g)	Date
1000	CBM	Tile	1	16	Modern
3004	CBM	Undiagnostic	1	22	Modern
3024	CBM	Undiagnostic	1	8	Modern
4001	CBM	tile	1	25	Roman
4001	CBM	Undiagnostic	2	12	Modern
4001	CBM	Tile	3	100	Modern
5003	CBM	Undiagnostic	1	3	Roman
5007	CBM	Undiagnostic	1	3	Roman
4008	Fired Clay	Undiagnostic	1	1	Undated
5000	Fired Clay	Undiagnostic	2	7	Undated
6008	Fired Clay	Undiagnostic	4	16	Undated
6011/12	Fired Clay	Object	1	45	Undated
6012	Fired Clay	Undiagnostic	5	21	Undated
6012/6014	Fired Clay	Undiagnostic	2	2	Undated
4008	Fired Clay	Undiagnostic	1	1	Undated
4000	Wall Plaster	undiagnostic	3	251	undated
6012/6014	Wall Plaster	wall plaster	2	430	Roman
<b>TOTAL</b>			<b>32</b>	<b>1751</b>	

Table 1: Material by Context, Form, Number, Weight and Date.

## Clay Tobacco Pipe

Mike Wood BA (hons) MLitt MIfA

### Introduction

A clay tobacco pipe stem was recovered during a watching brief on land at Andoversford Sewage Treatment Works (AND16). The material was derived from topsoil (1000).

### Methodology

The material was counted and weighed in grams, then examined visually to identify any diagnostic pieces and the overall condition of the assemblage. Reference was made to published guidelines (Higgins & Davey 2004). A summary of the material is recorded in Table 1.

### Assemblage

Context	Deposit	Date range	Count	Weight	Stem Bore	Comments
1000	Topsoil	1760-1900	1	2	4/64"	plain stem, snapped at each end

Table 1: Clay tobacco pipe

### Discussion

Plain pipe stems are difficult to accurately date, though the bore diameter can be a useful guide, and in this case suggests the clay pipe is no earlier than mid 18<sup>th</sup> century in manufacture.

### Recommendations for further work

The material warrants no further work or illustration. The artefact is in a stable condition and requires no conservation.

### Reference:

Coleman, H, 1999, *The Art and Archaeology of Clay Tobacco Pipes*. Dawn Mist Studio

Higgins, D A & Davey, P J, 2004, 'Appendix 4: Draft guidelines for using the clay tobacco pipe record sheets' in S D White, *The Dynamics of Regionalisation and*

*Trade: Yorkshire Clay Tobacco Pipes c1600-1800*, The Archaeology of the Clay Tobacco Pipe, **XVIII**, British Archaeological Reports (British Series 374), Oxford, 487-490 (567pp)

Oswald, A, 1975 *Clay Pipes for the Archaeologist* BAR 14, Oxford



## Environmental Samples

*Val Fryer*

### Introduction and Method Statement

A watching brief at Andoversford, undertaken by Network Archaeology, recorded a limited number of features of possible Roman and later date. Samples for the evaluation of the content and preservation of the plant macrofossil assemblages were taken from post-hole [5006] (sample 003), from possible occupation surfaces [6011] and [6012] (samples 004 and 005 respectively) and from the fill of gully [4011] (sample 007), and four were submitted for assessment.

The samples were processed by manual water flotation/washover and the flots were collected in a 300 micron mesh sieve. The dried flots were scanned under a binocular microscope at magnifications up to x 16 and the plant macrofossils and other remains noted are listed in Table 1. Nomenclature within the table follows Stace (1997). All plant remains were charred.

The non-floating residues were collected in a 1mm mesh sieve and will be sorted when dry. Any artefacts/ecofacts will be retained for further specialist analysis.

### Results

All four assemblages are extremely small (<0.1 litres in volume) and although plant remains are recorded, the density of material is very low and most remains are very poorly preserved. Barley (*Hordeum* sp.) and wheat (*Triticum* sp.) grains are present within the assemblage from sample 007 and additional grains, which are too poorly preserved for close identification are noted within samples 005 and 007. A single fragmentary spelt wheat (*T. spelta*) glume base is also recorded from sample 007. Charcoal/charred wood fragments are present throughout, but at a very low density. Although some of the pieces of black porous and tarry material are possibly derived from the combustion of organic remains at very high temperatures, other pieces are very hard and brittle, and it is suggested that these are bi-products of the combustion of coal, fragments of which are common within the assemblage from sample 005. It is currently unknown whether these coal fragments are contemporary with the feature from which the sample was taken, or later contaminants. Other remains are scarce, although severely abraded bone fragments are recorded from samples 003 and 005.

### **Conclusions and recommendations for further work**

In summary, plant macrofossils are extremely scarce within these assemblages, and it would appear most likely that some or all of those recorded are in secondary contexts, being derived from either scattered or wind-blown refuse. The paucity of the assemblages may indicate that the excavated features were peripheral to any main foci of either domestic or agricultural activity during the Roman period.

Although the current assemblages are unusually sparse for samples of probable Roman date, they do illustrate that plant macrofossils are preserved within the archaeological horizon at Andoversford. Therefore, if further interventions are planned, it is suggested that additional plant macrofossil samples of approximately 20 – 40 litres in volume are taken from all well-sealed and dated contexts recorded during excavation.

### **References**

Stace, C. 1997. *New Flora of the British Isles*. Second Edition. Cambridge University Press

## Metalwork and Glass

*Dr Kevin Leahy, FSA, MIfA*

The finds were received in an as found condition and no radiographs were available at the time of initial examination. This archive consisted of 16 items of which 14 were iron, one was glass and one copper alloy coin. The iron objects were corroded, but relatively well preserved, although detail was hidden by corrosion products. The coin was in a good, patinated condition and the glass fragment appeared unchanged by burial.

Finds were examined at x10 magnification, sketched and described in detail. Materials were identified visually and dimensions were recorded using vernier callipers. Masses were obtained on an electronic balance to an accuracy of 0.01g.

### Discussion

With the exception of the Roman coin (1000) and possible exception of the glass fragment (6022a) none of the material recovered during this project could be dated. One of the nails (3024), while corroded, appears to be a modern wire nail which is appropriate for its context.

### Recommendations

It is not believed that any of the material recovered during this project requires any further analysis. The coin (1000) and the glass fragment (6022a) should be described in any report and, if usefully stratified, the iron objects should be summarised .

### Catalogue

<b>Context:</b>	(1000)	<1>
Material	Copper alloy	
Condition:	Patinated but good	
Description:	Coin, Obv. Diademed bust right: DN CONSTAN – TIVS PF AVG Rev. Horseman spearing a fallen soldier: FEL TEMP REPARATIO No mint mark: contemporary copy.	
Dimensions:	Diameter 18.3mm	
Mass:	2.00g	
Identification:	Nummus of Constantius II	
Dating of find:	AD 355 – 61, Reece Period 18	
Context description	Topsoil, modern	
Further action	None required	
<b>Context:</b>	(3024)	<>
Material	Iron	
Condition:	Corroded with much of its surface obscured by concretions.	

Description:	Iron nail, section hidden by corrosion but appears to have had a round section now 6.0mm diameter, head round/oval 11.7 x 9.2mm
Dimensions:	Length 107.5mm
Mass:	17.15g
Identification:	Nail, probably wire
Dating of find:	Recent?
Context description	Made ground, modern
Further action	None required
<b>Context:</b>	(5007) <>
Material	Iron
Condition:	Corroded but good
Description:	Nail, square sectioned shaft 5.5 x 5.5mm bent at 30 degrees, tapering to a point, no head
Dimensions:	Length 50.2mm
Mass:	6.57g
Identification:	Nail
Dating of find:	Not datable
Context description	Secondary fill of possible post-hole, ?Roman
Further action	None required
<b>Context:</b>	(6008) <>
Material	Iron
Condition:	Corroded, encrusted and exfoliating
Description:	Nail, shaft section unknown, but 5.0mm diameter, head obscured but now 10.0mm diameter
Dimensions:	Length 65.0mm
Mass:	6.56g
Identification:	Nail
Dating of find:	Not datable
Context description	Ditch terminus fill, ?Roman
Further action	None required
<b>Context:</b>	(6012a) <>
Material	Lump of slag
Condition:	Good, stable
Description:	Lump of slag in the shape of an irregular ball, black, vitreous, vesicular most surfaces broken but with some signs of flowing. No response to a magnet.
Dimensions:	54.6 x 52.8 x 44.3mm
Mass:	117.14g
Identification:	Blast furnace slag
Dating of find:	Early modern
Context description	Possible occupation surface, ?Roman
Further action	None required
<b>Context:</b>	(6012b) <>
Material	Glass
Condition:	Excellent, stable with no sign of iridescence
Description:	Body sherd from a glass vessel or bottle, curved in two planes suggesting a globular form with a radius of c. 40.0mm. Section varies between 1.8 – 2.0mm. Glass translucent, pale green with some bubbles in the fabric.
Dimensions:	22.6 x 22.0 x 1.8mm

Mass:	1.52g
Identification:	Sherd from a glass vessel
Dating of find:	While a later date is possible, this fragment could have come from a soda-glass vessel of Roman date. The absence of stylistic features however, prevents a more accurate dating.
Context description	Possible occupation surface, ?Roman
Further action	None required
<b>Context:</b>	(6012c) <>
Material	Iron
Condition:	Corroded with much of its surface obscured by concretions.
Description:	Ring with a flattened oval shape apparently made from 7.4mm diameter rod. The object appears to be twisted along its length.
Dimensions:	Length 48.7mm; Width 8.1mm; Thickness 7.4mm
Mass:	22.65g
Identification:	Link from a chain, the longitudinal twist would fit in with this interpretation
Dating of find:	Not datable
Context description	Possible occupation surface, ?Roman
Further action	None required
<b>Context:</b>	(6012d) <>
Material	Iron
Condition:	Corroded but generally good
Description:	Nail with a rectangular section 6.2 x 5.2mm tapering to a point. Head T shaped 10.3 x 5.2mm
Dimensions:	Length 65.8mm
Mass:	7.44g
Identification:	Cut, machine made, nail
Dating of find:	Post 1840
Context description	Possible occupation surface, ?Roman
Further action	None required
<b>Context:</b>	(6012e) <>
Material	Iron
Condition:	Corroded with some detail hidden by concretions
Description:	Nail with a rectangular section 8.9 x 5.0mm, point missing. Head off-set, 10.5 x 5.0mm
Dimensions:	Length 35.9mm
Mass:	6.64g
Identification:	Cut, machine made, nail
Dating of find:	Post 1840
Context description	Possible occupation surface, ?Roman
Further action	None required
<b>Context:</b>	(6012f) <>
Material	Iron
Condition:	Corroded with some detail hidden by concretions
Description:	Nail or tack with a tapering square section 3.8 x 3.8mm. Head obscured by corrosion but measures 7.4mm diameter
Dimensions:	Length 23.9mm
Mass:	1.24g
Identification:	Tack

Dating of find:	Not datable
Context description	Possible occupation surface, ?Roman
Further action	None required
<b>Context:</b>	(6012g) <>
Material	Iron
Condition:	Corroded with some detail hidden by concretions
Description:	Nail, point missing, shaft square 7.2 x 7.2mm, head obscured but measures 21.0 x 18.0mm and is now set at 30 degrees to shaft
Dimensions:	Length 49.7mm
Mass:	16.82g
Identification:	Nail
Dating of find:	Not datable
Context description	Possible occupation surface, ?Roman
Further action	None required
<b>Context:</b>	(6014a) <>
Material	Iron
Condition:	Corroded, encrusted and exfoliating
Description:	Nail, shaft section rectangular 6.2 x 4.3mm, T shaped head 10.7 x 6.8mm, shaft now bent suggesting that the nail has been pulled.
Dimensions:	Length 53.4mm
Mass:	7.90g
Identification:	Cut, machine made, nail
Dating of find:	Post 1840
Context description	Remains of stone wall, ?Roman
Further action	None required
<b>Context:</b>	(6014b) <>
Material	Iron
Condition:	Corroded, good
Description:	Nail, shaft section rectangular 5.2 x 4.7mm, shaft bent and truncated, head now oval 11.0 x 8.0mm
Dimensions:	Length 25.5mm
Mass:	3.35g
Identification:	Nail
Dating of find:	Not datable
Context description	Remains of stone wall, ?Roman
Further action	None required
<b>Context:</b>	(7002a) <>
Material	Lump of slag
Condition:	Good, stable
Description:	Lump of slag, egg-shaped, black, vitreous, vesicular most surfaces broken but with some signs of flowing. No response to a magnet.
Dimensions:	46.9 x 38.0 x 30.0mm
Mass:	70.46g
Identification:	Blast furnace slag
Dating of find:	Early modern
Context description	Topsoil, modern

Further action	None required
<b>Context:</b>	(7002b) <>
Material	Iron
Condition:	Corroded with much of its surface obscured by concretions.
Description:	Probably a nail, section concealed but c. 7.4mm diameter, slightly bent along length, possible 10.0mm diameter head at one end.
Dimensions:	Length 70.7mm; Diameter 7.4mm
Mass:	11.96g
Identification:	Nail
Dating of find:	Not datable
Context description	Topsoil, modern
Further action	None required
<b>Context:</b>	(7002c) <>
Material	Iron
Condition:	Corroded with much of its surface obscured by concretions.
Description:	Nail or wire fragment, section ?, no sign of a head, slightly bent along length
Dimensions:	Length 76.0mm; Diameter 6.0mm
Mass:	7.46g
Identification:	Nail?
Dating of find:	Not datable
Context description	Topsoil, modern
Further action	None required

## **Roman Pottery**

*Jane Timby*

### Summary

The archaeological work resulted in the recovery of 197 sherds of pottery dating to the Iron Age, Roman period and post-medieval periods. Sherds were recovered from 27 contexts / GPS locations. A significant proportion of the assemblage comprises redeposited finds in modern contexts. Roman wares dominate and suggest a focus of activity in the 2<sup>nd</sup> and 3<sup>rd</sup> centuries.

### **Introduction**

The archaeological watching brief at Andoversford Sewage works produced a small assemblage of some 197 sherds of pottery weighing 1.7 kg dating to the Iron Age, Roman and post-medieval periods. In addition to the pottery two fragments of fired clay and four pieces of ceramic building material were noted.

In general terms the assemblage was fairly poor condition, reflected in the overall average sherd weight of 9 g. The sherds were of mixed condition with one or two larger pieces but also several fragmented sherds some weighing less than 1 g. Preservation of surface treatments such as burnishing and slips was poor.

Pottery was recovered from 20 defined contexts and seven GPS locations with the individual quantities of pot recovered ranging from single sherds up to a maximum of 69 sherds from possible occupation surface (6011/6012/6014).

The assemblage was sorted into broad fabric groups based on inclusions present, the frequency and grade of the inclusions and the firing colour. Known regional or traded Roman wares were coded following the system advocated for the National Roman reference collection (Tomber and Dore 1998).

The sorted assemblage was quantified by sherd count and weight for each recorded context. Sherds which showed clear fresh fractures were counted as single pieces. The resulting data is summarized in Tables 1 and 2.



### Iron Age

Two sherds of redeposited pottery of Iron Age date and weighing 14.25 g were recovered both from the possible occupation surface (6011/6012).

The sherds comprise one coarse quartz sand-tempered bodysherd and one tiny fragment of fossil shell-tempered ware. Closer dating is not possible.

### Roman

Most of the assemblage dates to the Roman period, a total 188 sherds, weighing 1740 g. The main phase of occupation appears to span the 2<sup>nd</sup> to 3<sup>rd</sup>/4<sup>th</sup> centuries.

The group comprises a mixture of imported wares, both continental and regional, and local wares.

Continental imports include eleven sherds of samian distributed across nine contexts: ten of Central Gaulish origin and one extremely tiny piece of probable South Gaulish origin from (6012/6014). Most of the sherds are very small but featured sherds include a dish Dragendorff (Drag.) type 31 from (6012) and a large basesherd from a dish Drag. 18/31 from the same layer. This latter sherd has part of a broken centrally positioned potter's stamp reading TRI... The form suggests an early Hadrianic date.

Other continental imports are limited to six sherds of Baetican amphorae, probably all from Dressel 20 olive-oil amphorae. This is the commonest form of amphora to be imported into Britain in from the 1<sup>st</sup> to the 3<sup>rd</sup> centuries from Baetica, Southern Spain.

Regional imports include 14 sherds of Dorset and South-west black burnished ware. Vessels include a 2<sup>nd</sup> century-type jars from (6012) and (6010) and a plain-rimmed dish from GPS 12 (5000) but no obvious later products. There are nine sherds from products from the Oxfordshire industry with white-ware mortaria and colour-coated wares although in most cases these have lost their surface finishes. Other imports include two sherds of Savernake ware from North Wiltshire and single pieces of pink grog-tempered ware from the Midlands and south-west white-slipped ware. More locally sourced are 57 sherds of Severn Valley ware, with examples of wide-mouthed jars/bowls, jars with flaring, everted or bifid rims and tankard.

In addition to the pottery four small fragments of ceramic building material (CBM) weighing just 3.5 g and two small pieces of fired clay (2.5 g) were recovered. The CBM is too small to identify original form but is probably Roman in date.

### **Post-medieval**

Seven sherds of quite degraded post-medieval pottery are present, total 18.25 g. Five sherds were recovered from the topsoil /remnant subsoil (1000, 4008) and two sherds from the occupation layer (6012) and wall (6014).

The sherds include Nottingham stoneware, glazed red earthenware and industrial white earthenware suggesting a 19<sup>th</sup> century or later date.

### **Distribution**

Although there are one or two sherds potentially of 1<sup>st</sup> -century date most of the pottery suggests a phase of activity at the locality largely in the 2<sup>nd</sup>-3<sup>rd</sup> centuries.

Much of the pottery is redeposited in later modern deposits. This accounts for 56 sherds (28% of the assemblage) with a further 18 sherds (9%) from GPS locations.

Amongst the possible earlier features, based on the pottery present, are pit [3001] and possible ditch [3003] which might suggest a 2<sup>nd</sup>-century date. However, these features produced just single sherds so any dating cannot be regarded as very reliable and they could date to any time after this period. The six sherds from alluvial clay (7000) would also be consistent with a 2<sup>nd</sup>-century date.

Possible features dating to the 3<sup>rd</sup> century include gully [4011]; ditches [5002], [5007] and [7007]; occupation surface (6011/6012) and layer (7009). The stone wall (6014) has a mixture of 3<sup>rd</sup> century Roman sherds with two post-medieval pieces which may be intrusive or may be dating the feature.

### **Statement of potential**

This is an extremely small assemblage of pottery from a location where there is known to be an extensive Roman settlement. Iron Age activity in the area has also been attested (Timby 1998, 337 ff). The pottery is entirely consistent with that which might be expected from such a location and contains nothing of great merit. There are very few featured sherds.

No further work is recommended.

**References**

Timby, J R, 1998, *Excavations at Kingscote and Wycomb, Gloucestershire*, Cotswold Archaeol Trust

Tomber, R, and Dore, J, 1998, *The National Roman fabric reference collection: a handbook*, Museum of London / English Heritage/ British Museum

## **Post-Roman Pottery**

*Paul Courtney*

Twelve sherds were submitted for examination from this site east of Cheltenham in Gloucestershire. Eleven sherds were post-medieval wares of the late 16<sup>th</sup> century-20<sup>th</sup> century. In addition there was an extremely abraded sherd of Oxfordshire colour-coated ware of the 3<sup>rd</sup>-4<sup>th</sup> century.

## **Fabric Types**

### **DEWW Developed Whiteware**

A single sherd with black striped decoration is probably 20<sup>th</sup> century.

### **PEAW Pearlware.**

Blue tinged industrial white ware, c. 1780-1830. 1 sherd.

### **ORSW Oxfordshire Red/Brown-Slip Ware**

A single very abraded sherd in an orange to buff fabric with a abundant fine mica. The form is a a bowl with a foot-ring and has traces of red slip. 3<sup>rd</sup>-4<sup>th</sup> century product of the Oxfordshire area. (Potsherd website *sub* Oxfordshire Red/Brown-Slip Ware and N. Cooper, ULAS pers.comm.).

### **ROCK Rockingham ware**

This ware has a streaky brown glaze over a buff fabric. All six sherds come from a teapot. This inexpensive ware was widely used for jugs and teaware from c.1830-1930. Claney 2004.

### **STRE Stroat-Type Red Earthenware**

A single sherd from a bowl in a non-micaceous red earthenware with greenish-brown glaze. This ware occurs at Gloucester (TF97 ware) and a production centre identified at Stroat which appears to have shipped the ware up the Severn, Late 16<sup>th</sup>-17<sup>th</sup> century (Vince 1984, ch. 2).

### **WBRE Welsh Borders Red Earthenware**

**Red firing post-medieval earthenware with lead glazs and trace of slip decoration The fabric is finely micaceous suggesting an Old Red Sandstone source. This is Vince's Hereford A7d (Post-Medieval**

Welsh Borderland wares) which was made at various centres from the end of the 16<sup>th</sup> to early 18<sup>th</sup> centuries including Upton, Dymock, Whitney-on-Wye and Newent Glasshouse. The slip decoration suggests it is likely to be Newent ware of the late 17<sup>th</sup>- early 18<sup>th</sup> century. 1 sherd. (Vince 1977 and 1984, ch.2).

#### WSGS White Salt-Glazed Stoneware

This industrially produced whiteware was produced c.1695-1830 but the gray body of this vessel suggests a date in the early 18<sup>th</sup> century (Maryland website *sub* White Salt-Glazed Stoneware). 1 sherd.

#### References

Claney, J. P. 2004, Rockingham Ware in American Culture, 1830-1930: Reading Historical Artifacts, Lebanon, NH: UPNE.

Maryland website, Maryland Archaeological Conservation Laboratory's, *Diagnostic Artifacts in Maryland* web site.

[http://www.jefpat.org/diagnostic/Historic\\_Ceramic\\_Web\\_Page/Historic%20Ware%20Descriptions/white\\_salt\\_glazed.htm](http://www.jefpat.org/diagnostic/Historic_Ceramic_Web_Page/Historic%20Ware%20Descriptions/white_salt_glazed.htm) (accessed 25/7/2011).

Potsherd website: Tyers, P. *Potsherd: Atlas of Roman Pottery*, On web at <http://potsherd.net/atlas/Ware/SVW.html>. (accessed 25/7/2011).

Vince, A. 1977, *Newent Glasshouse: a late 16th and 17th century glasshouse and late 17th and 18th century pottery*. Bristol: CRAAGS Occasional Paper.

Vince, A. G. 1984, *The Ceramic Industry of the Severn Valley*, unpublished Ph.D. thesis, University of Southampton. Available online at:

<http://www.postex.demon.co.uk/thesis/thesis.htm> (accessed 25/7/2011).

## CATALOGUE

Context	Fabric	Sherd Nos	Wt g	Form
002	DEWW	1	10	Flattish sherd, perhaps from casserole dish decorated with black bands
002	ORSW	1	7	Red slipped bowl with footring, 3-4 century AD
4001	WSGS	1	43	Base of bowl
6008	ROCK	6	56	Teapot spout
6008	PEAW	1	2	Hollow ware, ?small bowl
6009	WBRE	1	15	Base, internally glazed, trace of slip.
7002	STRE	1	43	Bowl rim, internally glazed

**APPENDIX E**

# **Finds Catalogue**

Context	Animal Bone		CBM		Clay Pipe		Fired Clay		Glass		Metalwork		Plaster		Iron Age		Pottery		PMed / Emod	Total Count	Total Weight		
	C	W	C	W	C	W	C	W	C	W	C	W	C	W	C	W	C	W					
<b>1000</b>			1	16	1	2					1	2					14	139	5	20	22	179	
<b>3002</b>			1	1													1	5			2	6	
<b>3004</b>	1	12	2	23													1	0.25			4	35.25	
<b>3018</b>																	1	3			1	3	
<b>3024</b>			1	8						1	17						2	7			4	32	
<b>4001</b>	1	68	6	137										3	251		12	56	1	43	23	555	
<b>4008</b>	1	2					2	2									15	100	1	3	19	107	
<b>4012</b>																	4	340			4	340	
<b>5000</b>							2	7									8	59			10	66	
<b>5003</b>	3	14	1	3													10	24			14	41	
<b>5007</b>	2	2	1	3							1	7					9	7			13	19	
<b>6000</b>							4	16									2	7			6	23	
<b>6009</b>																	3	9	1	15	4	24	
<b>6010</b>	10	129									1	6					13	179	7	58	31	372	
<b>6011</b>	3	3	1	1			1	45								2	14	34	132			41	195
<b>6012</b>	11	56	1	1			8	24	1	2	6	172	2	430			32	490	1	3	62	1178	
<b>6014</b>											2	11					6	1	1	3	9	15	
<b>7000</b>																	6	11			6	11	
<b>7002</b>	2	12	1	789							3	90					8	81	1	43	15	1015	
<b>7007</b>																	1	3			1	3	
<b>7008</b>																	3	88			3	88	
<b>7009</b>																	4	7			4	7	
<b>Total</b>	<b>34</b>	<b>298</b>	<b>16</b>	<b>982</b>	<b>1</b>	<b>2</b>	<b>17</b>	<b>94</b>	<b>1</b>	<b>2</b>	<b>15</b>	<b>305</b>	<b>5</b>	<b>681</b>	<b>2</b>	<b>14</b>	<b>189</b>	<b>1748</b>	<b>18</b>	<b>188</b>	<b>298</b>	<b>4314.25</b>	

c = count, w = weight



**APPENDIX F**

# **Plates**



**Plate 1** Profile of residual subsoil 4008, north of 4000, 4010 and 4011 (buried)



**Plate 2** Profile of possible pit 3005 sitting directly below the access track



**Plate 3** Residual stone surface 3013, with associated iron pipe remnant



**Plate 4** Limestone concrete surface 4000



**Plate 5** Remains of wall 4010 atop surface 4000, with gully 4011 to the fore



**Plate 6** Sample of masonry recovered in association with concrete surface 4000



Plate 7 Overview of MCC area, with NW edge of ditch 5002 visible above scale

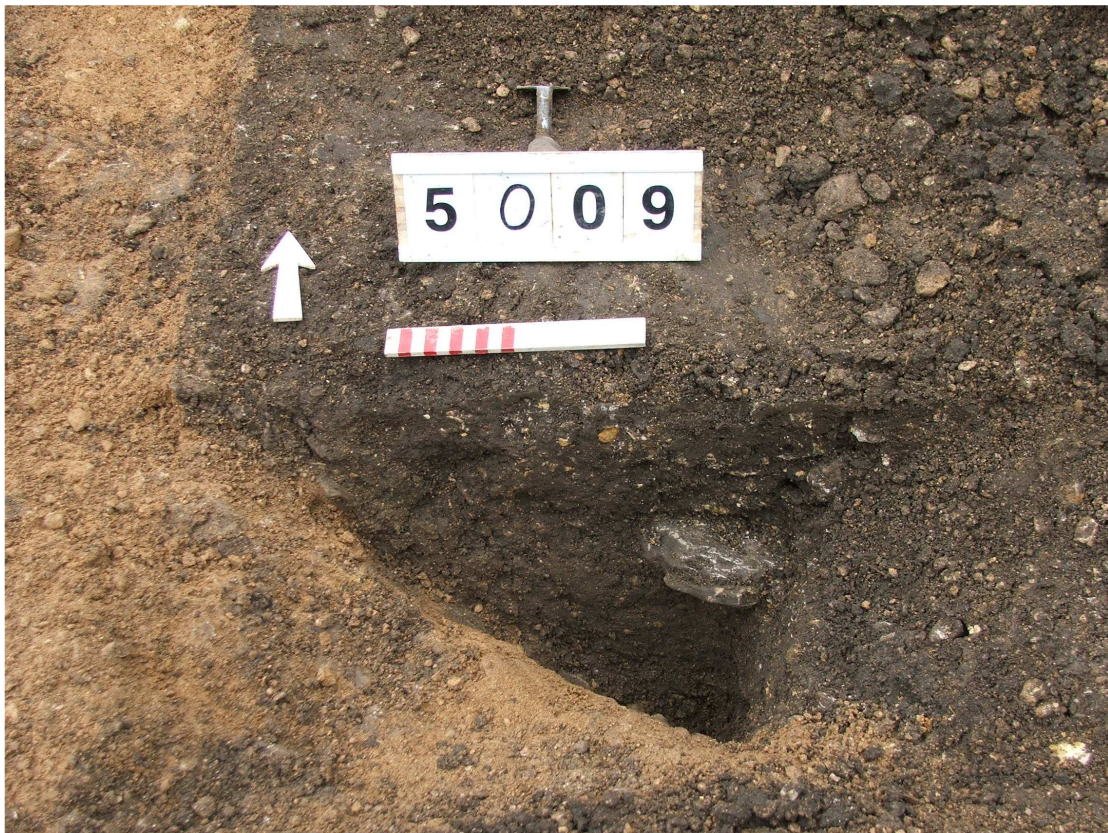


Plate 8 Profile of ditch 5009



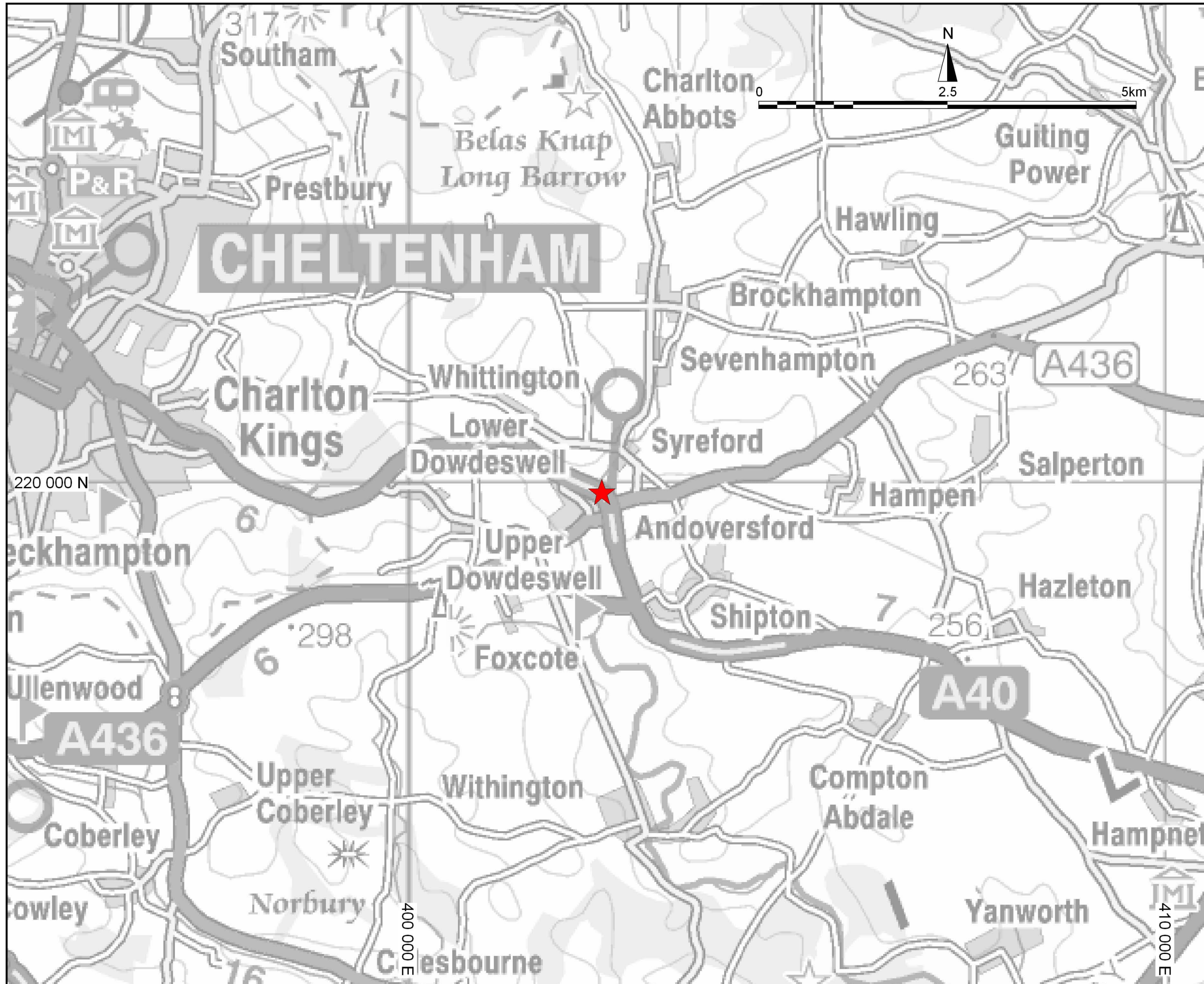
**Plate 9** Ditch terminus **6007**



**Plate 10** Layer 6012 below surface / wall 6014

**APPENDIX G**

# **Figures**



★ Development area

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1.00	12/09/11	First issue	SAF	CM	DB
Ver	Date	Description	Drn	Chk	App

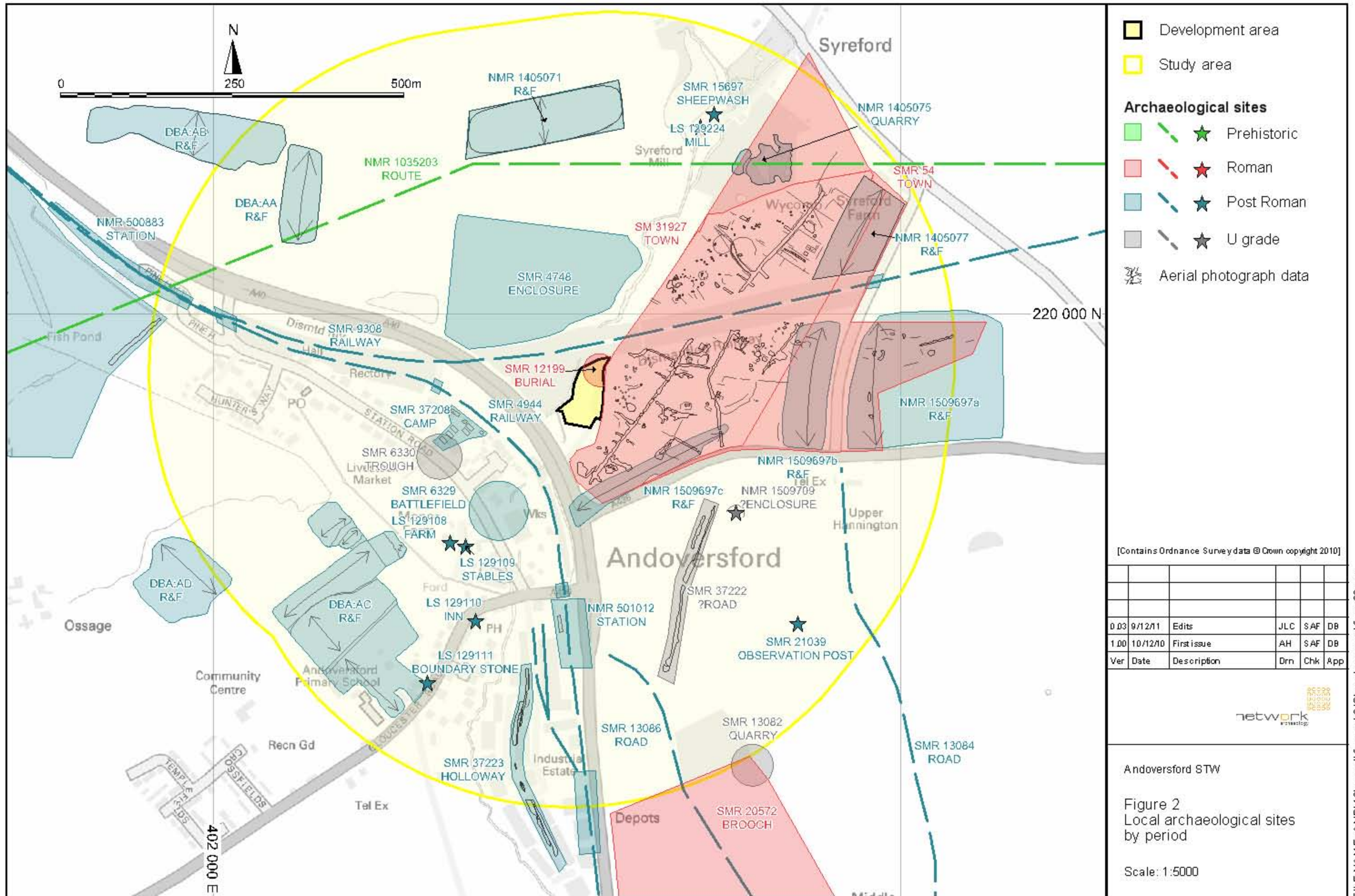


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Figure 1  
Location of development

Scale: 1:50 000







Watching brief areas

[Contains Ordnance Survey data © Crown copyright 2010]

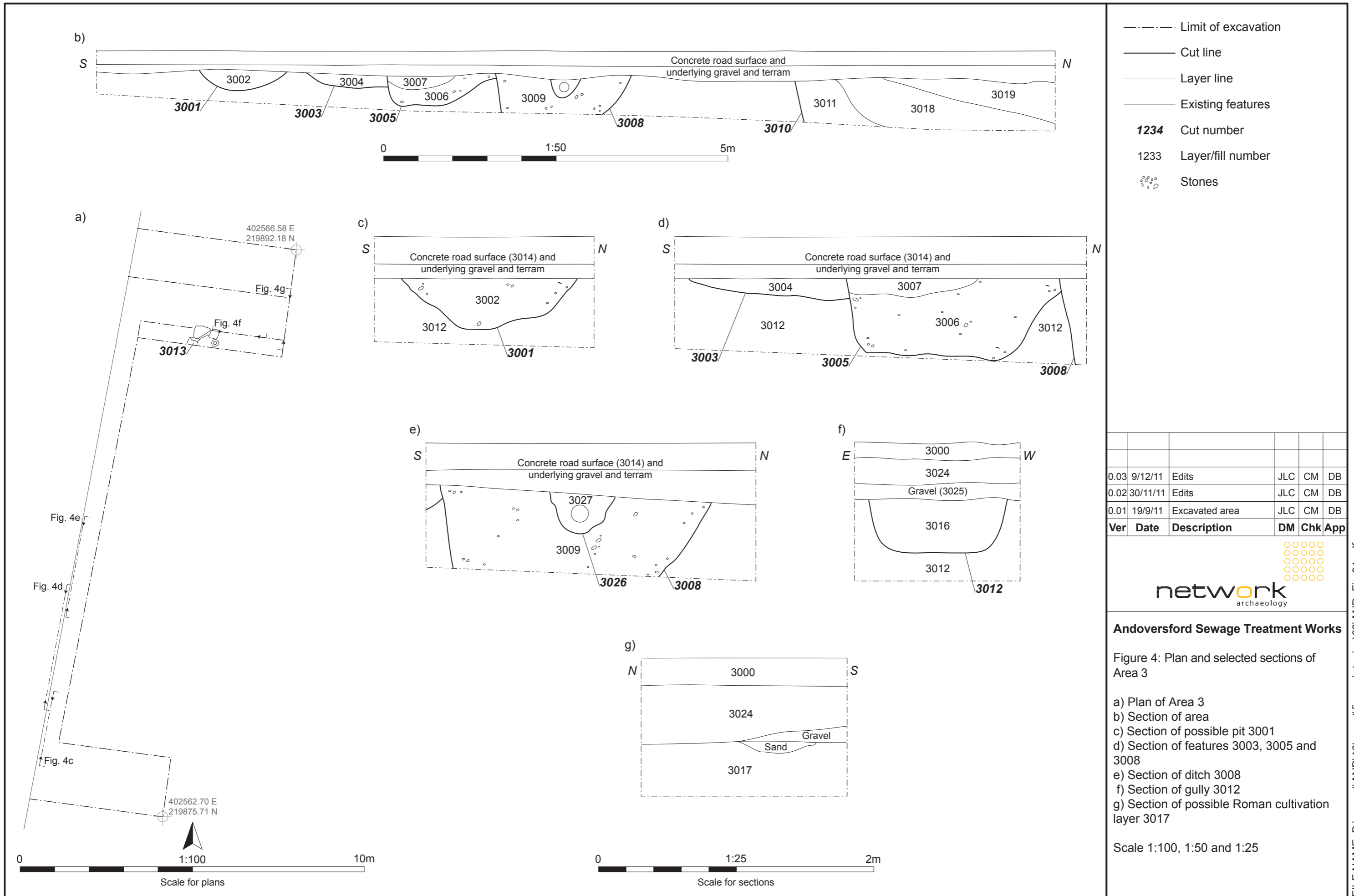
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0.02	30/11/11	Edits	JLC	CM	DB
1.00	28/11/11	First issue	JLC	CM	DB

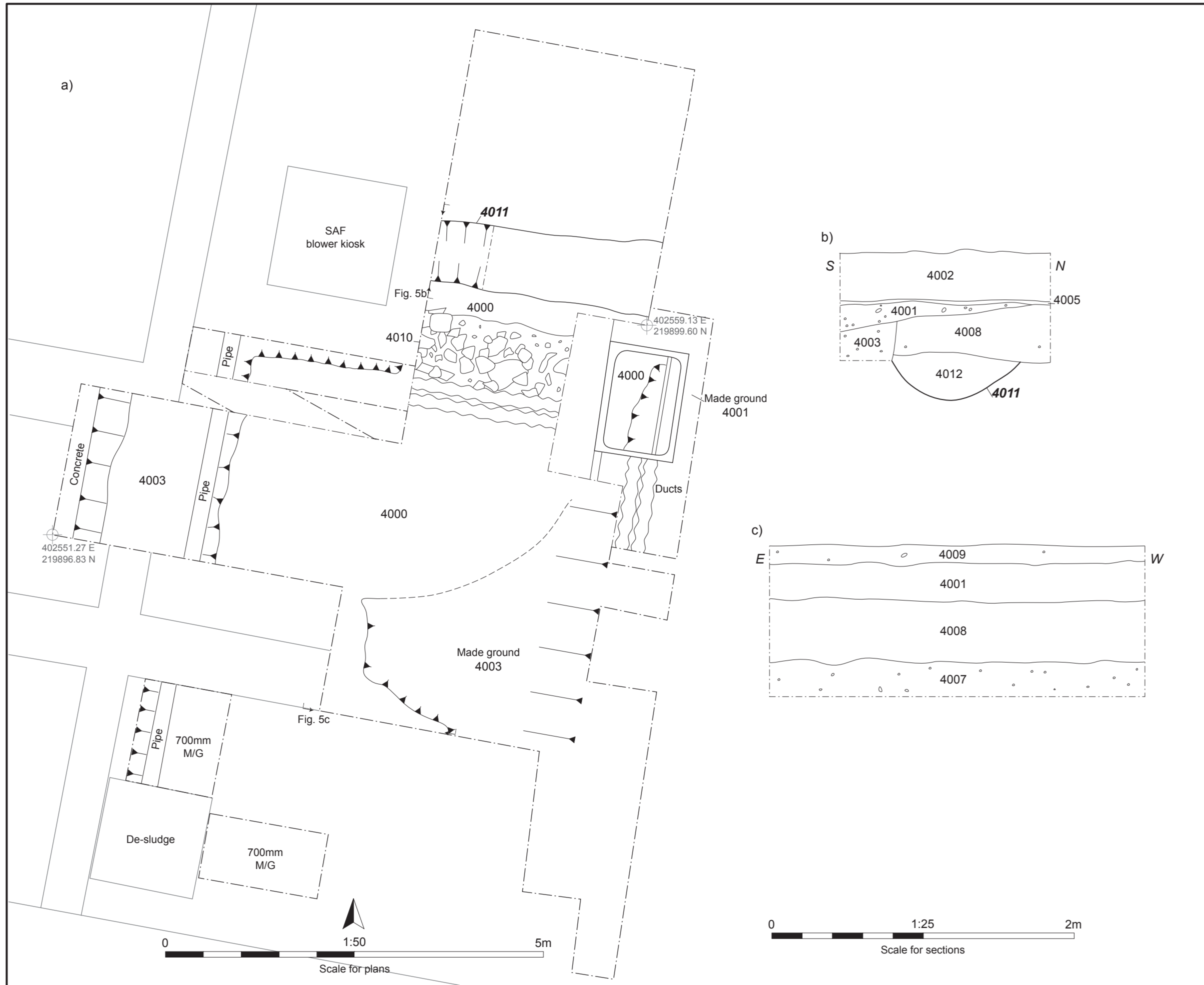


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Figure 3  
Location of watching brief areas  
in relation to the site

Scale: 1:500





- Limit of excavation
- Cut line
- Projected line
- Layer line
- Existing features
- 1234** Cut number
- 1233 Layer/fill number
- ☉ Stones

Ver	Date	Description	DM	Chk	App
0.03	9/12/11	Edits	JLC	CM	DB
0.02	30/11/11	Edits	JLC	CM	DB
0.01	20/9/11	Excavated area	JLC	CM	DB

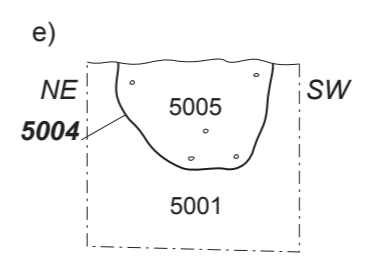
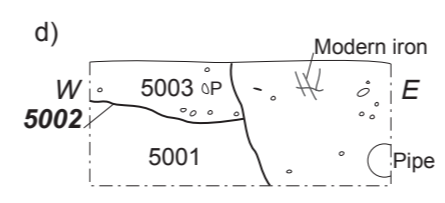
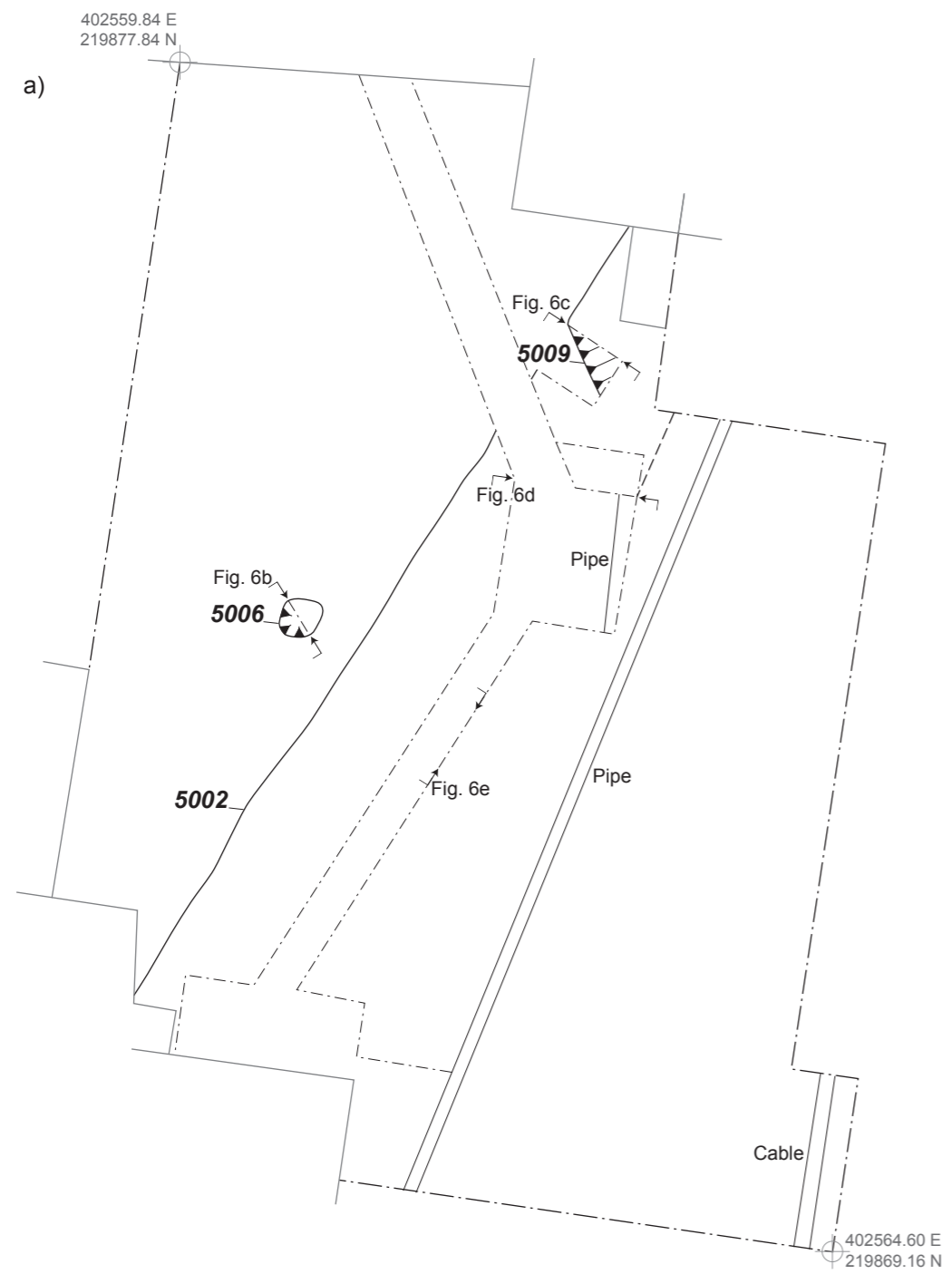


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Figure 5: Plan and selected sections of Area 4

- a) Plan of Area 4
- b) Section of Roman gully 4011
- c) Section of remnant subsoil 4008

Scale 1:50 and 1:25



- Limit of excavation
- Cut line
- Projected line
- Layer line
- Existing features
- 1234** Cut number
- 1233 Layer/fill number
- Stones
- P Pottery

Ver	Date	Description	DM	Chk	App
0.03	9/12/11	Edits	JLC	CM	DB
0.02	30/11/11	Edits	JLC	CM	DB
0.01	19/9/11	Excavated area	JLC	CM	DB

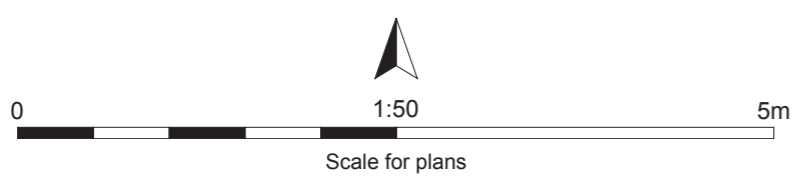


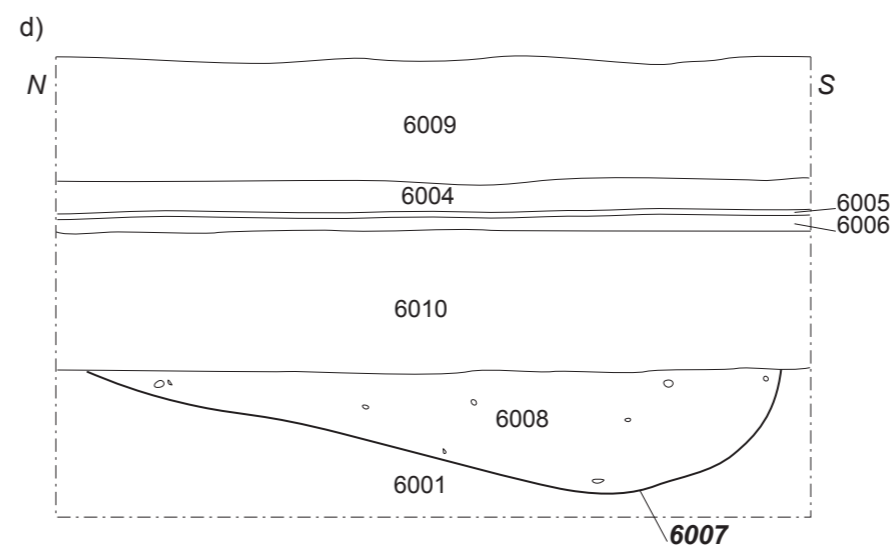
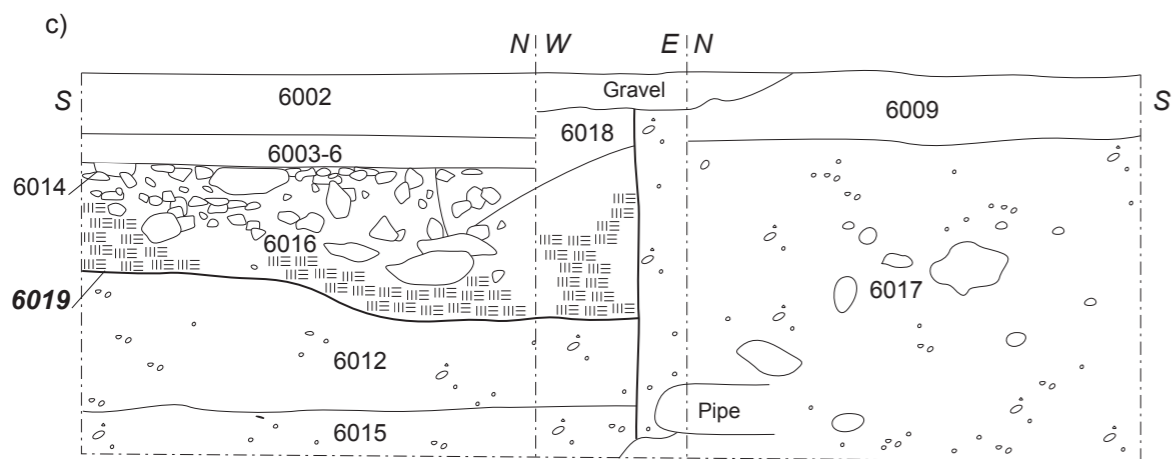
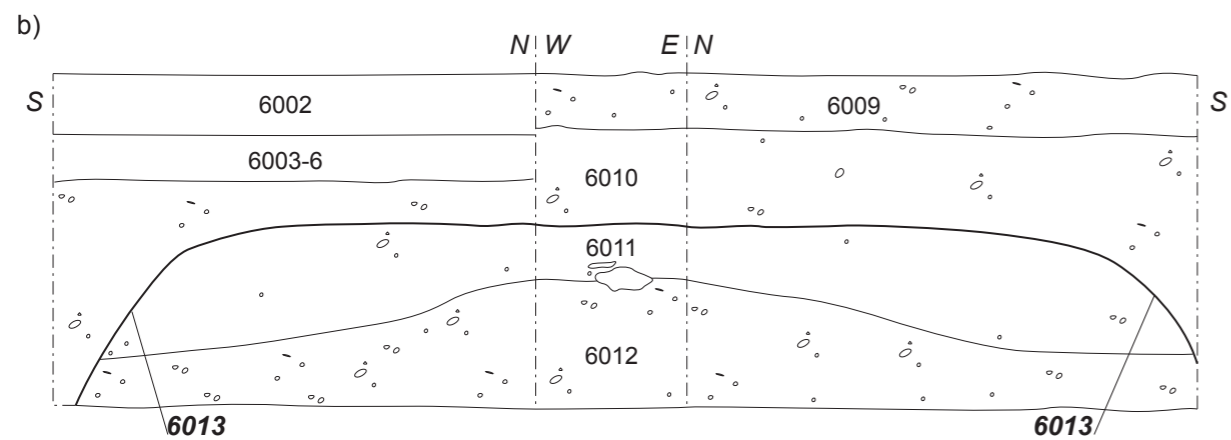
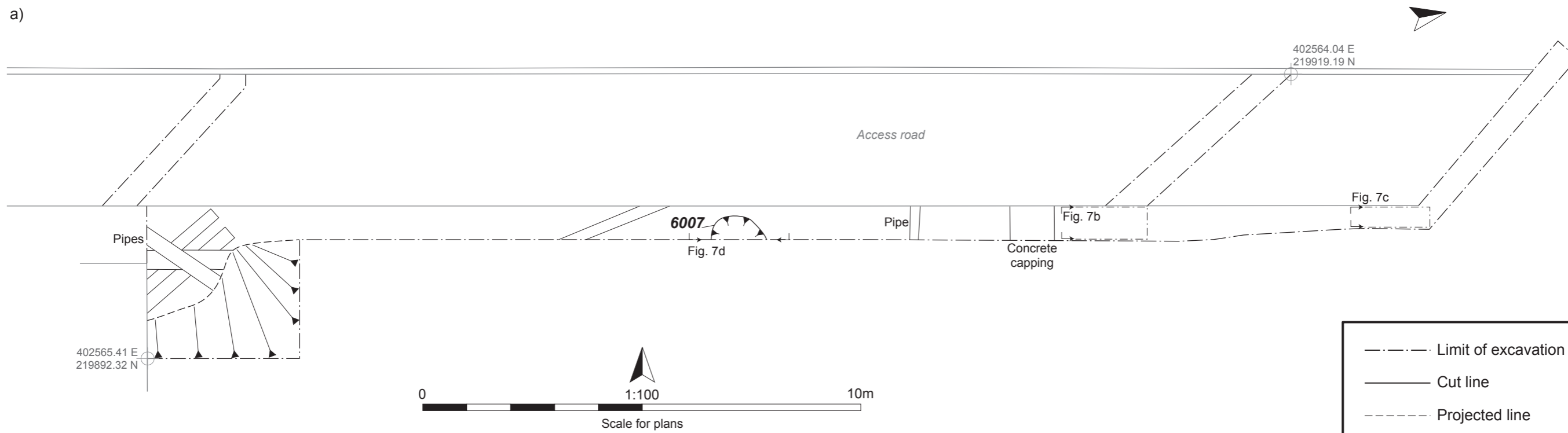
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Figure 6: Plan and selected sections of Area 5

- a) Plan of Area 5
- b) Section of posthole 5006
- c) Section of possible ditch 5009
- d) Section of possible ditch 5002
- e) Section of possible pit 5004

Scale 1:50 and 1:25





-----	Limit of excavation
—————	Cut line
-----	Projected line
—————	Layer line
—————	Existing features
<b>1234</b>	Cut number
1233	Layer/fill number
	Clay
o o o	Stones

Ver	Date	Description	DM	Chk	App
0.03	9/12/11	Edits	JLC	CM	DB
0.02	30/11/11	Edits	JLC	CM	DB
0.01	20/9/11	Excavated area	JLC	CM	DB

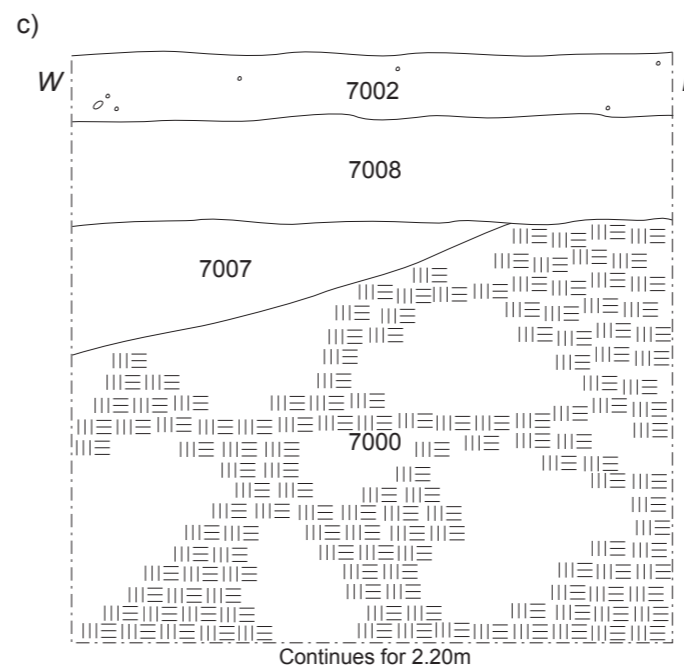
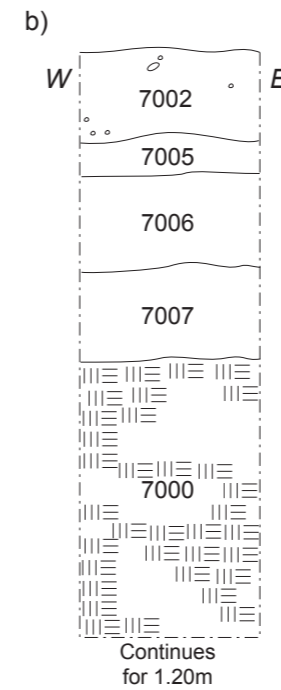
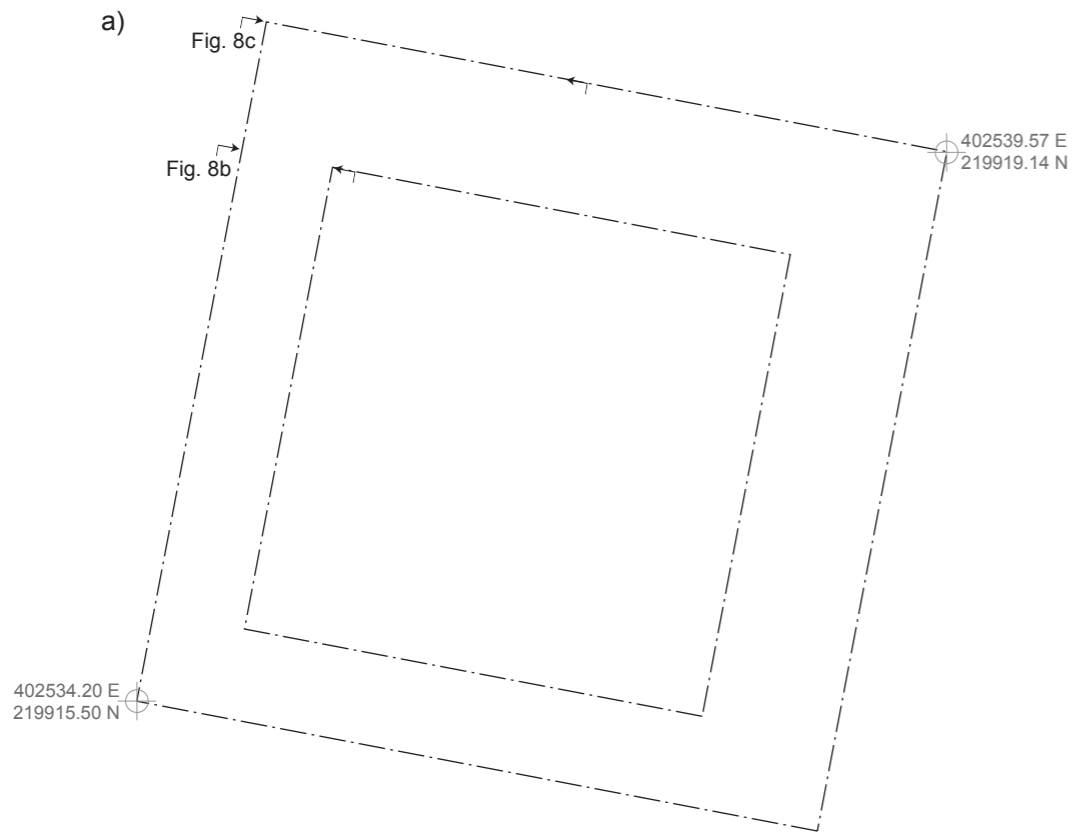


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Figure 7: Plan and selected sections of Area 6

- a) Plan of Area 6
- b) Section of layers 6011 and 6012
- c) Section of trench
- d) Section of possible Roman gully terminus 6007

Scale 1:100 and 1:25



- Limit of excavation
- Cut line
- Projected line
- Layer line
- Existing features
- 1234** Cut number
- 1233 Layer/fill number
- Stones
- ≡ Clay

Ver	Date	Description	DM	Chk	App
0.03	9/12/11	Edits	JLC	CM	DB
0.02	30/11/11	Edits	JLC	CM	DB
0.01	21/9/11	Excavated area	JLC	CM	DB



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Figure 8: Plan and selected sections of Area 7

- a) Plan of Area 7
- b) Section of layers 7005-7
- c) Section of layer 7007

Scale 1:50 and 1:25