

SWR18576

NR 18576

Newport Street, Worcester.

A Report on Archaeological Monitoring of a Borehole Survey

October 2003

Archenfield Archaeology



Desk-Top Surveys. Planning Advice.

Building Surveys. Excavation. Evaluation.

Watching Briefs

Principal Archaeologist: Huw Sherlock, BA, Diparch, A.I.F.A

Archenfield Archaeology is a multi-disciplinary archaeological consultancy offering a complete range of archaeological advice and services to the public and private sector. We specialise in giving archaeological advice to developers, housing associations and private individuals. We also undertake archaeological intervention, from watching briefs to full-scale excavation, landscape surveys and geophysical surveys.

Text: Huw Sherlock
Project Manager: Huw Sherlock

Contents:

Summary	2
1.0 Introduction	2
2.0 Geological, Historical and Archaeological Background.....	3
2.1 Geological Background and Land Use.....	3
2.2 Historical Background	3
2.3 Archacological Background.....	3
3.0 Project Aims and Objectives	5
4.0 Methodology	5
4.1 Field Methodology.....	5
4.2 Processing Methodology.....	5
5.0 The Results.....	6
5.1 The Driven Tube Samples.....	7
DTS A (DTS02).....	7
DTS B (DTS 01).....	8
DTS C (DTS05).....	9
DTS D (DTS 04).....	10
5.2 The Boreholes	10
Boreholes E and F.....	10
6.0 Conclusions.....	11
7.0 Archive Deposition.....	11
8.0 Publication and Dissemination Proposals.....	12
Appendices	13
General Bibliography	13

Figures:

Figure 1: Location plan	2
Figure 2: Plan showing the location of the Driven Tube samples and boreholes monitored.....	6

Plates:

Plate 1: DTS A	7
Plate 2: DTS B.....	8
Plate 3: DTS C.....	9
Plate 4: DTS D	10

Summary

Archaeological monitoring of a borehole survey in the Newport Street area of Worcester recorded the presence of substantial deposits of Roman industrial material (ironstone slag) and pottery of probable Roman date. Some of the boreholes were waterlogged and the cores recovered contained material with the potential to contain well preserved environmental evidence.

1.0 Introduction

NGR SO 84685849

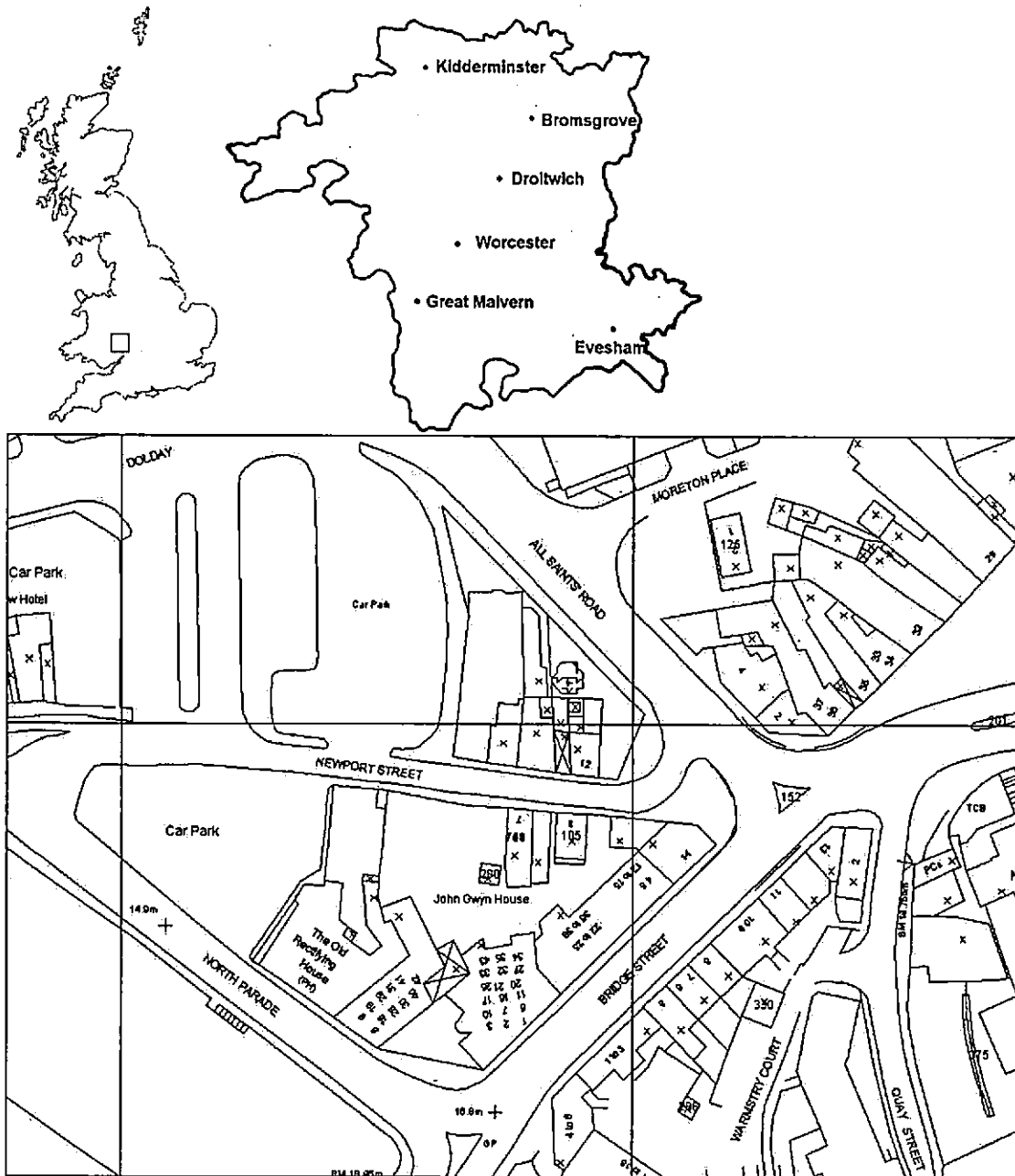


Figure 1: "Location plan." Ordnance Survey Superplan Data reproduced under license. Drawing reference: hmc_00001777

Soiltech Ltd (the client) commissioned a programme of archaeological monitoring and recording in accordance with a brief issued by the Worcester City Museum Archaeologist (ref. 03/29 issued 25th June 2003).

2.0 Geological, Historical and Archaeological Background

2.1 Geological Background and Land Use

The site lies close the line of the river Severn and is just to the west of the edge of the underlying gravel terrace that runs north-south across the area. The gravel terrace slopes down to the west to meet the edge of the floodplain. The overlying deposits consist of deep beds of alluvial clay. The site is currently in use as a car park to the west, with buildings and hard standing occupying the rest of the site.

2.2 Historical Background

Newport Street seems to have developed as a thoroughfare linking the original crossing of the river Seven with the higher ground to the east. In the Anglo-Saxon period it provided access from the gate that stood next to All Saints church to the bridge across the river. It seems likely that individual plots or burgages were established along the course of Newport Street in the period between 900 AD and 1100 AD, with Dolday becoming a service lane to rear of most northerly of these. Dolday also led to the site of St. Clements church and the adjacent North Quay. The area was brought within the line of the extended city wall sometime immediately after 1200 AD.

Newport Street became a focus of trade and crafts related activity, with medieval deeds frequently recording the presence of dyers from the early fourteenth century and tanning in the fifteenth century. In the sixteenth century the Newport Street Dolday area was firmly established as a key part of the city's cloth industry, and dyer's and walkers are recorded as living here. In the seventeenth and eighteenth centuries the population of the area seems to have expanded rapidly and there is evidence suggesting that a lot of housing was developed in the Newport street and Dolday area, with larger plots being subdivided to allow more room for housing. The bridge across the Severn was rebuilt in its present position in the later eighteenth century and Bridge Street was constructed in the period between 1771- 1780. By the late nineteenth century the area had become almost totally built up, with many houses (which are likely to have had cellars) having been built. The area was still a focus for industrial activity with the 1888 Ordnance Survey map showing the presence of timber yards, breweries, malthouses and blacksmiths.

2.3 Archaeological Background

The position of the site at the edge of the gravel terrace and on the floodplain has influenced both the nature of the settlement of the area and the preservation of the archaeological evidence this has left. Evidence from the observation of piling work in the Newport Street/Dolday area shows that archaeological deposits exist on top of up to 6 metres of alluvium (Carver 1980b, 306: catalogue 45/1). It has been pointed out that evidence of extensive flooding in the prehistoric and Roman periods may be preserved beneath interleaving layers of alluvium (Dalwood 1996). There is a high potential for the survival of well preserved waterlogged deposits.

The origin of Newport street as a trackway leading to the river crossing may date back to the roman period. When the original bridge piers were demolished in 12781 the bases of these structures were shown to consist of large amounts of ironstone slag which had amalgamated to form a very strong bond. The reason for the prevalence of this type of deposit in Worcester was the iron smelting industry which created huge amounts of slag. Large dumps of slag were left on the floodplain to the south Pitchcroft (HWCM 9315; Carver 1980, 306) and in other areas slag has been deliberately used to level the ground and make road surfaces. An evaluation of a site on the north east side of All Saints Road (WCM 100395) found a dump of roman slag and other features buried beneath three metres of later deposits (HWCM 10088; Brown, 1990). At the Crowngate car park site (WCM 100215) Roman deposits consisting of

waterlogged organic material and iron slag were recorded at 12m OD (Mundy 1985). The Roman layers found adjacent to All Saints road occurred beneath 3.75 metres of later deposits. The area appears to have been subject to prolonged periods of flooding in the Roman period and there is evidence for large scale dumping of slag and ash from iron smelting to raise the ground level. An evaluation and watching brief at the former Cattlemarket site, Croft Road and Dolday, lying to the north at the site of St. Clements church (Napthan 2001, WCM 100853) found evidence of deposits of Roman slag 0.6 metres deep at a depth of 14.6 metres OD (below 2.6 metres of overlying deposits) and other deposits containing well preserved Roman pottery.

In the Anglo Saxon period it is suggested (Dalwood 1996) that Newport Street and Dolday became a suburb immediately outside the inner defensive core of the *burh*. Newport Street may have been in existence by 900 AD as a deliberately planned approach to the bridge. Little archaeological evidence relating to this phase of the occupation of the site has yet been found, with no clearly dated Anglo-Saxon features being found at either the Crowngate car Park or All Saints Road sites. The extra mural suburb formed by Newport Street and Dolday was included within the line of the City wall after 1200 and evidence of the layout of burgage plots flanking Newport Street probably date from this period. Archaeological deposits 0.8 metres thick interpreted as dumping of soils and domestic waste from the medieval period were found at the Crowngate car park site, but no medieval layers were found at the All Saints Road site. The post medieval period saw the development of the area as a craft and industrial quarter as is discussed above (see 2.2 above) and the potential for the survival of well preserved structures relating to the dying and tanning industries is likely.

A number of buildings in Newport street are recorded as having stone cellars, some of which are likely to have dated from the medieval or early post medieval periods.

The development of the area in the eighteenth and nineteenth centuries is likely to have impacted on the archaeological record, with many houses in the area being built with cellars. This does not, however, mean that any cellarage has directly impacted on archaeological deposits existing at depths below 3 metres below current ground level.

3.0 Project Aims and Objectives

The aims of the project were: -

- To monitor all groundwork undertaken by the contractor.
- To make a record of the extent and depth of all such groundwork.
- To make a record of any archaeological features or deposits exposed.
- To record the presence of archaeological material within the trenches and in the spoil removed during excavation, and to retrieve any potential dating evidence.
- To make a record of all finds and any environmental material recovered.
- To ensure that if any environmental evidence was preserved, that a sufficient sample be retained to allow for further analysis.
- To ensure that the location and of the area excavated was accurately recorded on a suitably scaled plan.
- To record negative evidence and to consider its implications.

4.0 Methodology

4.1 Field Methodology

The following methodology was employed: -

- A suitably qualified archaeologist monitored all activity that involved disturbance of the ground surface.
- An assessment of the archaeological significance of any deposits and/or finds present in the cores was made and appropriate action taken.
- The stratigraphic sequences observed were recorded and the position of all the boreholes was located on a scaled plan.
- The presence of artefacts and was recorded with a description of their type, quantity and original location.
- All descriptions of structures and deposits, photographic records and drawing numbers were recorded on the relevant data capture documents in accordance with Archenfield Archaeology's standard site recording procedures.
- Staff carrying out the monitoring of the groundwork followed the guidelines laid down in the Archenfield Archaeology Health and Safety Policy.
- Archenfield Archaeology conforms to the Institute of Field Archaeologists' Code of Conduct and code of Approved Practice for the Regulation of Contractual arrangements in Field Archaeology. All projects are, where applicable, carried out in accordance with IFA Standards and Guidance or Draft Standards and Guidance.

4.2 Processing Methodology

- Samples were recovered from several of the deposits and have been retained for future reference
- All data were entered into a Microsoft Access relational database

5.0 The Results

A watching brief was maintained during the insertion of a series of driven tube samples (using a percussion rig) and a series of boreholes (using a shell and auger type rig). The driven tube samples (DTS) were recorded as samples A-D. In this type of sampling the cores retrieved are lifted in one metre sections and were retained in side clear polythene casing, which was subsequently split open and then photographed next to a scale. The shell and auger boreholes recorded as boreholes E-G) do not use clear polythene casing but lift a thin core within a hollow steel tube. These were therefore simply recorded by taking notes of the type of material being retrieved at relative depths and sub samples of the materials lifted were retained.

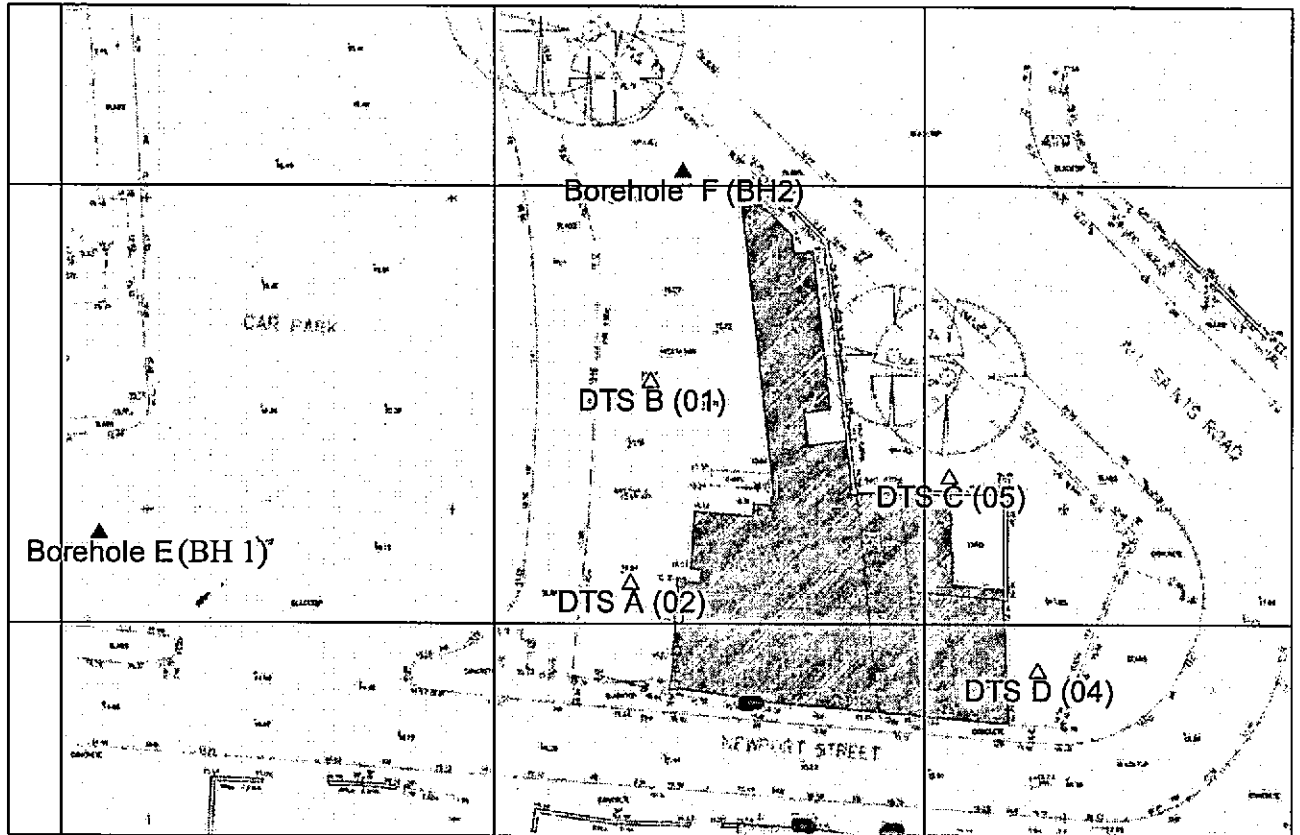


Figure 2: Plan showing the location of the Driven Tube samples and boreholes monitored

5.1 The Driven Tube Samples

DTS A (DTS02)



Plate 1: DTS A

This core was taken from a position in the centre of the access to the former Knights Restaurant building off Newport Street. The level OD of the ground surface was at 15.50 metres and the total depth of the core was 3.5 metres.

The upper 0.5 metres of deposit consisted of brick, crushed mortar mixed with ash and some topsoil. This overlay a mid brown silty loam with frequent inclusions of charcoal, ceramic building material (CBM) and occasional pieces of bone. Below this was a further 0.25 metres of similar deposit which became progressively softer, damper and more humic with frequent inclusions of charcoal. It became increasingly mixed with coarse sand which then became increasingly more clayey with inclusions of broken sandstone and patches of lime mortar.

Beneath this a layer of dark brown silty sand mixed with coarse sand and charcoal was present for a further 100 millimetres. Below this level was a very dark brown/black alluvial clay with silt, which was waterlogged, anoxic and approximately 200 millimetres thick. This layer became progressively mixed with a layer of ash and ferrous slag (**sample 1**) and continued for a further 150 millimetres. This overlay a very soft, fine mid red riverine sand mixed with a dark brown silty soil with charcoal inclusions.

The bore became waterlogged below 3 metres deep but at the deepest extent of the core there was a very dark greyish black alluvial silt. Also present were some larger pieces of ironstone slag which were retained (**sample 2**).

DTS B (DTS 01)

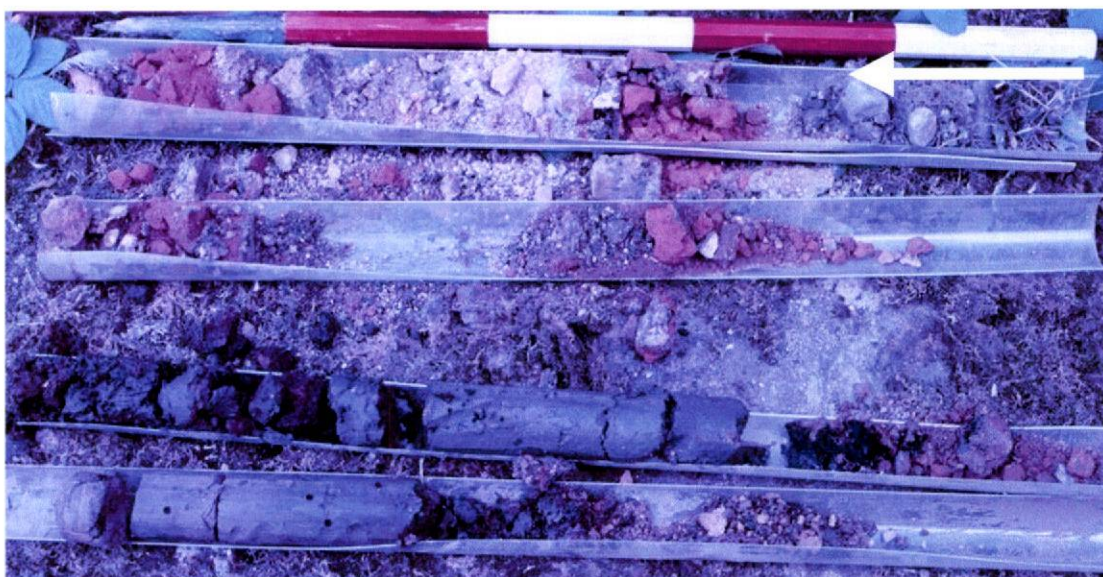


Plate 2: DTS B

This core was taken from within the yard of the former Knights Restaurant building. The level OD of the ground surface was at 15.33 metres and the total depth of the core was 4 metres.

The top metre of the core consisted of 150 millimetres of topsoil and stone overlying 750 millimetres of crushed CBM and mortar. Below this lay a void 200 millimetres deep then more crushed mortar and CBM (150 millimetres), a second void 150 millimetres deep and more crushed CBM (100 millimetres). The top 150 millimetres of the third metre core also consisted of crushed CBM, then a slight void. Below this, at approximately 2.2 metres from the surface, was a layer of dark grey/ black alluvial clay with silt, similar to the dark anoxic layer in DTS A. This layer was also 200 millimetres thick, very damp and contained inclusions of coarse sand. This layer became increasingly mixed with a layer of ash and slag (sample 3).

Below this at approximately 3 metres from ground level was a void 150 - 200 millimetres deep, followed by a layer of fine lime mortar. Within this mortar were some small pieces with an apparently finished surface. The mortar consisted of a matrix of angular stones, sand and what appears to be crushed CBM. This material appears similar in nature to Roman mortar found on other sites in Worcester (pers. comm. James Dinn). A sample (sample 4) of this was retained and it is proposed that this should be analysed by an expert in Roman building material. This layer became increasingly mixed with ash and ferrous slag. The lower 400 millimetres of the core consisted of dark grey alluvial clay with silt which had inclusions of ferrous slag within it. This became progressively more clayey towards the base of the core. A single sherd of pot was found within the lowest layer, at approximately 3.7 metres from the surface. This was retained and is a very hard, micaceous fine tempered fabric with inclusions of well sorted fine sand. It is unglazed but has a hard, fine finish on the outer surface and the internal surface shows evidence that it is from a wheel-thrown vessel.

DTS C (DTS05)

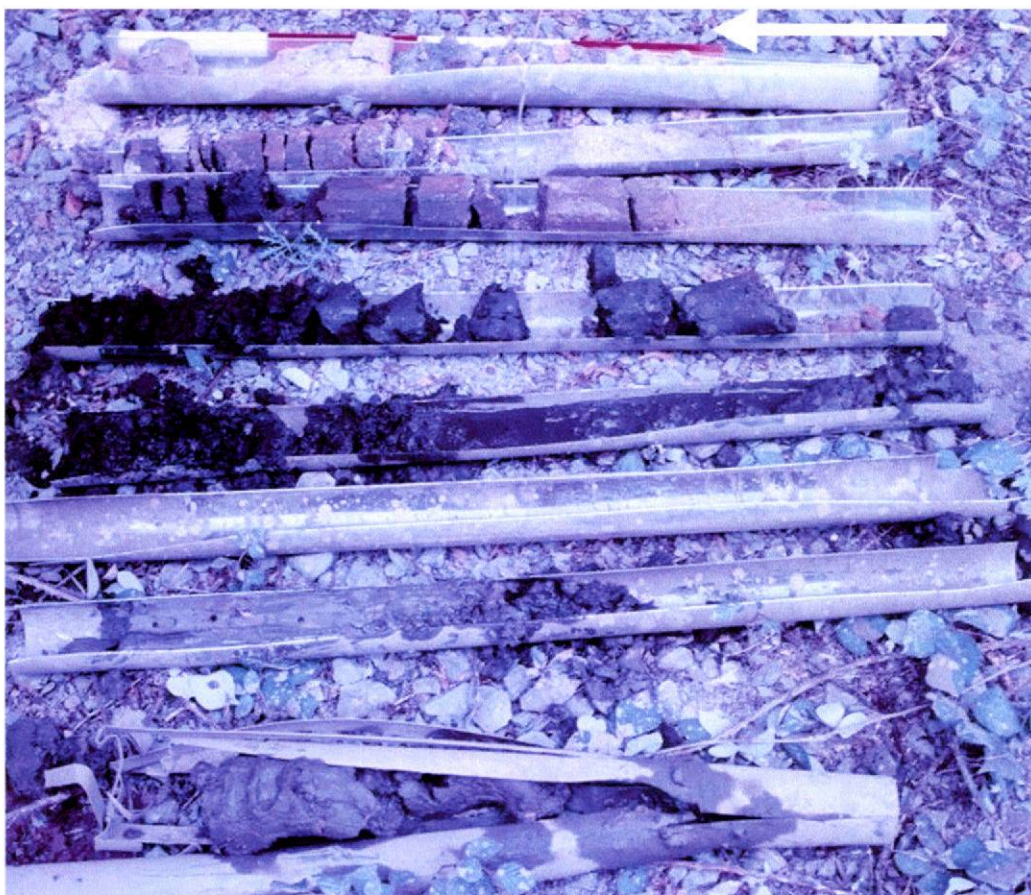


Plate 3: DTS C

This core was positioned to the rear of the buildings fronting onto Newport Street and close to the line of All Saints Road. The level OD of the ground surface was at 17 metres OD and the total depth of the core was 8 metres.

The top metre consisted of loose hardcore, broken brick and crushed mortar. Below this was a very loose layer of mortar and sand (0.45 metres) which overlay a layer 0.5 metres thick of compacted orangey-red sand, which is possibly a redeposited layer of natural riverine sand. This layer became mixed with a very dark silty soil with frequent inclusions of charcoal and small rounded stones.

At 2 metres deep was a void and then a layer of loose sand. This became progressively more compact and formed a deposit 0.45 metres thick. At approximately 2.5 metres from the surface was a layer of very dark, friable, humic silty soil with frequent inclusions of charcoal and crushed mussel shell. This deposit may form the fill of a pit as it became increasingly greener in colour, more humic and contained pieces of burnt bone.

This deposit also formed the upper 0.5 metres of the fourth metre, becoming increasingly soft and waterlogged below 3.5 metres from the surface. The lower 0.5 metres of the fourth metre consisted of the same deposit which became increasingly mixed with sand with slag and ash. This deposit also formed the upper 0.5 metres of the fifth metre, becoming increasingly waterlogged and contained more clay. Some bone was also present. At approximately 4.8 metres from the surface the deposit became indurated and drier, and had a high percentage of ironstone slag (**sample 5**). Below this the core became completely waterlogged and the sides of the core fell in. The last core consisted of more ironstone slag lying over clean blue

grey alluvial silt with clay at the base of the core, at approximately 8 metres from the surface.

DTS D (DTS 04)



Plate 4: DTS D

This core was taken from a position close to the junction of Newport Street and All Saints Road. The level OD of the ground surface was at 16.50 metres OD and the total depth of the core was 3.5 metres.

The top metre of the core consisted of a layer of made ground consisting of brick rubble, sand and mortar. Below this was a void was found, possibly a cellar belonging to building which formerly occupied the site. At the base of the core was a deposit of very soft dark alluvial silt.

A further core was attempted within the covered yard adjacent to the former Knights restaurant building, but this was abandoned as the top of a cellar wall was encountered below the concrete cap.

5.2 The Boreholes

Boreholes E and F

These boreholes were inserted using a shell and auger rig to an average depth of 8 metres. Borehole E was positioned in the south west part of the car park close to the Newport Street entrance. The level OD of the ground surface was at 15 metres OD and the total depth of the core was 8.5 metres. A thick deposit of indurated ironstone slag was found at 3.5 metres from the surface. This proved to be 1.5 metres thick. Below this layer were beds of alluvial silt and clay.

Borehole F was positioned to the rear of the former Knights Restaurant close to the boundary fence and adjacent to the All Saints Road. The level OD of the ground surface was at 15.80 metres OD and the total depth of the core was approximately 8 metres. Ironstone slag was also present as a thick, consistent indurated deposit in this core (sample 6). The top of this deposit was encountered at 3.45 metres below

ground level and continued to a depth of approximately 5.2 metres. From below 3.5 metres the borehole became waterlogged and alluvial silts were present below 5.5 metres. Below this a layer of fine well sorted riverine sand and gravel was present at 7 metres below ground level.

6.0 Conclusions

The results of the survey show that significant archaeological deposits are present across the site at depth. All the cores observed showed evidence of the existence of material that appears to be Roman ironstone slag. The widespread use of this material to create made ground has been widely reported in Worcester and indicates that the area was the focus of settlement activity at this period. The layer of what may be Roman mortar in DTS B is potentially significant as it indicates the possible existence of Roman buildings in the area. Most of the bores became waterlogged and contained material that had been formed in anoxic conditions suggesting that the ground conditions are favourable to the preservation of organic material. The importance of recovering plant macro and pollen evidence from this type of deposit has been discussed by Dalwood *et al* (1996) and is a key research priority. The presence of pottery of Roman date at a depth of 11.6 metres OD suggests that well preserved deposits of Roman date exist immediately above the underlying alluvium.

7.0 Archive Deposition

The primary project archive, consisting of the excavated material and any original paper records, will be prepared and stored in accordance with the guidelines laid down in the Institute of Field Archaeologists' guidelines for the preparation and storage of archives. The primary archive will be stored with Worcester City Museum

A copy of the digital archive, stored on CD and consisting of context, artefact and ecofact data, together with the site plan and selected photographs, will accompany the primary archive.

The client, in consultation with the project manager, will make provision for the deposition of all finds from the excavation with the Worcester City Museum. On completion of the fieldwork and the processing, collation, recording and analysis of the finds from the excavation all finds will be handed over to the museum staff, along with the project archive. Arrangements will be made with the museum for the transfer of title.

8.0 Publication and Dissemination Proposals

Paper copies of this report will be lodged with the Worcester City Museum Archaeologist, Worcester City Historic Environment Record and Worcester City Library. CDs of this report, together with the supporting archival material will be available from Archenfield Archaeology.

The complete photographic record, including the negatives, will be retained by Archenfield Archaeology.

Appendices

General Bibliography

- Allies, Jabez, 1840
On the ancient British, Roman, and Saxon antiquities of Worcestershire. London
- Baker, N, 1996
The Worcester Urban Design Campaign 1996 archaeology and urban morphology in the study area, typescript
- Brown, D. L, 1990
Evaluation At All Saints Road, Worcester. Report 66, Archaeology Section Hereford And Worcester County Council
- Dalwood, C H, 1996
Archaeology and Planning Towards the next millennium in Worcester – A Report on the Archaeological Implications of the "Worcester Urban Design Study" in Worcester Quality Partnership 1996
- Kenyon 1999
Croft Road/The Butts & Newport Street, Worcester Archaeological Assessment CAT Job: 709; CAT Report: 991116
- Mundy, C, 1985
Trial Excavations in Worcester 1985 HWCM 378 Dolday/Blackfriars; HWCM 3899 Deansway/Bull entry. Archaeology Section Hereford And Worcester County Council
- Napthan, M, 2001
Watching Brief and Evaluation at Former Cattlemarket, Croft Road and Dolday Worcester.
Mike Napthan Archaeology
- Whitehead, 1996
Historical Evaluation in Worcester Quality Partnership 1996
- Worcester Quality Partnership, 1996
St Clement's Gate – Background Papers on Local History / Archaeology / and Urban Morphology. Worcester Quality Partnership

