# ARCHAEOLOGICAL EVALUATION AT THE SOUTH WORCESTER DEVELOPMENT, KEMPSEY, WORCESTERSHIRE



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## Contents

# Archaeological evaluation at the South Worcester Development, Kempsey, Worcestershire

Jonathan Webster

With contributions by Elizabeth Pearson and Dennis Williams

## Summary

An archaeological evaluation was undertaken at the South Worcester Development, Kempsey, Worcestershire (NGR SO 8612 5140). It was commissioned by The Environmental Dimension Partnership, on behalf of their client, Welbeck Strategic Land LLP, who intends to undertake residential development of the area for which a planning application will be submitted to Malvern Hills District Council, Wychavon District Council and Worcester City Council.

The investigations revealed that the believed route of the main Romano-British road between Worcester (*Vertis*) and Gloucester (*Glevum*), based on map regression and cropmarks, was accurate, although the preservation of the road varied greatly across site due to later farming practices. The overall state of the road as observed in five trenches would suggest that it had been little more than a gravel track when first constructed and used. The previous geophysical survey indicated that it appeared to be more substantial, with ditches either side. This was however not found to be the case.

In the south of the proposed development area, Trench 1 revealed two ditches and an associated pit, thought to form an enclosure of Late Iron Age to early Romano-British date. It is conjectured that this represents occupation rather than simply a stock enclosure, as the features contained charred grain, fire cracked stone, burnt clay, pottery sherds in good condition and butchered fragments of animal bone. Evidence of later ridge and furrow was recorded in Trenches 1, 2, 6 and 7, former field boundaries in Trench 7 and an area of dumped hardcore and modern waste in Trench 3.

# Report

# 1 Background

## 1.1 Reasons for the project

An archaeological evaluation was undertaken at the South Worcester Development, Kempsey, Worcestershire (SO 8612 5140). It was commissioned by The Environmental Dimension Partnership, on behalf of their client, Welbeck Strategic Land LLP, who intends to undertake residential development of the area for which a planning application will be submitted to Malvern Hills District Council, Wychavon District Council and Worcester City Council.

The proposed development site is considered to include a heritage asset with archaeological interest in the form of a Romano-British road that connected the settlements at Worcester and Gloucester (WCM 96406), the significance of which may be affected by the application.

The project conforms to discussions between The Environmental Dimension Partnership and Mike Glyde, Worcestershire Historic Environment Planning Officer, for which a project proposal (including detailed specification) was produced (WA 2012a).

The project also conforms to the *Standard and guidance for archaeological field evaluation* (IfA 2008) and the *Standards and guidelines for archaeological projects in Worcestershire* (WCC 2010).

# 2 Aims

The aims of this evaluation were:

- to describe and assess the significance of the heritage asset with archaeological interest;
- to establish the nature, importance and extent of the archaeological site; and
- to assess the impact of the application on the archaeological site.

# 3 Methods

## 3.1 Personnel

The project was undertaken by Jonathan Webster, BA (hons), who joined Worcestershire Archaeology in 2009 and has been practising archaeology since 2001, and Andrew Mann (BA (hons) MSc); who has worked with Worcestershire Archaeology since 2001 when he started his archaeological career. Fieldwork was also undertaken by Mike Nicholson, BSc (hons), who joined Worcestershire Archaeology in 2008 and has been practising archaeology since that time. Environmental analysis was undertaken by Elizabeth Pearson, AIFA BSc MSc, who joined the service in 1993 and has worked in professional archaeology since 1987, the finds analysis was undertaken by Dennis Williams, MinstP CPhys BSc MA PhD, who has been in professional archaeology since 2006 when he joined WA. The project manager responsible for the quality of the project was Tom Vaughan, AIFA BA (hons) MA. Illustrations were prepared by Carolyn Hunt, MIfA BSc (hons), who has been with WA since 1985.

## 3.2 Documentary research

A desk based assessment was carried out by the client (EDP 2012) and a geophysical survey was undertaken by ArchaeoPhysica Limited (Roseveare 2011).

## 3.3 Fieldwork strategy

A detailed specification was prepared by Worcestershire Archaeology (WA 2012a). As a result of the documentary search, adjustments were made to the fieldwork strategy.

Fieldwork was undertaken between 1 October and 21 November 2012, although the backfilling of the second phase of trenches occurred at a later date due to adverse weather conditions. The site reference number and site code is WSM 47391.

Eight trenches were excavated over two phases, amounting to just over 800m² in area. The locations of the trenches are indicated in Figure 2. Trenches 1, 2, 5, 6 and 7 were all located to investigate the believed route of the main Romano British Road between Worcester and Gloucester, which was projected through a combination of map regression, crop marks and geophysical survey. Trenches 3, 8 and 9 were located to investigate geophysical anomalies.

Trench 4 was proposed, but ultimately not excavated, due to the presence of overhead electricity cables in the immediate vicinity.

Deposits considered not to be significant were removed under archaeological supervision, using a wheeled excavator, employing a toothless bucket. Subsequent excavation was undertaken by hand. Clean surfaces were inspected and selected deposits were excavated to retrieve artefactual material and environmental samples, as well as to determine their nature. Deposits were recorded according to standard Worcestershire Archaeology practice (WA 2012b). On completion of excavation, trenches were reinstated by replacing the excavated material.

### 3.4 Structural 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.

### 3.5 Artefact methodology, by Dennis Williams

#### 3.5.1 Artefact recovery policy

The artefact recovery policy conformed to standard WA practice (WA 2012b; appendix 2).

#### 3.5.2 Method of analysis

All hand-retrieved finds were examined. They were identified, quantified and dated to period. A *terminus post quem* date range was produced for each stratified context. All information was recorded on *pro forma* sheets.

A small quantity of animal bone was recovered from one context, but was not worthy of detailed analysis, nor included in the Table 1 quantification.

The pottery and ceramic building material was examined under x20 magnification and recorded by fabric type and form according to the fabric reference series maintained by WA (Hurst and Rees 1992 and www.worcestershireceramics.org).

### 3.6 Environmental archaeology methodology, by Elizabeth Pearson

#### 3.6.1 Sampling policy

Samples were taken according to standard WA practice (2012b). Samples were taken by the excavator from deposits considered to be of high potential for the recovery of environmental remains. A total of 2 samples (each of 10 litres) were taken from the site from a pit and the terminus of a ditch, both of Late Iron Age/Early Romano-British date (Table 3). One sample (from secondary ditch fill 110) was selected for analysis. A small assemblage of animal bone was hand-collected from the site.

#### 3.6.2 Processing and analysis

The sample was processed by flotation 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 scanned by eye and the abundance of each category of environmental remains estimated. A magnet was also used to test for the presence of hammerscale. The flot was scanned

using a low power MEIJI stereo light microscope and plant remains identified using modern reference collections maintained by WA, and a seed identification manual (Capper *et al* 2006). Nomenclature for the plant remains follows the *New Flora of the British Isles*, 3rd edition (Stace 2010).

#### 3.6.3 Discard policy

The sample from pit fill 113 (<1>, 10 litres) will be discarded after a period of 6 months after the submission of this report, unless there is a specific request to retain it.

### 3.7 Statement of confidence in the methods and results

The methods adopted allow a high degree of confidence that the aims of the project have been achieved.

## 4 The application site

### 4.1 Topography, geology and archaeological context

The site is located to the south of Worcester, to the immediate east of the A38 Worcester Road. It is bounded to the north by Taylor's Lane and to the south by Broomhall Lane. The east of the site is limited by Norton Road. The land itself is set either side of the Hatfield Brook and slopes down from an average height of 25m AOD (above Ordnance Datum) to the brook at 20m AOD.

The soils are typical brown earths of the Hall and Wick series (Beard *et al* 1986). Brown earths of this subgroup (541) are permeable, well-drained, non-calcareous loams or clays. The underlying geology consists of Pleistocene and recent drift deposits of glacial origin forming the third terrace of the River Severn, overlying Upper/Middle Triassic Mercian Mudstone of the Sidmouth and Branscombe formations (formerly Keuper Marl; British Geological Survey 1976 and 1990).

Two thin bands of alluvium run through the site; one north to south, broadly parallel with the terrace, and the second along the line of the Hatfield Brook that passes through the village of Kempsey to the south of the proposed development area.

### 4.2 Current land-use

The site is currently arable fields associated semi-derelict farm buildings close to Clerkenleap Cottages to the west. At the time of excavation these fields had been harvested and left as fallow.

## 5 Structural analysis

The trenches and features recorded are shown in Figs 1-5. The results of the structural analysis are presented in Appendix 1.

#### 5.1.1 Phase 1: Natural deposits

The natural substrate comprised a combination of clays and gravels that typify glacial deposits at the edge of gravel terraces. Of note were several bands of gravel that appeared to form north to south aligned parallel banding that averaged between 1-3m in width. These bands are the product of later erosional processes that have truncated and exposed the gravels at an oblique angle.

#### 5.1.2 Phase 2: Late Iron Age to early Romano-British deposits

Trench 1 revealed two ditches [106] and [112] (Figs 2 and 3, Plate 3) that, due to their similar U-shaped profile and the artefactual remains recovered, are thought to represent contemporary activity. They may be either side of an enclosure that measured 19.85m in width, although this is at variance with the findings of the geophysical survey, which indicates an enclosure to the west. They were both filled with silt rich deposits that were indicative of slow natural borne siltation through a probable combination of alluvial and colluvial processes. Ditch [112] terminated within the trench, with steep rounded sides that is thought at present to be an entranceway.

To the immediate south and truncated by terminus [112] was an elongated pit [114]. This measures 0.51m in width by 1.55m in length and was filled with a single fill (113) 0.22m deep. It contained pottery fragments and heat cracked stones. This fill was almost identical in make up to that of ditch fill (111) and so it is considered that they were derived through the same processes and are potentially of similar date.

### 5.1.3 Phase 3: Romano-British deposits

The Roman road (WCM 96406), whilst present in Trenches 1, 2, 6 and 7, was not evident in Trench 5 (Fig 5, Plates 1 and 2). Measuring just less than 4m in width and constructed from a single layer of gravel rammed directly into the underlying geology, the route looked more like a simple gravel track than a major Roman road between towns. Later and ongoing ploughing certainly accounts for the varying but overall poor preservation of the road (having completely truncated the road in Trench 5), but cannot explain its basic overall nature that is clearly an indication of the poor original construction. The lack of earlier surfaces or associate roadside drainage ditches also suggests that this road was little more than a track and not the major thoroughfare expected. It should be noted that no finds were recovered in association with the road.

### 5.1.4 Phase 4: Post-Roman/modern deposits

Trenches 1, 2, 6 and 7 all revealed evidence of ridge and furrow cultivation that was orientated to follow the direction of slope (Fig 3), whilst Trench 7 also revealed a north to south aligned ditch [705] 2.54m in width with a steep U-shaped profile (Fig 5). It was positioned at the base of the valley along the route of a current vehicular route for farm traffic. Post-medieval white porcelain was recovered from the fill and it is believed to be a former hedge boundary/drainage ditch that has since migrated 30m to the east.

A large geophysical signature investigated within Trench 3 revealed a large hollow that had been infilled with modern CBM, tarmacadam and waste material [303]. Located as it is next to the entrance for the field from the A38, in a soft clay geology, it is likely that the farmer created this feature to become an area of hardcore and reduce the risk of getting stuck when entering or leaving the site (Fig 4).

Finally, Trench 2 contained two north to south orientated ceramic field drains that, like the ridge and furrow, had been orientated to best make use of the natural slope.

### 5.1.5 Phase 5: Undated deposits

A north to south aligned linear ditch [708] was revealed in Trench 7 near the base of the valley slope (Fig 5). This feature had a shallow U-shaped profile and two fills that suggested a slow naturally silted infilling through a combination of alluvial and colluvial depositional processes, its initial fill (707) being suggestive of a period of stagnant water. At present it is thought that this feature represents a former field boundary and drainage ditch of unknown date.

## 5.2 Artefact analysis, by Dennis Williams

The artefactual assemblage is summarised in Tables 1 and 2. The pottery retrieved from the excavated areas consisted of 22 sherds weighing 236g. In addition, fragments of fired clay, tile, brick and a clay pipe stem were recovered. The group came from 10 stratified contexts and could be dated to the Late Iron Age/Roman period onwards. Using pottery as an index of artefact condition, this was generally good, with few sherds displaying significant abrasion.

| Period | Material class | Object specific type | Count | Weight (g) |
|---|---|---|---|---|
| LIA/ERB | ceramic | pot | 8 | 54 |
| medieval | ceramic | pot | 1 | 6 |

| | | | | |
|---|---|---|---|---|
| post-medieval | ceramic | brick/tile | 1 | 14 |
| post-medieval | ceramic | clay pipe | 1 | 2 |
| post-medieval | ceramic | pot | 13 | 176 |
| post-medieval | ceramic | roof tile(flat) | 4 | 88 |
| post-medieval | glass | bottle | 2 | 36 |
| undated | ceramic | fired clay | 3 | 50 |
| undated | glass | glassy waste | 1 | 218 |
| undated | mineral | coal | 1 | 4 |
| Totals: | | | 35 | 648 |

*Table 1: Quantification of the assemblage*

| Context | Material class | Object specific type | Fabric code | Count | Weight (g) | Start date | End date | *tpq* date range |
|---|---|---|---|---|---|---|---|---|
| 110 | ceramic | pot | 3 | 2 | 22 | -400 | 100 | 400BC-AD100 |
| | ceramic | pot | 3 | 1 | 14 | -400 | 100 | |
| | ceramic | pot | 97 | 1 | 4 | -400 | 100 | |
| | ceramic | pot | 97 | 1 | 4 | -400 | 100 | |
| 113 | ceramic | pot | 97 | 3 | 10 | -400 | 100 | 400BC-AD100 |
| | ceramic | fired clay | - | 3 | 50 | - | - | |
| 116 | ceramic | brick/tile | - | 1 | 14 | 1600 | 1850 | 1600-1850 |
| 205 | ceramic | roof tile(flat) | - | 2 | 42 | 1600 | 1850 | 1600-1850 |
| 207 | ceramic | clay pipe | - | 1 | 2 | 1600 | 1900 | 1600-1850 |
| 211 | ceramic | roof tile(flat) | - | 1 | 10 | 1600 | 1850 | 1600-1850 |
| 213 | ceramic | pot | 69 | 1 | 6 | 1300 | 1600 | 1300-1600 |
| 800 | ceramic | pot | 78 | 1 | 8 | 1700 | 1800 | 1700-1800 |
| 801 | ceramic | pot | 150 | 1 | 12 | 1600 | 1700 | 1600-1700 |
| 900 | ceramic | pot | 78 | 1 | 68 | 1600 | 1800 | 1830-1900 |
| | ceramic | pot | 78 | 1 | 4 | 1600 | 1800 | |
| | ceramic | pot | 78 | 1 | 12 | 1600 | 1800 | |
| | ceramic | pot | 91 | 1 | 18 | 1700 | 1800 | |
| | ceramic | pot | 84 | 1 | 4 | 1760 | 1840 | |
| | ceramic | pot | 81 | 1 | 4 | 1600 | 1800 | |
| | ceramic | pot | 85 | 3 | 6 | 1800 | 1900 | |
| | ceramic | pot | 78 | 1 | 6 | 1600 | 1800 | |
| | ceramic | roof tile(flat) | - | 1 | 36 | 1600 | 1850 | |
| | glass | glassy waste | - | 1 | 218 | - | - | |
| | glass | bottle | - | 2 | 36 | 1830 | 1900 | |
| | mineral | coal | - | 1 | 4 | - | - | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | ceramic | pot | 91 | 1 | 34 | 1700 | 1800 | |

*Table 2 Summary of context dating based on artefacts (for explanation of fabric codes see www.worcestershireceramic.org)*

### 5.2.1 Summary of artefactual evidence by period

***Iron Age to early Roman***

The most significant finds recovered from this site were small body sherds of Malvernian ware (fabric 3) found in the secondary fill (110) of enclosure ditch [112]. None of these sherds was diagnostic in terms of its form, and they could date from either the Late Iron Age or the early Roman period. It was noted that no other pottery clearly of later Roman manufacture was found. Small sherds found in (113), the fill of pit [114], adjacent to (110), lacked Malvernian inclusions but displayed signs of organic tempering, and were probably also from the Late Iron Age/early Roman period. Irregular lumps of fired clay were also noted in (113), suggesting the presence of a hearth nearby.

***Medieval***

Medieval pottery was confined to a single sherd of glazed Malvernian ware (fabric 69) retrieved from a furrow fill.

***Post-medieval***

The largest part of the assemblage consisted of post-medieval pottery dating from the 17th century onwards, recovered from furrow and land drain fills, and topsoil. This pottery included red wares (fabric 78), stoneware (fabric 81), creamware (fabric 84), china (fabric 85), buff wares (fabric 91), and Deerfold/Lingen ware (fabric 150).

### 5.2.2 Assessment of significance

The presence of domestic Late Iron Age to early Roman pottery in good condition and in features indicates archaeological significance. No Roman finds were noted despite the proximity of the Roman road.

The medieval and post-medieval finds recovered from this site are all consistent with agricultural use (e.g. ploughing and drainage), and are, therefore, of very limited significance.

## 5.3 Environmental analysis, by Elizabeth Pearson

The environmental evidence recovered is summarised in Tables 3 to 5.

Only a small assemblage of environmental remains and artefacts was recovered from secondary ditch fill 110. It is uncertain whether the uncharred plant remains (Table 5) are contemporary with the ditch terminus. As the deposits were not waterlogged, they are considered likely to be modern contamination. It was not possible to interpret much from these remains, except that the presence of charred grains of emmer/spelt wheat (*Triticum dicoccum/spelta*) and heat-cracked stone are consistent with rural deposits of Late Iron Age to Early Romano-British date and are likely to derive from hearth deposits.

A total of 28 fragments (48g) of animal bone was also recovered from secondary ditch fill 110. The bone was well preserved, consisting of chopped fragments of large ungulate (horse/cow/red deer sized) limb bone. As this was a small assemblage, it is not thought worthy of further analysis, but demonstrates potential for good survival of animal bone from features of this date.

These remains show low potential for recovery of environmental remains from the ditch terminus, and from the site as a whole.

| Context | Sample | Feature type | Fill of | Position of fill | Period | Volume of sample (L) | Volume processed (L) | Residue assessed | Flot assessed |
|---|---|---|---|---|---|---|---|---|---|
| 110 | 2 | ditch | 106 | primary | LIA/ERB | 10 | 10 | yes | yes |
| 113 | 1 | pit | 114 | | LIA/ERB | 10 | 0 | no | no |

*Table 3: List of environmental samples*

| context | sample | large mammal | charcoal | charred plant | uncharred plant | Comment |
|---|---|---|---|---|---|---|
| 110 | 2 | occ | occ | occ | occ | occ burnt clay, heat-cracked stone |

*Table 4: Summary of environmental remains*

| **Latin name** | **Family** | **Common name** | **Habitat** | **110** |
|---|---|---|---|---|
| | | | | |
| *Uncharred plant remains* | | | | |
| | | | | |
| Cereal sp indet culm node | Poaceae | cereal | F | + |
| *Stellaria media* | Caryophyllaceae | common chickweed | AB | + |
| *Atriplex* sp | Amaranthaceae | orache | AB | + |
| *Marrubium vulgare* | Lamiaceae | white horehound | ABD | + |
| | | | | |
| *Charred plant remains* | | | | |
| *Triticum dicoccum/spelta grain* | Poaceae | emmer/spelt wheat | F | + |
| Cereal sp indet grain | Poaceae | cereal | F | |

*Table 5: Plant remains from Context (110)*

# 6 Synthesis

The archaeological investigations revealed what appears to be a dispersed landscape of activity ranging from the Iron Age to modern times. At present the archaeology would suggest that the area of investigation has not been a focus for settlement activity, but rather that it has always been used for farming of one form or another, with the exception of the Roman road that runs north to south through the western half. Although no roadside features or buildings are currently known or seen on the geophysical survey of the site, the length of road within the investigation area (770m) provides a unique opportunity in the region to investigate a long length of road, its construction, repairs, development and wear along with roadside activities and its placing in the wider landscape.

## 6.1 Late Iron Age to early Romano-British

The presence in Trench 1 of a pit, along with two linears that may represent opposing sides to an enclosure 19.85m wide, would certainly not be uncommon in this landscape. In fact this feature type typifies the archaeological remains for this period (Jackson and Dalwood 2007). The majority are only known through cropmark evidence and few have been subject to any level of excavation (Hurst 2004; Hancocks 2007, 91-100; Morton and Holbrook 2007, 101-111; Webster 2012). The chance to investigate one in its entirety and place it within the larger landscape provides a relatively rare chance in the region. The artefactual and environmental remains indicate that it is more likely to relate to occupation rather than being a stock enclosure.

## 6.2 Romano-British

The route of the Roman road between Gloucester and Worcester has long been thought to traverse the area of investigation and the geophysical survey followed by this evaluation has helped to confirm that this is the case. The relatively poor nature of the surface does need further investigation as does the apparent lack of phasing that suggests that the road comprised little more

than a single phase gravel 'skin' rammed into the underlying geology. This would have provided little more than additional grip in the poorer wet areas of the site and become covered over in a very short period of time. This is certainly not consistent with the believed interactions on main transportation routes in the region, and the opportunity to investigate the construction and use of 770m of Roman road along with its placing in the landscape and potentially associated roadside activities is a rare one that would help us to better understand this well known but poorly understood feature type.

### 6.3 Post-Roman/Modern

No occupational features were noted and the only activity apparent appears to have been a development of farming practices with ridge and furrow being employed to improve the crop yield, and later ceramic drains to help water drain down the slope and increase yields yet further.

### 6.4 Research frameworks

The original aims and objectives for the fieldwork was to try and gain an understanding of the presence/absence of archaeological deposits and features and their relative importance in the development of the history and archaeology of the region. In light of these evaluation results it is felt that these original aims can be further refined so that a better understanding of the site and its environs can be developed. These research agendas are drawn from local regional research frameworks that have been established in recent years including the West Midlands Regional Research Framework (Watt 2011; http://www.iaa.bham.ac.uk/research/fieldwork_research_themes/projects/wmrrfa/index.htm), the resource assessment and research agenda specifically developed for aggregate producing areas in Worcestershire (Jackson and Dalwood 2007; http://www.worcestershire.gov.uk/home/wccindex/wcc-arch/wcc-archaeology-aggregates.htm) and an outline assessment and research framework for the archaeology of Worcester (WCC 2007; http://www.worcestercitymuseums.org.uk/archaeo/worcs-resch-framewk-v2.51.pdf).

#### 6.4.1 Research Aim 1: Refine and characterise the archaeology present

The site contains features that appear to typify archaeological sites in the region, these comprise enclosure systems of Iron Age or Romano-British date. However few of these sites have been investigated with intrusive works and have been dated purely on morphology seen in crop marks and aerial photographs (Hurst 2004; Hancocks 2007; Jackson and Dalwood 2007; Morton and Holbrook 2007). As such, any site that can help further refine and develop the understanding of these relatively common features is an opportunity not to be missed.

#### 6.4.2 Research Aim 2: Regional identities and cultural and economic expression

Strong regional differences have been previously observed in Iron Age and Romano-British settlement patterns and character in Britain. Consequently, establishing the character, relationships and dating between settlement and landscape components is hoped to provide an important addition to the understanding of rural settlement patterns in this area (Morton and Holbrook 2007).

Similar differences exist in the character of material assemblages and ecofactual remains associated with these regional settlements. These not only reflect the different subsistence patterns represented, but also reflect the trading networks, cultural identities and social contacts of these rural communities. These may have their roots in Pre-Roman tribal/cultural identities and contacts pre-dating the Roman 'market' economy (Morton and Holbrook 2007). Examination of the spatial relationships, chronological development and character of the associated material assemblages and ecofactual remains therefore may by used to support understanding of changing (or unchanging) patterns of subsistence economy and trade networks of these communities.

### 6.4.3 Research Aim 3: Roman Settlement patterns, landscape utilisation and economy

The period of transition between the Iron Age and Roman periods, and again in the mid 2nd and 3rd centuries AD are thought traditionally to be periods of rural settlement dislocation and the latter commonly also being a period of apparent abandonment (though dating frameworks for the late Roman period are poor). It has recently been observed that the longer term rhythms and patterns of change in the local and regional agrarian landscape, as well as the social and ideological frameworks based around these, are likely to have been more central to the lives of communities than the major changes within the Roman system in Britain and beyond. As such, any evidence provided from sites that can help to create a better understanding of the changing (or not) practices or landscape utilisation would help us to further interpretations relating to interactions between communities and the larger state (Morton and Holbrook 2007).

### 6.4.4 Research Aim 4: Roman trade networks, economy and industry in the Worcester hinterlands

The areas around the small town of Worcester and their interactions with the town and beyond are currently poorly understood, as are the routes, uses and evolution of the roads that ran through and from the town (WCC 2007). As such, any site that can help to refine our understanding of how the hinterlands of the small industrial town of Worcester interacted with not just the town, but also the wider trade networks could help demonstrate the relative economic and social 'pulls' of various economic centres on the trade networks.

The practical nature, construction and evolution of Roman roads are poorly understood despite being a well known feature in the British landscape. As such, any work in the region that can help refine our understanding on the construction, development, adaption and usage of Roman Roads in the region could help characterize this poorly understood feature type (WCC 2007).

### 6.4.5 Research Aim 5: Post-Roman settlement and landscape usage

At present there is no evidence to suggest that further activity other than farming took place on the site between the post-Roman period and today, but given the limited investigations undertaken so far this can not be confirmed with any certainty. Given its ideal location next to a major trade route near the settlement of Worcester, further study needs to be made before a true interpretation of the landscape can be put forward with confidence.

# 7 Significance

## 7.1 Nature of the archaeological interest in the site

In the south-west of the site a small enclosure was seen that suggested that there has been activity on the site from the Late Iron Age, whilst the route of the Roman road between Gloucester and Worcester was found running north to south through the west of the area and immediately adjacent to the enclosure. The quality of the road was less than expected, however, being more a gravel track than a major commuting route. No other associated roadside structures or features were noted during the course of the evaluation and it was clear that later farming activities (ridge and furrow and historic/ongoing ploughing) have impacted on the underlying archaeology, in places removing it all together.

## 7.2 Relative importance of the archaeological interest in the site

Iron Age enclosures typify the archaeological remains for this period (Jackson and Dalwood 2007). The majority are only known through cropmark evidence and few have been subject to any level of excavation or placed into their wider landscape (Hurst 2004, Hancocks 2007; 91-100, Morton and Holbrook 2007; 101-111, Webster 2012). As such, this feature has a moderate importance to help characterise this feature type.

Like the Iron Age enclosures, the Roman road is a feature type that is well known in the region but has had little actual investigation undertaken on it. The construction, road types, usage and understanding of Roman Roads has been the centre of much debate over recent years and still

only a general understanding can be provided (Margary 1973, Davies 2002). Margary argues that there were standard road widths with 7.30m to 9m along important routes down to 3.80-4.50m for minor roads whilst Davies argues that width has little to do with importance and that the standard road regardless of importance was 6.50m to allow two vehicles to pass. As such the opportunity to investigate such a long length of road and potential associated roadside activity is a rare one and must be counted as of moderate to high importance.

### 7.3 Physical extent of the archaeological interest in the site

The site has been subjected to intensive ploughing. Combined with the slope, the average depth of archaeologically significant deposits was around 0.45m below the present ground level, although this became shallower along the crest and top of the slope where erosional processes are at their most striking. The archaeology present comprised shallow individual features with few interconnecting relationships that appear to be scattered across the investigation area in a fairly dispersed nature.

The historic environment is a non-renewable resource and therefore cannot be directly replaced. However mitigation through recording and investigation also produces an important research dividend that can be used for the better understanding of the area's history and contribute to local and regional research agendas (cf NPPF, DCLG 2012, Section 141).

## 8 Publication summary

Worcestershire Archaeology has a professional obligation to publish the results of archaeological projects within a reasonable period of time. To this end, Worcestershire Archaeology 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.

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*In the south of the proposed development area, two ditches and an associated pit are thought to form an enclosure of Late Iron Age to early Romano-British date. It is considered that this represents occupation rather than simply a stock enclosure, as the features contained charred grain, fire cracked stone, burnt clay, pottery sherds in good condition and butchered fragments of animal bone. Evidence of later ridge and furrow was recorded in a number of trenches, as were former field boundaries and an area of hardcore and modern waste.*

## 9 Acknowledgements

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## 10 Bibliography

Beard, G R, Cope, D W, Jones, R J A, Palmer, R C, and Whitfield, W A D, 1986 *Soils of Worcester and the Malvern District*, Soil Survey of England and Wales, Sheet **150**

British Geological Survey, 1976 Geological Survey of Great Britain (England and Wales) Solid and Drift sheet, **182**, 1:50,000

British Geological Survey, 1990 1:250,000 Series, Solid Geology sheet $52^0$ N-$04^0$ W

Cappers, T R J, Bekker, R M, and Jans, J E A, 2006 *Digitale Zadenatlas van Nederland: Digital seed atlas of the Netherlands*, Groningen Archaeological Studies, **4**, Barkhuis Publishing and Groningen University Library: Groningen

Davies, H, 2002 *Roads in Roman Britain*, Stroud: Tempus

DCLG 2012 *National Planning Policy Framework*, Department for Communities and Local Government

DCLG/DCMS/EH 2010 *PPS5 Planning for the historic environment: historic environment planning practice guide*, Department for Communities and Local Government/Department for Culture, Media and Sport/English Heritage

EDP 2012 *Land south of Worcester, Archaeological Desk-based Assessment,* The Environmental Dimension Partnership (EDP), Report **EDP1181_03b**

English Heritage 2002 *Environmental archaeology: a guide to the theory and practice of methods, from sampling and recovery to post-excavation*, Centre for Archaeology Guidelines

English Heritage 2011 *The setting of heritage assets*, English Heritage

Hancocks, A, 2007 Later prehistory: Middle and Late Bronze Age to Iron Age, in Jackson and Dalwood 2007, 82-100

Hurst, D, 2004 *Middle Bronze Age to Iron Age: a research assessment*, West Midlands Regional Research Framework (publication draft)

Hurst, J D, and Rees, H, 1992 Pottery fabrics; a multi-period series for the County of Hereford and Worcester, in Woodiwiss, S G (ed), *Iron Age and Roman salt production and the medieval town of Droitwich*, CBA Res Rep, **81**, 200-9

IfA 2008 *Standard and guidance for archaeological field evaluation*, Institute for Archaeologists

Jackson, R, and Dalwood, H, 2007 *Archaeology and aggregates in Worcestershire: a resource assessment and research agenda*, Historic Environment and Archaeology Service, Worcestershire County Council and Cotswold Archaeology, HEAS internal report, **1477** (available online at www.worcestershire.gov.uk/home/wccindex/wcc-arch/wcc-archaeology-aggregates.htm)

Margary, I D, 1973 *Roman Roads in Britain,* 3rd edition

Morton, R, and Holbrook, N, 2007 Later pre-Roman Iron Age to sub-Roman period, in Jackson and Dalwood 2007, 101-111

Ragg, J M, Beard, G R, George, H, Heaven, F W, Hollis, J M, Jones, R J A, Palmer, R C, Reeve, M J, Robson, J D, and Whitfield, W A D, 1984 *Soils and their use in midland and western England*, Soil Survey of England and Wales, **12**

Roseveare, M J, 2011 *Land South of Worcester, Worcestershire; Geophysical Survey Report produced for EDP,* ArchaeoPhysica Ltd, unpublished document dated 14 June 2011, report **KMP101**

Stace, C, 2010 *New flora of the British Isles*, Cambridge University Press, (3rd edition)

WA 2012a *Proposal for an archaeological evaluation at the South Worcester Development, Kempsey, Worcestershire,* Worcestershire Archaeology, Worcestershire County Council, unpublished document dated 30 August 2012, P3871

WA 2012b Manual of Service Practice, Recording Manual, Worcestershire Archaeology, Worcestershire County Council, report **1842**

Watt, S, (ed) 2011 *The archaeology of the West Midlands. A framework for research*, Oxford, Oxbow Books, (available online at http://www.iaa.bham.ac.uk/research/fieldwork_research_themes/projects/wmrrfa/index.htm)

WCC 1999 *Statement of standards and practices appropriate for archaeological fieldwork in Worcester*, Appendix 3 in Supplementary Planning Guidance Number 8: Archaeology and Development, Worcester City Council, document revised June 1999

WCC 2007 *An outline assessment and research framework for the archaeology of Worcester,* Worcester City Council, document dated September 2007 (available online at http://www.worcestercitymuseums.org.uk/archaeo/worcs-resch-framewk-v2.51.pdf)

WCC 2010 *Standards and guidelines for archaeological projects in Worcestershire*, Planning Advisory Section, Historic Environment and Archaeology Service, Worcestershire County Council unpublished report 604, revised December 2010

Webster, J, 2012 *Excavations at Church Farm West, Ball Mill Quarry, Grimley, Worcestershire (SAM WT209)* Historic Environment and Archaeological Service, Worcestershire County Council, internal report **1906,** draft dated December 2012

Worcestershire Historic Environment and Archaeology Service 2009 *Worcestershire online ceramic database* [online]. Available from: http://www.worcestershireceramics.org [Accessed 6 December 2012]

# Figures

## Plates

*Plate 1: Roman road surface [104], Trench 1*

*Plate 2: Roman road surface [204], Trench 2*

*Plate 3: Enclosure ditch [112], Trench 1*

# Appendix 1 Trench descriptions

### Trench 1

Maximum dimensions: Length: 50m Width: 1.60m Depth: 0.73m

Orientation: east to west

| Context | Classification | Description | Depth below ground surface (b.g.s) – top and bottom of deposits |
|---|---|---|---|
| 100 | Ploughsoil | Medium dark greyish brown soft to moderate loam with frequent root disturbance. | 0.00-0.20m |
| 101 | Subsoil | Mid greyish brown soft to moderate clay and loam mix with rare rounded gravel inclusions. Rare charcoal flecks throughout. | 0.21-0.36m |
| 102 | Natural substrate | Medium reddish pink compact clay marl with rare to moderate rounded to subrounded gravels, moderately sorted. Bands of natural gravels also noted. | 0.37m+ |
| 103 | Cut of linear | North-south aligned shallow slightly concaved U shaped linear. 3.74m in width by at least 1.60m in length. Not bottomed. | 0.36-0.58m+ |
| 104 | Cobbled surface | Single layer of compact rounded to subrounded gravels with two wheel ruts 1.57m apart noted. Set within the hollow of [103]. 3.74m in width by at least 1.60m in length. | 0.57-0.58m |
| 105 | Fill of [103] | Light orange brown compact clay with occasional subrounded gravels throughout. Very similar to furrow fills seen elsewhere within trench. | 0.36-0.56m |
| 106 | Cut of terminus | North-south aligned moderately steep U-shaped linear gradually sloping to a flat base. 0.98m in width. | 0.36-0.71m |
| 107 | Fill of [106] | Dark orange brown compact silty clay with occasional charcoal flecks and rounded to subrounded gravels throughout. | 0.60-0.71m |
| 108 | Fill of [106] | Light greyish brown firm silty clay with moderate charcoal flecks and occasional rounded to subrounded gravels throughout. | 0.52-0.59m |
| 109 | Fill of [106] | Mid orange brown firm silty clay with very occasional pea grit and roots throughout. | 0.36-0.51m |
| 110 | Fill of [112] | Light greyish brown moderate clay loam with occasional rounded gravels and charcoal flecks throughout. | 0.36-0.48m |
| 111 | Fill of [112] | Mid pinkish brown compact silty clay with occasional subrounded gravels throughout. | 0.49-0.73m |
| 112 | Cut of terminus | North-south orientated steep sided linear with U-shaped concaved base and rounded corners. 1.96m in width. Truncates 113. | 0.36-0.73m |
| 113 | Fill of [114] | Mid greyish brown soft silty clay and loam mix with frequent rounded to subrounded gravels and occasional charcoal flecks throughout. | 0.36-0.58m+ |

| Context | Classification | Description | Depth below ground surface (b.g.s) – top and bottom of deposits |
|---|---|---|---|
| 114 | Cut of pit | East-west aligned elongated pit with steep sides dropping towards a concaved base. Not fully excavated | 0.36-0.58m+ |

**Trench 2**

Maximum dimensions: Length: 50m Width: 1.60m Depth: 1.10m

Orientation: east to west

| Context | Classification | Description | Depth below ground surface (b.g.s) – top and bottom of deposits |
|---|---|---|---|
| 200 | Ploughsoil | Medium dark greyish brown soft to moderate loam with frequent root disturbance. | 0.00-0.30m |
| 201 | Subsoil | Mid greyish brown soft to moderate clay and loam mix with rare rounded gravel inclusions. Rare charcoal flecks throughout. | 0.31-0.51m |
| 202 | Natural substrate | Medium reddish pink compact clay marl with rare to moderate rounded to subrounded gravels, moderately sorted. Bands of natural gravels also noted. | 0.52m+ |
| 203 | Cobbled surface | Light greyish brown soft to moderate silt rich loam into which a single coarse of rounded to subrounded gravels appear to have been pressed. 2.25m wide it is within the base of [204]. | 0.52-0.57m |
| 204 | Cut of linear | North-south orientated linear with very gentle shallow sides tapering onto a flat base 3.40m wide. | 0.52-0.57m |
| 205 | Fill of [206] | Mid greyish brown soft silt rich loam with rare rounded gravels throughout. | 0.52-0.86m |
| 206 | Cut of furrow | North-south aligned furrow with gentle sloping convex sides dropping onto a concaved U-shaped base. 2.46m wide and at least 1.60m in length. | 0.52-1.08m |
| 207 | Fill of [208] | Mid greyish brown soft clay rich loam with occasional rounded to subrounded gravels throughout. | 0.52-0.94m+ |
| 208 | Cut of land drain | North-south orientated land drain with vertical sides dropping to what is believed to be a flat base although the feature was not fully excavated. 0.20m in width by at least 1.60m in length. | 0.52-0.94m+ |
| 209 | Fill of [210] | Light greyish brown clay with occasional rounded to subrounded gravels and frequent charcoal flecks throughout. | 0.52-1.10m+ |
| 210 | Cut of land drain | North-south aligned land drain with vertical sides dropping to what is believed to be a flat base although the feature was not fully excavated. 0.26m in width by at least 1.60m in length. | 0.52-1.10m+ |
| 211 | Fill of [212] | Mid reddish brown silty clay with no visible inclusions present. | 0.52m+ |

| Context | Classification | Description | Depth below ground surface (b.g.s) – top and bottom of deposits |
|---|---|---|---|
| 212 | Cut of linear | North-south aligned furrow, 2.48m wide by at least 1.60m in length. Not excavated but artefactual material collected from fill. | 0.52m+ |
| 213 | Fill of [206] | Mid reddish brown compact silt and clay mix with no visible inclusions | 0.87-1.08m |

**Trench 3**

Maximum dimensions: Length: 50m Width: 1.60m Depth: 0.83m

Orientation: north-west to south-east

| Context | Classification | Description | Depth below ground surface (b.g.s) – top and bottom of deposits |
|---|---|---|---|
| 300 | Ploughsoil | Dark greyish brown compact clay rich loam with occasional charcoal flecks and rounded to subrounded gravels throughout. | 0.00-0.40m |
| 301 | Natural substrate | Mid yellow brown compact clay with bands of rounded to subrounded gravels noted throughout. | 0.41m+ |
| 302 | Fill of [303] | Mixed dark blue grey and dark greyish brown silty clays with very frequent CBM, tarmacadam and charcoal fleck inclusions and moderate light blue grey angular hardcore gravels. | 0.41-0.83m |
| 303 | Cut of pit | Moderately steep sides dropping onto a flat base filled with post-medieval building and waste fragments | 0.41-0.83m |

**Trench 4 -** was not dug due to the presence of overhead electricity cables.

**Trench 5**

Maximum dimensions: Length: 50m Width: 1.60m Depth: 0.57m

Orientation: east to west

| Context | Classification | Description | Depth below ground surface (b.g.s) – top and bottom of deposits |
|---|---|---|---|
| 500 | Ploughsoil | Dark greyish brown compact clay rich loam with occasional charcoal flecks and rounded to subrounded gravels throughout. | 0.00-0.23m |
| 501 | Subsoil | Mid greyish brown compact silty clay with occasional charcoal flecks, manganese and rounded to subrounded gravels throughout. | 0.24-0.56m |
| 502 | Natural | Mid yellow brown compact clay with bands of rounded to subrounded gravels noted throughout. | 0.57m+ |

**Trench 6**

Maximum dimensions: Length: 50m Width: 1.60m Depth: 0.38m

Orientation: east to west

| Context | Classification | Description | Depth below ground surface (b.g.s) – top and bottom of deposits |
|---|---|---|---|
| 600 | Ploughsoil | Dark greyish brown compact clay rich loam with occasional charcoal flecks and rounded to subrounded gravels throughout. | 0.00-0.37m |
| 601 | Natural substrate | Mid yellow brown compact clay with bands of rounded to subrounded gravels noted throughout. | 0.38m+ |
| 602 | Cobbled surface/ natural gravels | Single course thick band of rounded to subrounded gravels set directly into the underlying natural substrate. No clear edges noted and very patchy but 3.80m in width by at least 1.60m in length. | 0.37-0.38m |
| 603 | Cobbled surface/ natural gravels | Single course thick patchy band of rounded to subrounded gravels set directly into the underlying natural substrate. No clear edges but 1.24m wide by at least 1.60m in length. | 0.37-0.38m |

**Trench 7**

Maximum dimensions: Length: 130m Width: 1.60m Depth: 0.46m

Orientation: east to west

| Context | Classification | Description | Depth below ground surface (b.g.s) – top and bottom of deposits |
|---|---|---|---|
| 700 | Ploughsoil | Dark greyish brown compact clay rich loam with occasional charcoal flecks and rounded to subrounded gravels throughout. | 0.00-0.36m |
| 701 | Subsoil | Mid greyish brown compact silt rich clay with occasional charcoal flecks and rounded to subrounded gravels throughout. | 0.37-0.45m |
| 702 | Natural substrate | Mid yellow brown compact clay with bands of rounded to subrounded gravels noted throughout. | 0.46m+ |
| 703 | Fill of [705] | Mid greyish brown moderately compact silt rich clay with frequent charcoal flecks and rounded to subrounded gravels throughout. 2.08m in width. | 0.46-0.86m+ |
| 704 | Fill of [705] | Mid reddish brown firm silty clay with rare charcoal flecks throughout. Appears to be a lining of [705]. 2.54m in width. | 0.46-0.86m+ |
| 705 | Cut of linear | North-south orientated linear with moderately steep sides that were concaved towards a projected U-shaped base. Not fully excavated due to water ingress. 2.54m in width by at least 1.60m in length. | 0.46-0.86m+ |
| 706 | Fill of [708] | Mid greyish brown firm silty clay with rare charcoal flecks and rounded to subrounded gravels throughout. Single CBM | 0.46-0.58m |

| Context | Classification | Description | Depth below ground surface (b.g.s) – top and bottom of deposits |
|---|---|---|---|
| | | fragment also noted. 1.11m in width. | |
| 707 | Fill of [708] | Light greyish brown moderately compacted silty clay with rare charcoal flecks throughout. 1.74m in width | 0.46-0.66m |
| 708 | Cut of linear | North-south aligned linear with moderate U-shaped profile with a gradual break of slope onto a slightly concaved base. 1.74m wide by at least 1.60m in length | 0.46-0.66m |
| 709 | Cobbled surface | North-south aligned single coarse thick rounded to subrounded gravels set directly into the underlying substrate. 3.92m in width by at least 1.60m in length. | 0.45-0.46m |

**Trench 8**

Maximum dimensions: Length: 50m Width: 1.60m Depth: 0.51m

Orientation: north to south

| Context | Classification | Description | Depth below ground surface (b.g.s) – top and bottom of deposits |
|---|---|---|---|
| 800 | Topsoil | Dark greyish brown soft silt rich clay that contains frequent root action and occasional charcoal flecks and rounded to subrounded gravels throughout. | 0.00-0.15m |
| 801 | Subsoil | Mid greyish brown soft silty clay with no visible inclusions. | 0.16-0.27m |
| 802 | Natural interface | Light pinkish yellow firm silty clay with no visible inclusions. | 0.28-0.50m |
| 803 | Natural substrate | Medium pinkish blue very compact clay with occasional banding of gravels throughout. | 0.51m+ |

**Trench 9**

Maximum dimensions: Length: 50m Width: 1.60m Depth: 0.31m

Orientation: north to south

| Context | Classification | Description | Depth below ground surface (b.g.s) – top and bottom of deposits |
|---|---|---|---|
| 900 | Topsoil | Dark grey brown soft silt rich clay that contains frequent rooting with occasional charcoal flecks and rounded to subrounded gravels throughout. | 0.00-0.15m |
| 901 | Subsoil | Mid greyish brown soft silty clay with no visible inclusions. | 0.16-0.23m |
| 902 | Natural substrate | Light pinkish brown firm silty clay with blue gleyed mottles | 0.24m+ |
| 903 | Fill of [904] | Dark greyish brown moderately compact silty clay with no visible inclusions. Post-medieval pot recovered. 0.95m in width | 0.24-0.30m |

| Context | Classification | Description | Depth below ground surface (b.g.s) – top and bottom of deposits |
|---|---|---|---|
| 904 | Cut of linear | East-west orientated gently concaved sides U-shaped linear dropping onto a flat base. 0.95m in width by at least 1.60m in length. | 0.24-0.30m |

# Appendix 2 Technical information

## The archive (site code: WSM 47391)

The archive consists of:

| | |
|---|---|
| 27 | Context records AS1 |
| 2 | Photographic records AS3 |
| 132 | Digital photographs |
| 6 | Scale drawings |
| 1 | Sample records AS17 |
| 1 | Sample number catalogues AS18 |
| 1 | Flot records AS21 |
| 8 | Trench record sheets AS41 |
| 1 | Box of finds |
| 1 | CD-Rom/DVDs |
| 1 | Copy of this report (bound hard copy) |

The project archive is intended to be placed at:

Worcestershire County Museum
Museums Worcestershire
Hartlebury Castle
Hartlebury
Near Kidderminster
Worcestershire DY11 7XZ
Tel Hartlebury (01299) 250416

## Summary of data for Worcestershire HER (site code: WSM 47391)

**Artefacts**

| Period | Material class | Object specific type | Count | Weight (g) |
|---|---|---|---|---|
| LIA/ERB | ceramic | pot | 8 | 54 |
| medieval | ceramic | pot | 1 | 6 |
| post-medieval | ceramic | brick/tile | 1 | 14 |
| post-medieval | ceramic | clay pipe | 1 | 2 |
| post-medieval | ceramic | pot | 13 | 176 |
| post-medieval | ceramic | roof tile(flat) | 4 | 88 |
| post-medieval | glass | bottle | 2 | 36 |
| Undated | ceramic | fired clay | 3 | 50 |
| Undated | glass | glassy waste | 1 | 218 |
| Undated | mineral | coal | 1 | 4 |
| | | Totals: | 35 | 648 |

*Table 1: Quantification of the assemblage*

| Context | Material class | Object specific type | Fabric code | Count | Weight (g) | Start date | End date | *tpq* date range |
|---|---|---|---|---|---|---|---|---|
| 110 | ceramic | pot | 3 | 2 | 22 | -400 | 100 | 400BC-AD100 |
| | ceramic | pot | 3 | 1 | 14 | -400 | 100 | |
| | ceramic | pot | 97 | 1 | 4 | -400 | 100 | |
| | ceramic | pot | 97 | 1 | 4 | -400 | 100 | |
| 113 | ceramic | pot | 97 | 3 | 10 | -400 | 100 | 400BC-AD100 |
| | ceramic | fired clay | - | 3 | 50 | - | - | |
| 116 | ceramic | brick/tile | - | 1 | 14 | 1600 | 1850 | 1600-1850 |
| 205 | ceramic | roof tile(flat) | - | 2 | 42 | 1600 | 1850 | 1600-1850 |
| 207 | ceramic | clay pipe | - | 1 | 2 | 1600 | 1900 | 1600-1850 |
| 211 | ceramic | roof tile(flat) | - | 1 | 10 | 1600 | 1850 | 1600-1850 |
| 213 | ceramic | pot | 69 | 1 | 6 | 1300 | 1600 | 1300- |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | 1600 |
| 800 | ceramic | pot | 78 | 1 | 8 | 1700 | 1800 | 1700-1800 |
| 801 | ceramic | pot | 150 | 1 | 12 | 1600 | 1700 | 1600-1700 |
| 900 | ceramic | pot | 78 | 1 | 68 | 1600 | 1800 | 1830-1900 |
| | ceramic | pot | 78 | 1 | 4 | 1600 | 1800 | |
| | ceramic | pot | 78 | 1 | 12 | 1600 | 1800 | |
| | ceramic | pot | 91 | 1 | 18 | 1700 | 1800 | |
| | ceramic | pot | 84 | 1 | 4 | 1760 | 1840 | |
| | ceramic | pot | 81 | 1 | 4 | 1600 | 1800 | |
| | ceramic | pot | 85 | 3 | 6 | 1800 | 1900 | |
| | ceramic | pot | 78 | 1 | 6 | 1600 | 1800 | |
| | ceramic | roof tile(flat) | - | 1 | 36 | 1600 | 1850 | |
| | glass | glassy waste | - | 1 | 218 | - | - | |
| | glass | bottle | - | 2 | 36 | 1830 | 1900 | |
| | mineral | coal | - | 1 | 4 | - | - | |
| | ceramic | pot | 91 | 1 | 34 | 1700 | 1800 | |

*Table 2 Summary of context dating based on artefacts (for explanation of fabric codes see [www.worcestershireceramic.org](www.worcestershireceramic.org))*

**Environmental results**

| Context | Sample | Feature type | Fill of | Position of fill | Period | Volume of sample (L) | Volume processed (L) | Residue assessed | Flot assessed |
|---|---|---|---|---|---|---|---|---|---|
| 110 | 2 | ditch | 106 | primary | LIA/ERB | 10 | 10 | yes | yes |
| 113 | 1 | pit | 114 | | LIA/ERB | 10 | 0 | no | no |

*Table 3: List of environmental samples*

| **context** | **sample** | **large mammal** | **charcoal** | **charred plant** | **uncharred plant** | **comment** |
|---|---|---|---|---|---|---|
| 110 | 2 | occ | occ | occ | occ | occ burnt clay, heat-cracked stone |

*Table 4: Summary of environmental remains*

| **Latin name** | **Family** | **Common name** | **Habitat** | **110** |
|---|---|---|---|---|
| | | | | |
| *Uncharred plant remains* | | | | |
| | | | | |
| Cereal sp indet culm node | Poaceae | cereal | F | + |
| *Stellaria media* | Caryophyllaceae | common chickweed | AB | + |
| *Atriplex* sp | Amaranthaceae | orache | AB | + |
| *Marrubium vulgare* | Lamiaceae | white horehound | ABD | + |
| | | | | |
| *Charred plant remains* | | | | |
| *Triticum dicoccum/spelta* | Poaceae | emmer/spelt wheat | F | + |

| | | | | |
|---|---|---|---|---|
| *grain* | | | | |
| Cereal sp indet grain | Poaceae | cereal | F | |

*Table 5: Plant remains from Context (110)*

| **Methods of retrieval** | **Yes/No** |
|---|---|
| Hand retrieval | Y |
| Bulk sample | Y |

*Table 6: Retreval methodology*

| **Type** | **Preservation** | **Date (note 1)** | **Specialist report? Y/N (note 2)** | **Key assemblage? Y/N (note 3)** |
|---|---|---|---|---|
| Bone – large mammal | undecayed | Medieval to post-medieval | N | N |
| Plant remains – macrofossils | charred | Late Iron Age to Early Romano-British | Y | N |

*Table 7: Summary of results*

**Notes**

1) In some cases the date will be "Undated". In most cases, especially if there is not a specialist report, the information entered in the Date field will be a general period such as Neolithic, Roman, medieval etc (see below for a list of periods used in the Worcestershire HER). Very broad date ranges such as late Medieval to Post-medieval are acceptable for artefacts which can be hard to date for example roof tiles. If you have more specific dates, such as 13th to 14th century, please use these instead. Specific date ranges which cross general period boundaries can also be used, for example 15th to 17th century.

| **period** | **from** | **to** |
|---|---|---|
| Palaeolithic | 500000 BC | 10001 BC |
| Mesolithic | 10000 BC | 4001 BC |
| Neolithic | 4000 BC | 2351 BC |
| Bronze Age | 2350 BC | 801 BC |
| Iron Age | 800 BC | 42 AD |
| Roman | 43 | 409 |
| Post-Roman | 410 | 1065 |
| Medieval | 1066 | 1539 |
| Post-medieval | 1540 | 1900 |
| Modern | 1901 | 2050 |

| **period specific** | **from** | **to** |
|---|---|---|
| Lower Paleolithic | 500000 BC | 150001 |
| Middle Palaeolithic | 150000 | 40001 |
| Upper Palaeolithic | 40000 | 10001 |

| | | |
|---|---|---|
| Early Mesolithic | 10000 | 7001 |
| Late Mesolithic | 7000 | 4001 |
| Early Neolithic | 4000 | 3501 |
| Middle Neolithic | 3500 | 2701 |
| Late Neolithic | 2700 | 2351 |
| Early Bronze Age | 2350 | 1601 |
| Middle Bronze Age | 1600 | 1001 |
| Late Bronze Age | 1000 | 801 |
| Early Iron Age | 800 | 401 |
| Middle Iron Age | 400 | 101 |
| Late Iron Age | 100 BC | 42 AD |
| Roman 1st century AD | 43 | 100 |
| 2nd century | 101 | 200 |
| 3rd century | 201 | 300 |
| 4th century | 301 | 400 |
| Roman 5th century | 401 | 410 |
| Post roman | 411 | 849 |
| Pre conquest | 850 | 1065 |
| Late 11th century | 1066 | 1100 |
| 12th century | 1101 | 1200 |
| 13th century | 1201 | 1300 |
| 14th century | 1301 | 1400 |
| 15th century | 1401 | 1500 |
| 16th century | 1501 | 1600 |
| 17th century | 1601 | 1700 |
| 18th century | 1701 | 1800 |
| 19th century | 1801 | 1900 |
| 20th century | 1901 | 2000 |
| 21st century | 2001 | |

*Table 8: Date ranges for phases used*

2. Not all evaluations of small excavation assemblages have specialist reports on all classes of objects. An identification (eg clay pipe) and a quantification is not a specialist report. A short discussion or a more detailed record identifying types and dates is a specialist report. This field is designed to point researchers to reports where they will find out more than merely the presence or absence of material of a particular type and date.

3. This field should be used with care. It is designed to point researchers to reports where they will be able to locate the most important assemblages for any given material for any given date.