# ARCHAEOLOGICAL EVALUATION OF LAND BETWEEN THE RIVER SEVERN AND HYLTON ROAD, WORCESTER

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With contributions by Dennis Williams

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INVESTOR IN PEOPLE

Project 3245
Report 1633
WCM 101644

## Contents

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## Part 1 Project summary

An archaeological evaluation was undertaken on the strip of land between the River Severn and Hylton Road, Worcester (NGR SO 840 554 - 843 550). It was undertaken on behalf of the Environment Agency, who intends undertake flood alleviation works for which a planning application will be submitted. The project aimed to determine if any significant archaeological remains were present and if so to indicate their date, nature and location.

Four trenches were excavated along the route of the proposed flood alleviation works. One was aborted, due to the presence of live services. The remaining three were dug to a depth of between 0.95-1.10m below the present ground surface. At no point was the natural matrix revealed. A sequence of deposits containing variable post-medieval and modern material was identified. These were determined to be of modern, 19th/20th century, origin, and are considered to be deliberate make-up and dump deposits resulting from the demolition of the buildings which occupied the southern half of the site from at least the later 18th century to the mid 20th century and the raising of the ground level to prevent seasonal flooding. The few Roman and medieval artefacts are considered to be residual within these later layers.

Thus little of archaeological significance was identified. However, this cannot be taken to indicate that significant remains do not exist within this area, as previous fieldwork along this side of the riverbank has revealed *c* 3m depth of modern make up layers and a late medieval structure identified.

# Part 2 Detailed report

## 1. Background

### 1.1 Reasons for the project

An archaeological evaluation was undertaken on land between the River Severn and Hylton Road, Worcester (NGR SO 840 554 - 843 550; Fig 1), on behalf of the Environment Agency. They intend to undertake flood alleviation works for which a planning application will be submitted to Worcester City Council. It is conjectured that remains site of archaeological interest may be affected.

### 1.2 Project parameters

The project conforms to the *Standard and guidance for archaeological field evaluation* (IFA 2001) and to the *General standards and practices appropriate for archaeological fieldwork in Worcester City* (WCM 2006).

The project also conforms to a project proposal, including detailed specification (HEAS 2008).

### 1.3 Aims

The aims of the evaluation were to locate archaeological deposits and determine, if present, their extent, state of preservation, date, type, vulnerability and documentation. The purpose of this was to establish their significance, since this would make it possible to recommend an appropriate treatment, which may then be integrated with the proposed development programme.

## 2. Methods

### 2.1 Documentary search

Prior to fieldwork commencing a search was made of Worcester Historic Environment Record (HER). In addition to the sources listed in the bibliography the following were also consulted:

*Cartographic sources*

- 1779, George Young, Map of the City of Worcester, WCRO BA 2960 r726; PACI
- 1st edition Ordnance Survey, 1884, Worcestershire sheet XXXIII.3.24 & XXXIII.7.4, scale 1:500
- 1930, Ordnance Survey, sheet SO 85 NW, scale 6":1 mile
- 1954, Ordnance Survey, sheet SO 85 NW, scale 1:10,564
- 1965, Ordnance Survey, sheet SO 85 NW, scale 1:10,000
- 1975, Ordnance Survey, sheet SO 85 NW, scale 1:10,000

## 2.2 Fieldwork methodology

### 2.2.1 Fieldwork strategy

A detailed specification has been prepared by the Service (HEAS 2008).

Fieldwork was undertaken between 3 and 5 June 2008. The site reference number and site code is WCM 101644.

Four trenches, amounting to 68m² in area, were excavated over the site area. The location of the trenches is indicated in Figure 2. A number of the trenches were moved slightly from their originally planned position, due to practical constraints, such as trees and live services. Five trenches were initially planned, although the northernmost (Trench 1) was not excavated, due to that area being inaccessible. Trench 5 was abandoned due to the presence of live services.

Deposits considered not to be significant were removed under archaeological supervision using a 180º 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 Service practice (CAS 1995). On completion of excavation, trenches were reinstated by replacing the excavated material.

### 2.2.2 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.

## 2.3 Artefact methodology, by Dennis Williams

### 2.3.1 Artefact recovery policy

The artefact recovery policy conformed to standard Service practice (CAS 1995, appendix 4).

### 2.3.2 Method of analysis

All hand retrieved finds were examined and a primary record was made on a Microsoft Access 2000 database. They were identified, quantified and dated to period. A terminus post quem date 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.

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 the service (Hurst and Rees 1992; Hurst 1994).

## 2.4 Environmental archaeology methodology

### 2.4.1 Sampling policy

The environmental sampling strategy conformed to standard Service practice (CAS 1995; appendix 4). In the event no deposits or layers were identified which were considered suitable for analysis.

### 2.5 The methods in retrospect

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

## 3. Topographical and archaeological context

The area of the proposed flood alleviation defences comprises landscaped public open space of grass and flowerbeds, situated on the west bank of the River Severn and east of Hylton Road (the A443), to the north of the railway viaduct and south of houses which front onto the higher stretch of the road. The area lies at a height of *c* 14.50-15m AOD. The former towing path alongside the river is known as Henwick Parade.

The site lies within the parish of St Clement's, although the land was owned by the Dean and Chapter of Worcester Cathedral up to the 20th century. The underlying geology comprises Mercian Mudstone (Keuper Marl) with alluvial deposits overlying (Lockett and Jones 2001, 4-5).

The east bank of the river in particular was utilised extensively in the Roman period, particularly for the dumping of slag and cinders from ironworking which appears to have been the major industrial activity here at the time. The material appears to have been systematically dumped, in part to consolidate the area and provide foundations for further industrial activity (WCM 96167). In the 17th century the efficiency of Roman smelting methods were recognised to be so poor that the slag was being re-smelted, and traces of Roman hearths along with a coin hoard were observed set on more than 2m depth of slag, at Little Pitchcroft (thought to be in the vicinity of the cattle market off Croft Road; WCM 100418). In the late 18th century, the southern portion of Pitchcroft, 200-300m out from the city walls, was known as 'Cinder Point' because of the great depth of burnt bricks and slag (1.50-1.80m deep) which was exposed in the riverbank, below bands of river alluvium (WCM 100419 and 100420). Conversely, pipeline works *c* 1980 toward the southern end of the racecourse identified alluvial layers to a depth of more than 3m, without any trace of iron slag (WCM 100421), so the Roman deposits appear to be very variable across the area (Vaughan 2007).

During the 1646 Parliamentarian siege of the Royalist forces in Worcester a boat bridge was constructed across the river at Pitchcroft with an associated emplacement on the east bank (WCM 98636). Pitchcroft meadow became a racecourse in the 18th century (WCM 96637). The riverbank is thought to have been artificially raised in the post-medieval and modern periods (Vaughan 2007).

George Young's map of Worcester depicts the site as containing two buildings, but otherwise it is largely unoccupied. Incidentally the road was then known as Hinton Lane. The 1st edition Ordnance Survey map of 1884 indicates that the southern portion of the site was occupied by a number of structures, which from their layout appear to have been of both commercial (or industrial) and residential use. The northern half appears to have been under grass and was largely unoccupied by buildings. The area to the west of the road is occupied by terraced housing and the Severn Bank Tannery complex of buildings to the north (WCM 98019). In the 1930s a ferry service operated between Henwick Parade Fields and Pitchcroft. In 1965 two boathouses are shown within the northern half of the site whilst the buildings previously occupying the southern half have been removed.

A watching brief of test pits and pile holes was undertaken in 1990-1991 on either side of the river, including the area of the present development (WCM 100751). Within the footings for the Sabrina Bridge a well-preserved timber waterfront structure was identified (WCM 99094), sealed 0.80m below the foundations of an 18th century building (that shown on Young's map of 1779). It is unclear exactly what depth this would be below the present ground surface, however the timbers were noted to be waterlogged. The wharf is conjectured

to be of late medieval date. Elsewhere up to *c* 3m of made ground was identified, overlying alluvial deposits and former river channels, considered to have been in-filled during the Flandrian period over the last 10,000 years. No Roman deposits were observed along the west bank, although iron tap slag (of possible Roman date) was recovered on the east bank (De Rouffignac 1991).

An evaluation was undertaken in 2001 of the former fruit and vegetable market to the south-west of the site. Most of the identified activity was determined to be of modern origin, comprising structures, dump layers and possible quarry pits. Alluvial layers were also recorded, associated episodic flooding and the changing water table. One such deposit contained a single Mesolithic flint tool along with Roman pottery, although these are considered to be residual (WCM101353; Lockett and Jones 2001).

Excavation for a CCTV cable (between 0.30 and 0.85m deep) in 2001-2002 within the park alongside Hylton Road to the south of Sabrina Bridge revealed mainly silty clay soils with frequent 19th century building debris, domestic refuse, Cotswold and lias stone, all of which is consistent with 19th -20th century demolition rubble (WCM 100909).

# 4. Results

## 4.1 Structural analysis

The trenches and features recorded are shown in Figure 2. The results of the structural analysis are presented in Appendix 1.

### 4.1.1 Phase 1 Natural deposits

At no point was the natural undisturbed matrix observed.

The topsoils comprised a clayey silt or clayey loam, to a depth of up to *c* 0.40m below the present surface. However they overlay make up and dump deposits (see below) containing modern debris, so cannot be considered to be of natural origin.

### 4.1.2 Phase 2 Modern deposits

A sequence of deposits containing variable quantities of modern debris was recorded in all three of the trenches, which were continued to a depth of 0.95-1.10m below the present surface.

No layers or deposits were identified which predated the 19th/20th century, whilst no structures or features of any date were revealed.

## 4.2 Artefact analysis, by Dennis Williams

The artefactual assemblage recovered is summarised in Table 1. The total weight, recovered from three trenches, was 4,742g. The pottery assemblage comprised 13 sherds of pottery with a total weight of 777g. Fragments of slag and tile were also retrieved, but the bulk of the assemblage (by weight) consisted of glass bottles.

All the identifiable bottles and pottery jars were found in Trenches 2 and 3, and dated from the late 19th to mid 20th centuries, so their overall level of preservation was therefore generally good. In several cases, manufacturers' names were moulded into the glass bottles, thus giving an indication of their contents, which included alcoholic and non-alcoholic beverages (eg beer and lemonade), condiments (eg tomato ketchup), and human and veterinary medicines. These are all consistent with the disposal of refuse from domestic or light commercial sources.

Fragments of slag and tile were recovered from Trench 4. The latter were largely undiagnostic, insofar as they were hard-fired and of fairly uniform thickness, as would be expected of plain floor or roof tiles manufactured throughout the post-medieval period. However, the slag, although small in quantity, was dense and appeared iron-rich. This is similar to slag from Roman iron smelting, which has been found in large quantities on the east side of the Severn, within the city of Worcester.

| Material | Type | Total | Weight |
|---|---|---|---|
| Clay pipe | Tobacco | 2 | 6 |
| Glass | Modern | 3 | 1165 |
| Glass | Post-med/modern | 4 | 1468 |
| Glass | Undiagnostic | 1 | 49 |
| Pottery | Post-medieval | 7 | 341 |
| Pottery | Post-med/modern | 2 | 398 |
| Pottery | Medieval | 3 | 23 |
| Pottery | Roman | 1 | 15 |
| Slag | Roman? | 3 | 99 |
| Tile | Floor/roof | 7 | 178 |
| | Totals: | 33 | 4742 |

*Table 1: Quantification of the assemblage*

## 4.3 The pottery

All sherds have been grouped and quantified according to fabric type (Table 2). Where mentioned, all specific forms are referenced to the type series within the report for Deansway, Worcester (Bryant 2004).

Only one diagnostic form sherd was present, in context (4000). This was a rim from a locally made, medieval cooking pot of a fabric type (55) frequently found in Worcester. The Roman finds, comprising small sherds of Severn Valley Ware pottery, along with slag, were found in the same context. The Roman and medieval finds were all residual, since a range of common post-medieval pottery fabrics, including red and buff coarse wares (fabrics 78 and 91, respectively) dominated the finds in (4000). Examined collectively, the finds from this context were typical of domestic refuse, but did not provide clear evidence of building structures or industrial activity at the site.

| Fabric | Fabric common name | Total | Weight |
|---|---|---|---|
| 85 | Modern stone china | 1 | 291 |
| 81 | Stone wares, miscellaneous | 2 | 398 |
| 12 | Severn Valley ware | 1 | 15 |
| 55 | Worcester-type sandy unglazed ware | 1 | 15 |
| 69 | Oxidized glazed Malvernian ware | 2 | 8 |
| 78 | Post-medieval red wares | 3 | 32 |
| 81.5 | White salt-glazed stoneware | 1 | 1 |
| 85 | Modern stone china | 1 | 9 |
| 91 | Post-medieval buff wares | 1 | 8 |
| | Totals: | 13 | 777 |

*Table 2: Quantification of the pottery by fabric*

## 5. Synthesis and significance

All of the layers and deposits identified were determined to be of modern, 19th/20th century, origin, and are considered to be deliberate make-up and dump deposits resulting from the demolition of the buildings which occupied the southern half of the site from at least the later 18th century down to the mid 20th century and the raising of the ground level to prevent seasonal flooding. The few Roman and medieval artefacts are considered to be residual within these later layers.

Thus nothing of any great archaeological significance was identified. However, this cannot be taken to indicate that significant remains do not exist within this area. In previous fieldwork along this side of the riverbank, *c* 3m depth of make-up deposits have been recorded and a late medieval structure identified.

## 6. 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 the Environment Agency on land between the River Severn and Hylton Road, Worcester (NGR SO 840 554 - 843 550; HER ref. WCM 101644). Four trenches were excavated along the route of the proposed flood alleviation works. One was aborted, due to the presence of live services. The remaining three were dug to a depth of between 0.95-1.10m below the present ground surface. At no point was the natural matrix revealed. A sequence of deposits containing variable post-medieval and modern material was identified. These were determined to be of modern, 19th/20th century, origin, and are considered to be deliberate make-up and dump deposits resulting from the demolition of the buildings which occupied the southern half of the site from at least the later 18th century down to the mid 20th century and the raising of the ground level to prevent seasonal flooding. The few Roman and medieval artefacts are considered to be residual within these later layers.*

## 7. Acknowledgements

The Service would like to thank the following for their kind assistance in the successful conclusion of this project, Ed Wilson (Senior Archaeologist, The Environment Agency), James Dinn (Archaeological Officer, Worcester City Council) and Sheena Payne (HER Officer, Worcester City Council).

## 8. Personnel

The report was written by Tom Vaughan on the basis of field notes prepared by Justin Hughes. Fieldwork was undertaken by Justin Hughes and Richard Shakles, finds analysis by Dennis Williams and illustration by Carolyn Hunt.

# 9. Bibliography

Bryant, V, 2004 Medieval and early post-medieval pottery in H Dalwood and R Edwards, *Excavations at Deansway, Worcester, 1988-89: Romano-British small town to late medieval city*. *CBA Res Rep*, **139**, 281-339

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

De Rouffignac, C, 1991 *Watching brief at Worcester Cycle and Footbridge*, County Archaeological Service, Hereford and Worcester County Council, unpublished report, 90, dated October 1991, **P835**

HEAS, 2008 *Proposal for an archaeological evaluation on land off Hylton Road, Worcester*, Historic Environment and Archaeology Service, Worcestershire County Council, unpublished document dated 13 May 2008, **P3245**

Hurst, J D, 1994 (as amended) *Pottery fabrics. A multi-period series for the County of Hereford and Worcester*, County Archaeological Service, Hereford and Worcester County Council, report, **445**

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**

IFA, 2001 *Standard and guidance for archaeological field evaluation,* Institute of Field Archaeologists

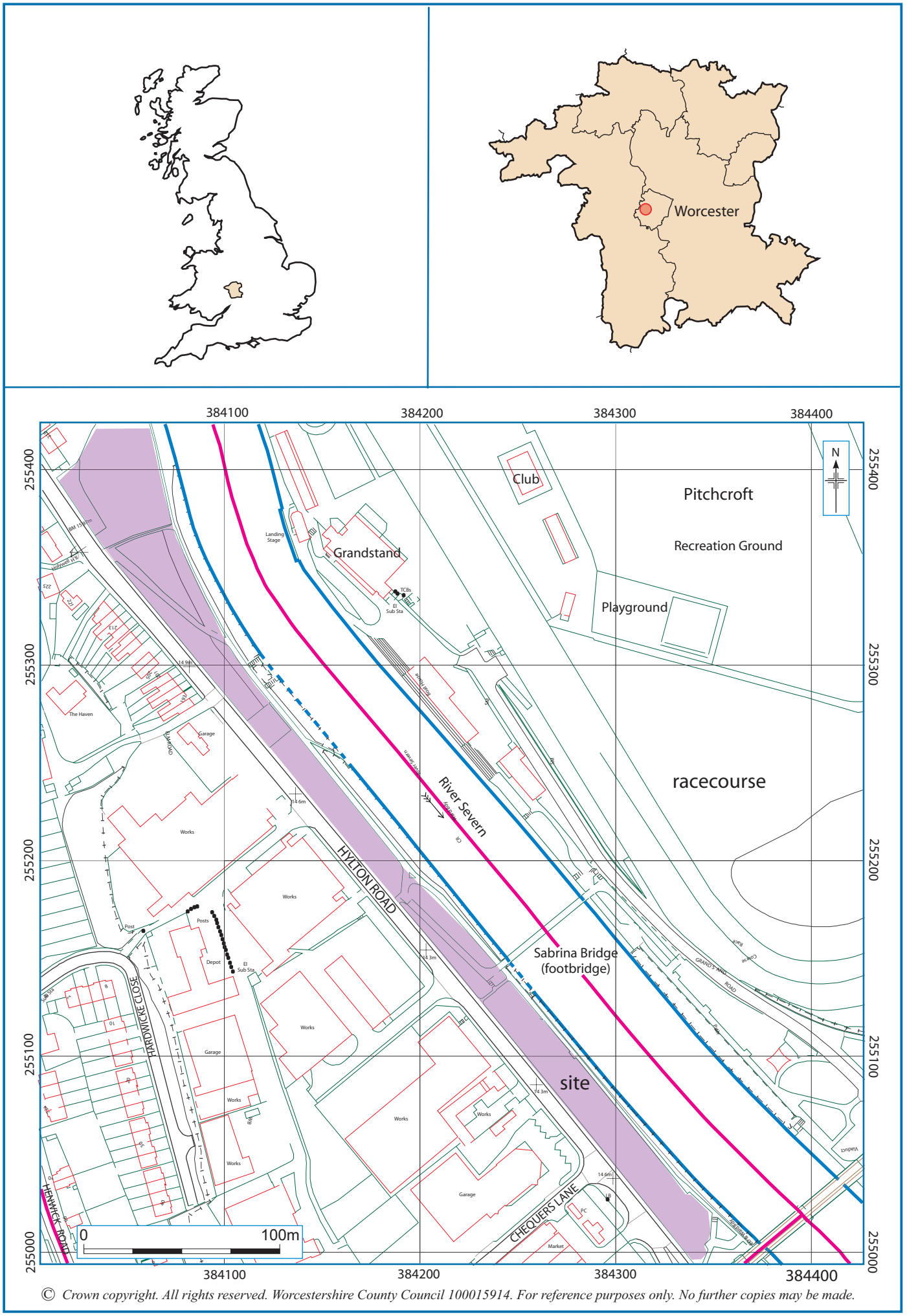
Lockett, N and Jones, L, 2001 *Evaluation at the former fruit and vegetable market, Hylton Road, Worcester,* County Archaeological Service, Hereford and Worcester County Council, unpublished report, 887, dated 6 February 2001, **P1845**

Vaughan, TM, 2007 *Archaeological Monitoring and recording of the grandstand Syphon, Grand Stand Road, Worcester*, Historic Environment and Archaeology Service, Worcestershire County Council, unpublished report 1500, dated 3 January 2007, **P3009**

WCMAS, 2006 *General standards and practices appropriate for archaeological fieldwork in Worcester City,* unpublished document

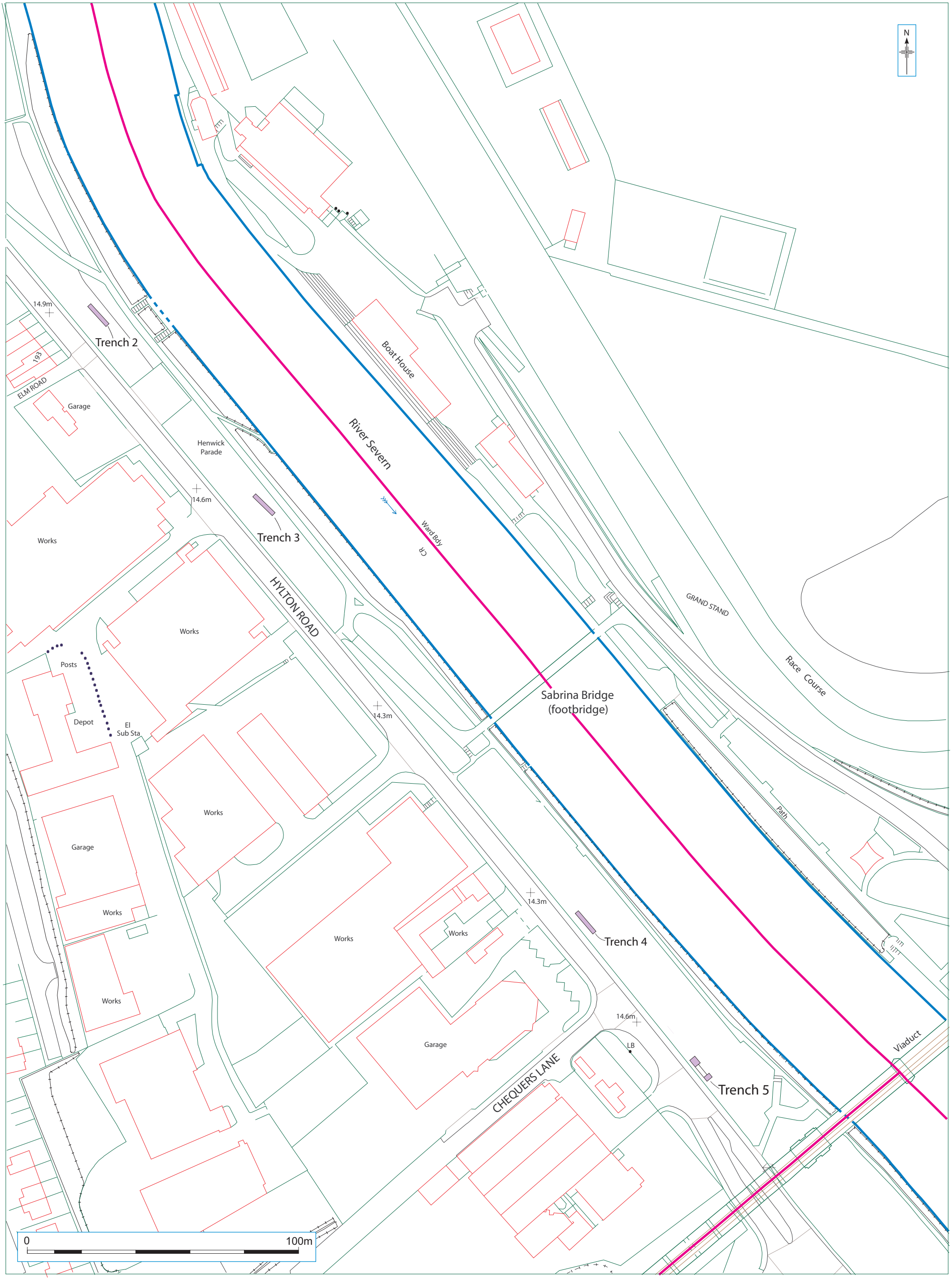
WCMAS, 2007 *Worcester Urban Archaeology Strategy: An outline research framework for the archaeology of Worcester*, unpublished document, version 2.5, dated July 2007

# Figures






*Location of the site.* *Figure 1*






*Trench location plan*

*Figure 2*

# Plates

*Plate 1, Trench 2, general view northwest*

*Plate 2, Trench 2, sample section, view southeast*

*Plate 3, Trench 3, general view northwest*

*Plate 4, Trench 3, sample section, view northwest*

*Plate 5, Trench 4, section through northwest sondage, view SW*

*Plate 6, Trench 5, excavation in progress, view south showing live services*

# Appendix 1 Trench descriptions

### Trench 1

Unexcavated at present due to access constraints.

### Trench 2

Maximum dimensions: Length: 10m Width: 1.60m Depth: 1.07m

Orientation: northwest to southeast

Main deposit description

| Context | Classification | Description | Depth below ground surface (b.g.s) – top and bottom of deposits |
|---|---|---|---|
| 2000 | Topsoil | Mid brown turfed clay loam; compact but very friable; frequent roots; occasional charcoal, sub-rounded stone and clay pipe frags. Overlies 2001. | 0.00-0.15m |
| 2001 | Subsoil | Light greyish orange slightly sandy silt; compact but friable; moderate roots; occasional charcoal, mortar frags and glass shards. Below 2000; overlies 2002 | 0.10-0.30m |
| 2002 | Make up layer | Dark greyish brown clayey silt; compact but very friable; moderate roots, brick frags, charcoal and occasional glass shards. Below 2001; overlies 2003. | 0.22-0.37m |
| 2003 | Make up layer | Orangey brown silty clay; compact but friable; occasional roots, charcoal, glass shards and sub-rounded stones. Below 2002; overlies 2004. | 0.27-0.44m |
| 2004 | Demolition deposit | Blackish/greyish orange demolition debris; frequent ash, charcoal; moderate clinker, brick frags and glass shard; occasional roots, modern ceramic, glass bottles, clay pipe frags and slate. Below 2003; overlies 2005. | 0.35-0.81m |
| 2005 | Make up layer | Brownish/greyish yellow silty clay; compact but friable; occasional charcoal, glass shards, clay pipe stems, modern ceramic, brick frags, tile frags and mortar. | 0.72m+ |

**Trench 3**

Maximum dimensions: Length: 10m Width: 1.60m Depth: 1.10m

Orientation: northwest to southeast

Main deposit description

| Context | Classification | Description | Depth below ground surface (b.g.s) – top and bottom of deposits |
|---|---|---|---|
| 3000 | Topsoil | Greyish brown turfed clayey silt; compact; no inclusions. Overlies 3001. | 0.00-0.19m |
| 3001 | Dump deposit | Orangey grey clayey silt; compact and malleable; moderate charcoal and small frags of building rubble; occasional glass shards and coal. Below 3000; overlies 3002. | 0.13-0.28m |
| 3002 | Make up layer | Orangey brown clayey silt; compact; no inclusions. Below 3001; overlies 3003. | 0.22-0.59m |
| 3003 | Dump deposit | Dark grey cinders; frequent modern industrial and domestic debris. Below 3002; overlies 3004. | 0.47-0.90m |
| 3004 | Mixed alluvium & dumped debris | Mid grey fine clayey silt; occasional ceramic building debris and charcoal flecks. Below 3003. | 0.87m+ |

**Trench 4**

Maximum dimensions: Length: 10m Width: 1.60m Depth: 0.95m

Orientation: northwest to southeast

Main deposit description

| Context | Classification | Description | Depth below ground surface (b.g.s) – top and bottom of deposits |
|---|---|---|---|
| 4000 | Topsoil | Mid brownish grey turfed clayey loam; compact but friable; frequent roots; occasional pottery, brick and tile frags, glass, charcoal and sub-rounded pebbles. Overlies 4001. | 0.00-0.33m |
| 4001 | Make up layer | Reddish orange clay; compact and malleable; moderate roots. Below 4000; overlies 4002. | 0.32-0.40m |
| 4002 | Dump deposit | Greyish black cinders; compact but very friable; occasional brick, mortar, clinker and brick frags. Below 4001; overlies 4003. | 0.38-0.48m |
| 4003 | Make up layer | Light greyish brown clay; friable; occasional brick and mortar frags, charcoal, roots and sub-rounded pebbles. Below 4002; overlies 4004. | 0.43-0.59m |
| 4004 | Dump deposit | Pinkish brownish orange mottled silty clay; occasional roots, asbestos frags, bricks, concrete, mortar, glass shards, coke, iron nails and a builders glove. Below 4003; overlies 4005. | 0.52-0.85m |
| 4005 | Make up layer | Dark brownish black silty clay; occasional brick frags, charcoal, coke and mortar frags. Below 4004. | 0.78m+ |

**Trench 5**

Maximum dimensions: Length: 10.60m Width: 1.60-2.60m Depth: c 0.40m

Orientation: northwest to southeast

Main deposit description

| Context | Classification | Description | Depth below ground surface (b.g.s) – top and bottom of deposits |
|---|---|---|---|
| 5000 | Topsoil | Light orangey brown turfed clayey loam; compact but friable; frequent roots and brick rubble; occasional pottery, tile frags, glass, charcoal and sub-rounded pebbles. | 0.00->0.40m+ |

Trench abandoned due to live services – either end opened but not the middle section.

# Appendix 2 Technical information

## The archive

The archive consists of:

| | |
|---|---|
| 1 | Photographic records AS3 |
| 41 | Digital photographs |
| 3 | Trench record sheets AS41 |
| 1 | Box of finds |
| 1 | Computer disk |

The project archive is intended to be placed at:

Worcester City Museum and Art Gallery
Foregate Street
Worcester
WR1 2PW

Tel (01905) 25371