

ARCHAEOLOGICAL
EVALUATION AT
LAND OFF SALTWAY,
DROITWICH,
WORCESTERSHIRE

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Illustrated by Carolyn Hunt

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Archaeological evaluation of land off Saltway, Droitwich, Worcestershire

Paul Williams, J Derek Hurst, Elizabeth Pearson, and Erica Darch

Part 1 Project summary

An archaeological evaluation was undertaken at land off Saltway, Droitwich, Worcestershire (NGR SO9009 6339), at the request of APP Partnership (Architects, Brighton; the agent) and on behalf of London and Truro Estates Ltd (the client). The developers intend to construct new retail premises with associated car parking and landscaping, for which a planning application has been submitted (W/01/1700). The project aimed to evaluate the nature, depth and physical survival of any significant archaeological remains or deposits within the area of investigation.

Deposits dating from the Roman to the modern period were encountered during the evaluation. The earliest remains comprised a pit cut into the clay natural, and this contained well preserved timber-work. It was probably a brine reservoir tank dating to the late Iron-Age or early Roman period.

A medieval layer incorporating industrial waste sealed the earlier remains, and this was associated with earlier finds suggesting that it may have resulted from cultivation. A cobbled surface partially spread across the area from the west in the later medieval period, and this was probably related to a lane joining the High Street to Hogg Lane, as shown on 17th century mapping and later known as Gurneys Lane,. Saltworking buildings and deposits of the 18th-19th century lay below layers of modern levelling debris at the top of the site sequence.

Part 2 Detailed report

1. Background

1.1 Reasons for the project

An archaeological evaluation was undertaken of land off Saltway (NGR SO 90096339; Fig 1) in Droitwich, at the request of APP Partnership (Architects, Brighton; the agent) and on behalf of London and Truro Estates Ltd (the client). The client intends to the development of a supermarket, and has submitted a planning application to Wychavon District Council (reference W/01/1700). It is considered that a site of archaeological interest may be affected (WSM 10586).

1.2 Aims

The purpose of the archaeological project in its entirety (ie the desk-based study and evaluation trenching) is to locate any archaeological deposits and determine, if present, their extent, state of preservation, date, type, vulnerability and documentation, and further to establish their significance.

1.3 Project parameters

The project conforms to *Standard and guidance for archaeological field evaluation* (IFA 1999). The project also conforms to a brief prepared by the Planning Advisory Section of Worcestershire County Council (CAS 2001), for which a project proposal (including detailed specification) was produced (CAS forthcoming).

A desk-based assessment (Hurst 2002) was carried out prior to the evaluation. The results of this determined the best possible location for the trench in order to adequately sample the archaeological remains.

2. Methods

2.1 Documentary search

Prior to the commencement of the fieldwork a search of the County Sites and Monuments Record was made and a desktop assessment undertaken by Worcestershire Archaeological Service (Hurst 2002). This was based on the following sources of information:

Cartographic sources

- Early OS map editions
- 17th century map of Droitwich
- late 18th century map of Droitwich

Documentary sources

- Geological mapping (BGS)
- Site archives (from earlier excavations, evaluations etc including bore-hole data).

2.1.1 Fieldwork strategy

Fieldwork was undertaken between 7th-10th January 2002. One trench, amounting to just over 27m² in area was excavated (Fig 2). The location of the trench is indicated in Figure 2 and was based on the results of the desk-based assessment (Hurst 2002).

There were no available benchmarks from which to establish a firm set of levelling data within the immediate vicinity, therefore, a temporary benchmark was established in the south-western corner of the car park. At the end of the fieldwork a benchmark was transferred from the telephone exchange in Queen Street a short distance away.

The tarmac car park surface and brick rubble-levelling layers were removed by a JCB utilising a 0.60m wide toothed ditching bucket. This was carried out under archaeological supervision. This operation exposed two lengths of concrete capped service pipe (125 and 126), which were probably associated with the adjacent pumping station. The southern-most pipe ran roughly northeast-southwest and the opposite pipe, seen only in the south facing section, ran east-west. The presence of these pipes greatly diminished the area available for investigation. It was originally envisaged that the trench would be staged down with 1m steps until a working area of 2x2m was created at the level of significant archaeology. This was based on the depth of archaeological deposits encountered in previous work within the vicinity as highlighted by the desk-based assessment (Hurst 2002). However, due to the diminished working area a different methodology was adopted. The sides were stepped on the north and east sides, and the west side was battered back. It was not possible to grade the south side in any way, and it was, subsequently, decided that for safety reasons no hand cleaning or recording would take place from within the southern half of the trench.

The subsequent excavation was carried out using a toothless 1m wide bucket, until non-significant deposits were completely removed. The trench was then cleaned by hand where safe to do so and deposits were recorded according to standard Service practice (CAS 1995). On completion of the evaluation, the trench was backfilled with the excavated material under the direction of the Wychavon District Council Engineer (Mr A Jones), who then took steps to reinstate the carpark surface.

2.1.2 Analysis

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

2.2 Artefact recovery policy

All hand retrieved finds were examined. A primary record was made of all finds on *pro forma* sheets. Artefacts were identified, quantified and dated. A *terminus post quem* was produced for each stratified context. Pottery was examined under x20 magnification and recorded by fabric type and form according to the fabric reference series maintained by the service (Hurst and Rees 1992).

2.2.1 Method of analysis

All hand-retrieved finds were examined. They were identified, quantified and dated to period. A *terminus post quem* was produced for each stratified context. The date was used for determining the broad date of phases defined for the site. All information was recorded on *pro forma* sheets.

Artefacts from environmental samples were also examined, and are reported upon in Appendix 3.

2.3 **Environment**

2.3.1 **Fieldwork and sampling policy**

The environmental sampling policy was as defined in the County Archaeological Service Recording System (1995 as amended). Large animal bone was hand-collected during excavation and samples of 20 litres taken from layers 111 and 113 of medieval and Roman date respectively. In the case of the sample from 113 the principal aim was to retrieve finds from it rather than any environmental remains, as excavation conditions were not suitable for the easy extraction of finds on site.

2.3.2 **Processing and analysis**

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

The residue was fully sorted by eye and the abundance of each category of environmental remains estimated. The flot was scanned using a low power EMT stereo light microscope and remains identified using modern reference collections housed at the County Archaeological Service.

2.3.3 **Processing and analysis**

The samples were processed by flotation followed by wet-sieving using a Siraf tank. The flot was collected on a 300µm sieve and the residue retained on a 1mm mesh. This allows for the recovery of items such as small animal bones, molluscs and seeds. The residues were partially or fully sorted by eye and the abundance of each category of environmental remains estimated. The flots were scanned using a low power EMT stereo light microscope and remains identified using modern reference collections housed at the Service.

2.4 **The methods in retrospect**

The methods adopted allowed a high degree of confidence that the aims of the project have been achieved to a reasonable standard. The trench contained well-preserved and stratified deposits visible to a depth of around 4.80m. The data retrieved enabled a good archaeological sequence to be constructed that will add to the knowledge already collated from archaeological and engineering test-holes at other sites within the immediate vicinity.

3. **Geological, topographical and archaeological context**

The area of the proposed development is known to have been affected by subsidence in the past, as associated with the brine run flowing beneath Droitwich (Poole and Williams 1980). The excessive extraction of brine in the later 19th-20th century (including at nearby Stoke Prior after the industry relocated from Droitwich in the 1920s) gave rise to major subsidence the most obvious effect of which is the pronounced dip that exists today in the High Street. The general line of the subsidence in the area of the proposed development is from north to south between just east of the centre of the High Street (Woodiwiss 1983 fig 2) and the church of St Augustine on Dodderhill. This corresponds with the position of the main subterranean brine channel (Poole and Williams 1980, 6, fig 4), and with the linear subsidence pattern associated with the pumping of brine elsewhere (Poole and Williams 1980, 4).

Several archaeological sites in the vicinity of the area of subsidence have not shown obvious signs of subsidence and so lie just outside its effects: The Old Bowling Green (WSM 600), Upwich (WSM 4575) and Hanbury Street (WSM 681). In contrast excavations at WSM 4574

and 4099 (adjacent to the current site) showed the extreme effects of subsidence on the buried strata (Woodiwiss 1983).

The site lies close to the base of the valley of the River Salwarpe. The solid geology is Mercian Mudstone. Natural alluvial deposits have been encountered on several sites in the base of the river valley and these (unusually) have been closely dated archaeologically to about the 7th-8th century AD. The line of the river is known through archaeological study to have fluctuated over time, and a combination of archaeological observation and geological mapping suggests that the former floodplain of the river, in the pre-medieval period, stretched southwards as far as the High Street. Alluvial deposits are also mapped in the location of the site by the British Geological Survey (1:50,000, sheet 182). The canal occupied the former position of the river when it was constructed in the 18th century and the river was then diverted to a new course further north.

The Droitwich map of 1786 shows the parish boundaries of St Andrews and St Peters parishes (as a dashed line) passing through the proposed development area from north to south.

4. **Archaeological and historical context**

Archaeological sites registered with the County Sites and Monuments Record (CSMR) and within about 200m of the study area have been summarised for this project by Hurst (2002). The area of the proposed development lies within one of the principal 19th century industrial saltmaking complexes located around the town. Its position (on the north side of the proposed development area) was close to the canal, a factor favouring its association with the 18th-19th salt industry, due to the ease of loading the salt directly onto canal barges. Many saltworks clustered on the canal side during this period, until the early 20th century when salt production was finally transferred several miles away to Stoke Prior.

5. **Synthesis of trench evaluation results (Figs 2-4)**

Overall, the evaluation correlated broadly with the results of the desk-based assessment in that it confirmed the presence of well preserved waterlogged archaeological remains. It also confirmed that the current water table is at around 27.50m AOD.

The detailed structural results of the evaluation can be found in Appendices 1 and 4, detailed artefactual reporting in Appendices 2 and 5, and the detailed environmental report in Appendix 3 respectively. Where possible, *terminus post quem* dates have been allocated.

Late Iron-Age/early Roman

A large feature (117), which was cut into the natural gravels (118) and lined with planks, is likely to have been a timber-lined pit used in salt processing similar to those excavated at the old Bowling Green site less than 200m to the east (Woodiwiss 1992). Such a feature would most likely date to the late Iron Age or early Roman period. Unfortunately it was deemed unsafe to investigate this feature due to the depth within the trench, but from the brief view of it afforded during the machining process, it was clear that the fill of this feature (114) contained well preserved *in-situ* structural timbers.

Artefactual evidence

Roman pottery was recovered from the interface between the natural (118) and layer 113 above, and a single sherd from context 118 was of later Roman date.

Environmental evidence

Three large cattle horn cores (1.08 kg) were collected by machine from an unidentified waterlogged feature (114). They were well preserved in anaerobic conditions as a result of the waterlogging, and brine content in the deposit. A salty encrustation was left on the horncores after washing and drying. The size of the horncores indicates that these are a long-horned type of cattle according to classification by Armitage and Clutton-Brock (1976). These are generally only found in deposits of late medieval date onwards, although they have been found in Roman deposits on rare occasions, for example at Orton Hall Farm in Cambridgeshire (King 1996; Ian Baxter pers comm).

Medieval

A 0.40m thick layer of silty charcoal and ash (113) contained abraded sherds of pottery and brick dating from the 13th to 15th century, and sealed the ?Iron Age/Roman feature (117). The sherds of pottery were all similarly abraded, suggesting a mixing of the deposit, which may be indicative of cultivation, alternatively, the deposit may represent the build-up of industrial waste from salt manufacture dating from the post-Roman to medieval periods.

Artefactual evidence

There was a small amount of residual Roman pottery from layer 113, which also produced Cotswolds ware (fabric 57; 10th–mid 11th century) and one possible grass tempered sherd (fabric 50; mid 5th–early 7th century). All finds positively identified as medieval were from the same context (113), and included medieval sandy ware (fabric 64) dating to 11th–14th century, and fragments of handmade brick dating from the 15th–16th century, and flat roof tile dating from the 13th century onwards.

Environmental evidence

Little interpretation could be made of the environmental remains from contexts 113, as the material was largely fragmented and unidentifiable. However, this is common in deposits where there are high levels of industrial waste such as charcoal and hammerscale. In this type of industrial area, low levels of food and agricultural waste usually result in a scarcity of environmental remains (such as charred cereal crop remains and animal bone) found on other domestic settlement sites.

Later medieval/early post-medieval

A well-structured cobble layer (112) lay above the black silty charcoal layer (113). The position, and likely alignment (ie its eastern edge seemed to run from north to south), of the cobbled surface approximately corresponds with a former lane, which ran north-south through the evaluated area. This lane appears on the 17th century map of Droitwich splitting the land between Bagbridge Lane (now Ricketts Lane) and Gosford Street (now Queen Street) into two seemingly planned rectangular grid sections, and it may have formed part of the medieval town plan. If so, then the cobbled surface represents the medieval precursor to the modern line of Gurney's Lane, which still forms a route into the centre of the High Street today. Incidentally the difference in level between the cobbled (later medieval) street and the modern Gurneys Lane demonstrates the degree of build-up of deposits, or more likely in the case of this part of Droitwich, of subsistence (see below).

17th-18th century

The ashy layer (111) above the cobbled surface (112) contained pottery dating to the 17th and 18th centuries. This layer appears to be mainly waste material from the saltworking industry.

Artefactual evidence

Context (111) contained one sherd of post medieval red ware (17th–18th century), as well as two pieces of clay pipe. Tile and brick from context 111 ranged in date from 13th – 18th

century. Another layer (122) produced 7 sherds of creamware, which date to 1760–1780AD. whilst context 120 contained brick of 18th–19th century date.

Environmental evidence

Little interpretation could be made of the environmental remains from context 111, as the material was largely fragmented and unidentifiable. However, this is common in deposits where there are high levels of industrial waste including coal and clinker, charcoal and hammerscale. In this type of industrial area, low levels of food and agricultural waste usually result in a scarcity of environmental remains (such as charred cereal crop remains and animal bone) found on other domestic settlement sites.

18th-20th centuries

The upper 2.80m of the trench were deposited during the modern period. Two substantial brick walls encountered were seemingly part of the fabric of the saltwork complex that existed on the site from the 18th century until the 1920's (see Hurst 2002, figs 3-4). The construction of the walls did not seem to be indicative of a cellar, even though the walls were constructed from 2.80m below the modern ground level. The structure of the more substantial wall (104) would seemingly not be capable of supporting a structure above. It had no stepped foundations, as would be expected in cellar construction and was only a 9-inch thick construction (ie the thickness of two bricks). The compacted ashy deposits (122) behind the wall were notably cracked on a vertical plane highlighting the subsidence within the area (see below)

Although the two walls (104 and 120; Fig 3a) may be contemporary, it is possible that the eastern wall (104) follows the boundary line with the medieval lane represented by the cobbles (112). This might suggest that the cobbled lane was still used in some form at the time the wall was constructed.

A levelling survey undertaken along Droitwich High Street indicates that the subsidence here had lowered the central part of the High Street by some 2.70m. This correlates with the difference between the medieval lane surface (112) and the current ground level in the evaluation trench. This suggests that the subsidence had compromised the stability of the salt-working structures in this area resulting in periods of levelling during the early 20th century. This is demonstrated in the build up of dumps (106, 109 and 109) against and over walls (104 and 120), and the levelling and subsequent sealing by a layer of ash (103).

Artefactual evidence

A layer (103) sealing the brick buildings of this phase contained tile from the 19th–20th century.

6. Discussion

The evaluation trenching confirmed the presence of archaeological deposits on the site, and the sequence was much as predicted by Hurst (2002). One new development was the possible identification of a trackway/street that preceded the present Gurneys Lane.

The earliest deposits were not investigated in detail due their extreme depth, but Roman levels were established at about 3.50m below the modern ground surface (at about 26m AOD; Fig 4). This was slightly higher than their level at Upwich (at about 25.70m AOD; cf Hurst 2002, fig 7), though the original level of the Saltway Roman horizon will have been at

about 29.50m AOD but for later subsidence. This may suggest that the Saltway area may once have been located on a higher terrace above the Salwarpe than currently seems the case at this location. One consequence of this was probably the absence of alluvium which was present at Upwich at between 25.90-26.30m. The only feature at the bottom of the site was a timber-lined tank that closely resembled features excavated about 100m further to the west (Old Bowling Green site; Woodiwiss 1992) suggesting that the area occupied by such tanks was much more extensive eastwards than previously known. This may reflect the scale of the salt industry in the Iron Age period, as represented by activity on the south bank of the river.

Medieval deposits accumulated above the Roman level, and formed a homogeneous spread of charcoal-rich silt. The presence of hammerscale indicates iron smithing in the area suggesting that not all the charcoal present may be from salt making. It is uncertain whether a medieval precursor to Gurneys Lane was present at this time, but by the later medieval/early post-medieval period a cobbled surface had spread onto the site, which probably represents an earlier lane in this position. The remains of brick walls at this level may indicate that buildings fronted the street within the area of the evaluation trench. This is the first time that evidence of this kind has come to light.

Subsequently the cobbled surface became disused and was covered by a further brick building, probably corresponding with a likely salt works shown on late 18th and 19th mapping (and cf Hurst and Hemingway 1997). The considerable post-medieval deposits were largely the product of industrial salt making of the 18th to 19th centuries, and these survived in a 2m thick sequence of waste deposits. This was exceptional as it included the walls of salt works still surviving to a height of about 1.5m. Such a degree of preservation seems to be due to the documented modern subsidence which has resulted in large-scale dumping of layers around buildings in order to raise the ground level to counteract its effects. The demise of salt making in Droitwich finally occurred in 1922, and many of the salt works then became derelict and went into structural decline. They were finally demolished in the course of re-development from the mid 20th century onwards.

7. Significance

In considering significance, the Secretary of State's criteria for the scheduling of ancient monuments (DoE 1990, annex 4), have been used as a guide. These nationally accepted criteria are used to assess the importance of an ancient monument. The criteria should not, however, be regarded as definitive; rather they are indicators, which contribute to a wider judgement based on the individual circumstances of a case.

Period

Significant archaeological deposits were encountered at around 2.80m below the current ground level. The uppermost deposits within this sequence date to the early post-medieval period. These overlay a well-preserved cobbled surface, which probably represents the medieval precursor to the modern Gurney Lane. The sequence is completed with an homogenous layer sealed beneath the cobbles, and therefore earlier, this in turn seals deposits and features from the Roman and probably late Iron-Age periods. There is therefore a long and continuous chronological sequence of deposits.

Rarity

The lower levels of the trench were associated with waterlogging and this had ensured the survival with intact timberwork of a probable late Iron Age brine reservoir tank. These features are unique to Droitwich and represent a stage in the prehistoric manufacture of salt.

Survival

It is likely that there are further similar waterlogged wooden structures on the site, and that organic remains within the waterlogged deposits would be well preserved.

Vulnerability

The effects of the present level of the water-table has been to preserve the organic remains, but should the water-table be affected, in particular fall in level, it is certain that any previously waterlogged deposits will become subject to decay. Additional preservation bestowed by the alkalinity of the ground water is little understood, but has on an adjacent site (Upwich; Hurst 1997) given rise to exceptional preservation conditions where some artefacts such as rope manufactured from vegetation, have very unusually (even for waterlogged sites) been preserved.

Potential

The potential of the archaeological deposits when considered as part of the wider picture is considerable. Relatively little is known archaeologically about the 16th-18th century, while in the medieval period the deposits are part of the urban burgrave system on the north side of the High Street (Buteux and Hurst 1996). The Roman and Iron Age remains are of exceptional interest and were well represented on the site.

8. **Publication summary**

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

An archaeological evaluation was undertaken on behalf of London and Truro Estates Ltd (the client) at land off the Saltway in Droitwich (NGR ref 90096339; SMR ref 31184). This confirmed the presence on the site of the proposed development of deposits dating from the later prehistoric period to the modern day, the lower deposits associated with waterlogging.

9. **The archive**

The archive consists of:

4	Fieldwork progress records AS2
2	Photographic records AS3
1	Colour transparency films
1	Black and white photographic films
1	Drawing number catalogue AS4
1	Sample number catalogue AS18
1	Levels record AS19
5	Scale drawings
6	Abbreviated context records AS40
1	Computer disk

The project archive is intended to be placed at:

Worcestershire County Museum, Worcestershire County Museum, Hartlebury Castle, Hartlebury, Near Kidderminster, Worcestershire DY11 7XZ

Tel Hartlebury (01299) 250416

10. **Acknowledgements**

The Service would like to thank the following for their kind assistance in the conclusion of this project: Mr Brian Norfolk and Mr Tony Jones (Wychavon District Council), Mr R Heard (APP Architects, Brighton: the Agent), and Mike Glyde (Planning Officer, Worcestershire County Archaeological Service).

11. **Personnel**

The fieldwork was led by Paul Williams. The project manager responsible for the quality of the project was Derek Hurst. Fieldwork was undertaken by Paul Williams, Gaynor Western and Derek Hurst.

The report was prepared by Paul Williams and Derek Hurst, with illustrations by Carolyn Hunt.

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13. **Abbreviations**

BGS British Geological Survey

CSMR County Sites and Monuments Record.

WSM Numbers prefixed with 'WSM' are the primary reference numbers used by the Worcestershire County Sites and Monuments Record.

Appendix 1

Structural results

Paul Williams

Reference should be made to Figures 3, and 4 with respect to the following results.

Late Iron-Age-Roman

One cut feature (117) was observed cut into the natural greenish gravely-marl (118). This had been filled by a mid-brown silty clay (114). This feature had only become visible during excavation of a sump designed to accommodate a pump to alleviate the waterlogging of the trench, this was excavated to a depth of around 4.80m below present ground level. The feature appeared to be cut on a northeast-southwest alignment and had either timber revetments or some form of timber structure sealed within the fill, samples of which were taken from the spoil heap. The fill also contained three horn-cores none of which displayed knife serration's. It was not possible to investigate this feature due to the depth of the unshored trench. One sherd of samian ware pottery was seen protruding from the section on top of the gravels (118).

Medieval

An homogenous layer of silty charcoal and ash around 0.40 metres thick (113) sealed the Roman deposits below. This layer contained abraded pottery dating from the mid-5th to 14th centuries.

Above the silty charcoal layer (113) there was a well preserved cobbled surface (112) made up of medium to large rounded and well-compacted cobbles. This generally ran north-south through the trench and petered out on an approximate alignment with the eastern wall (104). The cobble layer varied in thickness from its shallowest along the eastern edge to around 0.30m on the west of the trench.

17th-18th century

A layer of homogenous black silty charcoal and fuel residues (111) lay over the cobbled surface. This contained pottery dating to the 17th or 18th centuries along with two pieces of clay tobacco pipe. Again, this layer appears to be a build up of waste material from the salt production processes within the vicinity.

18-20th centuries

The brick rubble hardcore below the tarmac car park surface (102) lay uniformly above a compacted layer of black ash (103) across the site. Machining away of this layer exposed a 9 inch orange brick and mortar wall running approximately north-south across the site (104). The brick size and appearance suggested that the wall was probably 18th or 19th century. The wall had been truncated to the north by a deep cut sewer main trench (124), which had been cut from within the ashy layer (113). This suggests that the layer (113) was in fact a gradual build up of several layers of visually indistinguishable ash, thus probably the waste material from an 'ongoing' industrial process. The sewer pipe was exposed in the east facing section. It was a 14 inch earthenware ceramic probably 19th century in date. The wall survived to a height of 1.80m although leaning heavily to the east. There were seemingly no foundations to the wall suggesting it was a boundary or retaining wall rather than a cellar or building wall. Butting the east of the wall was a substantial build-up of ashy deposits (122), which were similar in colour and consistency to (103) above. When the wall was removed a hollow wooden elm pipe was exposed, this was not in situ but apparently dumped with the ashy material. These pipes were common in the brine industry over a long period (pers comm

Derek Hurst). Cleaning back the exposed dumped material revealed a stake hole (131), the purpose of which was unclear.

A series of dumps had built up against the west of the wall (104). A dump of brown ashy-sand with frequent pieces of mortar (106) had accumulated over an insubstantial brick wall (120), surviving only to a maximum of three courses high, and running roughly parallel to the wall to the east (104). At some time prior to the abandonment and levelling of the site a clay bedding was laid (110), presumably to take a brick floor that had later been removed (although it is possible that the work was never completed). After removal of the floor another episode of dumping (109) continued across this area. The smaller wall (120) had been built into a black ashy layer (111), and stood on a scant foundation of quartered orange bricks (129) pressed into the ash. A thin mortar screed (127) then covered the quartered brick and it appears this formed the base for the build of the wall and a tile floor, which was only seen in the north facing section on the west side of the wall, this was in turn covered by a build up of ashy silt (123). Although not absolutely clear due to the logistical problems (outlined above), it appears that the base of the more substantial wall was set into this ashy layer (111), suggesting the walls were roughly contemporary.

Appendix 2

Artefactual Results

Erica Darch

A summary of the artefacts can be seen in Table 1 (Appendix 5). The assemblage retrieved from the excavated area came from seven stratified contexts and one unstratified. The material is primarily of medieval / post medieval date, but ranged from Roman to modern and includes some Saxon/Norman pottery. Preservation was average but later salt residues made some identification difficult.

Pottery formed the largest material group with a total of 30 sherds. Sherds were identified and grouped by fabric. The pottery was dated by fabric as there were no diagnostic sherds, and covered the full range of periods from the site.

Fabrics have been referenced to Hurst and Rees (1992), where appropriate.

Discussion of artefacts by phase.

The discussion below is a summary of the finds and associated location or contexts by period. Where possible, *terminus post quem* dates have been allocated based on the evidence recorded and the importance of individual finds commented upon as necessary.

Because of the lack of diagnostic material from this site only very broad dates have been assigned. However, the ceramics from the site as a whole produced a consistent chronological sequence.

Roman

Roman pottery was recovered from context 118. The single sherd from context 118 is possibly of late Roman date, and has a red colour coat.

Medieval

Three sherds of Roman date were recovered from context 113, two of which (shelly ware and samian (fabric 43) were retrieved from sieving. The third is of Severn Valley ware type (fabric 12) with a white slip and may, therefore, have come from a flagon.

Two sherds were recovered by sieving from context 113 of middle Saxon, and Saxon-Norman date. These were respectively a grass tempered sherd (fabric 50) possibly from the mid 5th-early 7th century, and a sherd of Cotswolds ware (fabric 57) dating from the mid 11th-12th century.

All finds positively identified as medieval were from context 113. The largest of these was a handmade base sherd. Also, an early medieval sandy ware sherd recovered from sieving gives a possible date of 11th – 14th century, whilst a handmade brick may date from the 15th – 16th century. Context 113 also contained pieces of flat roof tile which may date from the 13th century onwards.

Early post-medieval

Context 111 contained one sherd of post-medieval red ware (fabric 78; 17th – 18th century), as well as two pieces of clay pipe. Tile and brick from context 111 range in date from 13th – 18th century.

Context 122 produced 7 sherds of creamware (fabric 84), which date to 1760 – 1780AD whilst 120 contains brick of 18th – 19th century date.

20th century

Context 103 (tile, 19th – 20th century) and 121 (one pot sherd, 19th – 20th century) contain modern material.

Significance

Although the *tpq* for context 113 is 16th century, the range in date of the material within it suggest it has either become very mixed (possibly at the end of the medieval period) or that it built up very slowly over a long period of time.

Appendix 3

Environmental results

Elizabeth Pearson

Methods

Fieldwork and sampling policy

The environmental sampling policy was as defined in the County Archaeological Service Recording System (1995 as amended). Large animal bone was hand-collected during excavation and samples of 20 litres taken from layers 111 and 113 of post-medieval and medieval date respectively.

Processing and analysis

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

The residue was fully sorted by eye and the abundance of each category of environmental remains estimated. The flot was scanned using a low power EMT stereo light microscope and remains identified using modern reference collections housed at the County Archaeological Service.

Results

Hand-collected animal bone

Three large cattle horn cores (1.08 kg) were collected by machine from an unidentified waterlogged feature (114). They were well preserved in anaerobic conditions as a result of the waterlogging, and brine content in the deposit. A salty encrustation was left on the horncores after washing and drying. The size of the horncores indicates that these are a long-horned type of cattle according to classification by Armitage and Clutton-Brock (1976). These are generally only found in deposits of late medieval date onwards, although they have been found in Roman deposits on rare occasions, for example at Orton Hall Farm in Cambridgeshire (King 1996; Ian Baxter pers comm).

Only 5 small fragments (4g) of possible cattle skull fragments were recovered from layer 113.

Wet-sieved samples

Context 113: medieval layer

This context was rich in very fine fragmented charcoal, and small fragments of animal bone and teeth. Occasional small mammal and fish bone was also noted.

Context 111: post-medieval layer

Only moderate quantities of fragmented animal bone were recovered.

Discussion

Little interpretation could be made of the environmental remains from contexts 111 and 113, as the material was largely fragmented and unidentifiable. However, this is common in deposits where there are high levels of industrial waste such as coal and clinker (111), charcoal and hammerscale. In this type of industrial area, low levels of food and agricultural waste usually result in a scarcity of environmental remains (such as charred cereal crop remains and animal bone) found on other domestic settlement sites.

The largely intact horncores found in context 114 (probably Iron Age/Roman) may be waste from tanning or horn-working or they be primary butchery. In the latter case, the butchery waste may be associated with the salting of meat, a process which was known to have been an important activity in the town on account of the availability of brine.

Significance

The environmental remains from this site are of low significance.

Bibliography

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

Appendix 4

Trench description

Main deposit description

Context	TPQ	Classification	Description	Depth below ground surface
100		Surface layer	Modern car park layer of Tarmac	0-0.06m
101		Bedding layer	Limestone chippings	0.06
102		Hardcore	Brick rubble	0.46
103	19-20c	Layer	Compacted black ash	0.92
104		Wall	Double brick thickness wall of 18 th /19 th century orange bricks bonded with a pinkish sandy mortar.	0.92
105		Stake	Wooden stake around 0.15 metres square seen at northern end of visible wall (104)	2.20
106		Dump	Brown ashy dump with rare brick fragments	0.92
107		UNUSED		
108		Dump	Brown ashy dump with rare brick fragments, lighter in colour than (106)	2.20
109		Dump	Brick rubble with mortar and flat roof tile (FRT)	0.92
110		Bedding Layer	Layer of buff clay around 0.12m thick seen in east and north facing sections	2.52
111	17-18c	Layer	Black homogenous layer of silty charcoal and fuel residues	2.70
112		Layer/road surface	Well compacted layer of medium to large cobbles around 0.30m thick at west end of trench and petering out to the east	2.80
113	16c	Layer	Homogenous layer of ash and fuel residues in a silty matrix. Well compacted	3.00
114		Fill	Mid-brown silty clay containing structural timbers and cattle horn cores	3.60
115		Fill	As (114). Diffused boundary suggesting leaching of darker silty material from (113) above	4.10
116		Fill	Mix of brownish ashy sand and moderate building rubble. Same as (128)	0.75
117		Cut	Linear in plan running approximately NE-SW. Not excavated. Filled by (114/115)	
118		Natural	Water washed medium gravels in a greenish marl	4.12
119		Cut	Straight edged and flat bottom cut into (111). Wall (120) fills the cut	2.70

120	19c	Wall	Surviving to two courses only, a brick and mortar wall constructed of 18 th /19 th century bricks and a loose whitish sandy mortar	2.54
121	20c	Layer/Dump	Very compacted ashy dump . White with black striations. Enclosed within (122)	1.80
122	20c	Layer/Dump	Large build up of compacted black ashy material, very striated and enclosing (121)	0.90
123		Layer	Similar material to (111) but on west of wall (120)	2.68
124		Cut	Cut filled by (128). Not excavated but vertical sides seen in section. Cut for laying of 19 th century sewer main	0.72
125		Drain	Concrete encased drain running NE-SW on south side of trench	0.40
126		Drain	Concrete encased drain running E-W on north side of trench	0.40
127		Layer	Thin mortar screed, a bedding layer for floor associated with wall (120)	2.80
128		Fill	Fill of sewer trench (124) same as (116)	0.72
129		Layer	Quarter bricks and tile bedding layer associated with wall (120)	2.75
130		Stake hole	Stake hole into (122) seen in west facing section	3.20

Appendix 5

a. Quantification of finds

Context	Material	Type	Total	Weight (grams)	Notes	Date range	TPQ	Period
U/S	STONE	BURNT	1	17				
103	TILE		9	238		19 - 20C	20thC	MOD
111	COAL		1	16				
111	TILE	PANTILE	2	44		18C?	18thC	POST MED
111	TILE		2	60				
111	BRICK		5	109	Hand made.	15 - 18C	18thC	MED / POST MED
111	TILE	FRT	1	6		13 - 18C	18thC	MED / POST MED
111	POT	POST MED	1	4	Post medieval red ware. 78.	17 - 18C	18thC	POST MED
111	PIPE	STEM	1	1				POST MED
111	PLASTER		9	24	From sieving.			
111	GLASS	VESSEL	1	1	From sieving.			
111	PIPE	STEM	1	1	From sieving.			POST MED
111	GLASS		1	1	From sieving.			
111	TILE			170	From sieving. And / or brick.			
111	COAL			54	From sieving.			
111	CLINKER			99	From sieving.			
111	BONE			34	From sieving.			
113	SLAG		1	9				
113	POT	MED / POST MED	1	1	55.			MED / POST MED
113	POT	ROM	1	2	White slip, SVW, flagon? 12.			RBR
113	POT	MED	1	22	Early medieval pitcher??? Hand made, large pot. 99.			MED
113	TILE	FRT	7	82		13C onwards.		POST MED
113	BRICK		12	682	Hand made. 2 inches thick.	15 - 16C	16thC	MED
113	BONE		4	6				
113	COAL		3	12				
113	CLINKER		2	6				
113	TILE		1	1				
113	STONE		4	66	Heat shattered???			
113	TILE			32	From sieving.			
113	SLAG			48	From sieving.			
113	FE	OBJ	2	7	From			

					sieving. Nail.			
113	GLASS		1	0	From sieving. Fragment.			
113	BONE			48	From sieving.			
113	POT	MED	8	15	From sieving. Early medieval sandy ware. 55.	L11 / E12 - 14C	14thC	MED
113	POT	ROM	1	1	From sieving. Shelly ware. Late Roman.			RBR
113	POT	SAX	1	2	From sieving. Grass tempered??	M5 - E7C?	7thC	SAX
113	POT	SAX / NRM	2	2	From sieving. Cotswalds ware. 57.	10 - M11C.	11thC	SAX / NRM
113	POT	ROM	1	0	From sieving. Samian.			RBR
113	POT	MED	2	2	From sieving. 99.			MED
113	POT	MED	2	3	From sieving. 99.			MED
114	BONE		3	1008	Horn cores.			
118	STONE	HEAT SHATTE RED	2	55				
118	POT	ROM	1	6	Late Roman, red colour coat. ? 98.			RBR
120	BRICK		1	3540	2 3/4 inch thick.	18 - 19C.	19thC	POST MED
121	POT	MOD	1	4	85.	19 - 20C	20thC	MOD
121	SALT	WASTE		55	Residue from salt production? Is this an insoluble bi product?			
122	BRICK		1	2380	2 1/2 inch thick.	18C?		POST MED
122	MORTAR		2	40	Burnt?			
122	TILE		2	14	Or brick.			
122	POT	POST MED	7	18	Cream ware. 84.	1760 - 80 AD	1780AD	POST MED

b. Total materials recovered

Material	Sum Of Total	Sum Of Weight
BONE	7	1096
BRICK	19	6711
CLINKER	2	105
COAL	4	82
FE	2	7
GLASS	3	2
MORTAR	2	40
PIPE	2	2
PLASTER	9	24
POT	30	82
SALT		55
SLAG	1	57
STONE	7	138
TILE	24	647