

# **Archaeological Services**

An Archaeological Watching Brief During The Excavation of Geotechnical Trial Holes For The Leicester Royal Infirmary Emergency Department, Leicester, SK 587 036



Jennifer Browning and Mireya Gonzalez Rodriguez

ULAS Report No 2014-124 ©2014

## An Archaeological Watching Brief During The Excavation of Geotechnical Trial Holes For the Leicester Royal Infirmary Emergency Department SK 587 036

Jennifer Browning and Mireya Gonzalez Rodriguez

## For: University Hospitals of Leicester NHS Trust

Approved by:		
Signed:		
Date: 11 July 2014		
Name: R. Buckley		

University of Leicester Archaeological Services University Rd., Leicester, LE1 7RH Tel: (0116) 2522848 Fax: (0116) 2522614 www.le.ac.uk/ulas

ULAS Report Number 2014-124 ©2014 Accession Number A17.2014 

## CONTENTS

Sum	Summary		
1.	Introduction	2	
2.	Site Description, Topography and Geology	3	
	Historical and Archaeological Background		
4.	Aims and Objectives	6	
5.	Methodology	6	
	Results		
7.	Conclusion	12	
8.	Archive	12	
9.	Publication	12	
10.	Bibliography	13	
	Acknowledgements		

## FIGURES

Figure 1: Location plan. Scale 1:50000 Compiled from Land ranger maps	.2
Figure 2: Location of the works within the area showing proposed locations for both	
bore-holes (window samples) and trial pits.	.3
Figure 3: Selection of photographs of BHL, HPL and WSL samples 1	

## Cover photo: HPL 306

## An Archaeological Watching Brief during the Excavation of Trial Holes for the Leicester Royal Infirmary Emergency Department, Leicester

Jennifer Browning and Mireya Gonzalez Rodriguez

## Summary

An archaeological watching brief was undertaken on behalf of the University Hospitals of Leicester NHS Trust during a programme of ground investigation associated with the development of a new Accident and Emergency facility. The work took place at the Royal Infirmary in June 2014. The work involved the excavation of a series of trial pits and boreholes, which were monitored by an archaeologist. No archaeological deposits were disturbed by the groundworks. The archive will be held by Leicester City Council under the Accession Number A17 2014.

## 1. Introduction

This report presents the results of an archaeological watching brief carried out by University of Leicester Archaeological Services during the excavation of geotechnical trial pits. The work took place as part of initial ground investigations for the University Hospitals of Leicester NHS Trust in preparation for the construction of a new Accident and Emergency facility. In view of the location of the site in an area of moderate archaeological potential, the City Archaeologist required monitoring of the works in order to record the stratigraphic profile with the aim of informing future work and helping to determine whether any buried archaeological deposits might be affected by the proposed works (Figure 1).

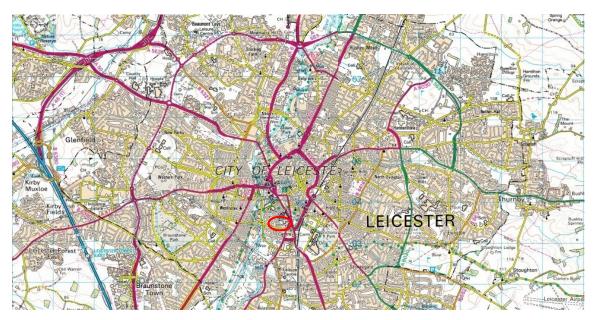


Figure 1: Location plan. Scale 1:50000 Compiled from Land ranger maps). Area of watching brief ringed. Reproduced by permission of Ordnance Survey® on behalf of The Controller of Her Majesty's Stationery Office. © Crown copyright. All rights reserved. Licence number AL 100029495.

## 2. Site Description, Topography and Geology

The watching brief took place at the Royal Infirmary grounds.

The Ordnance Survey Geological Survey of Great Britain, Sheet 156, indicates that the underlying geology is likely to consist of Mercia Mudstone with overlying river gravel.



Figure 2: Location of the proposed works within the area showing proposed locations for both boreholes (window samples) and trial pits.

## 3. Historical and Archaeological Background

The pits were located within the grounds of the Leicester Royal Infirmary. Below is a summary of the potential of archaeology in this area.

### Prehistoric

Prehistoric activity in the area appears to be limited to finds. Palaeolithic implements were identified during gravel extractions at Jarrom Street, near the River Soar (50SE.JF) (Browning 2001: 2).

### Roman

The site is located approximately 700 metres outside the south gates of the Roman city. Roman features that may occur within the targeted area are the Rawdykes (SAM 30218) and the 'Tripontium' road.

The Rawdykes are believed to have been part of a water control or aqueduct system dating from the 1st century AD. The excavations were carried out by Kenyon in the 1940s and a section of the bank and ditch earthworks are still visible close to Aylestone and Saffron Lane. The remains are orientated NE-SW and are thought to follow the 60-metre contour. It is thought that they were partially reused by Royalists forces during the siege of Leicester in 1645. Early maps show that in the 19th century the earthworks were present as far as Brazil Street. There is no conclusive evidence that they existed as far north as the Royal Infirmary and recent excavations in the area have revealed no sign of them (APS 1998 and ULAS 1995).

The 'Tripontium' road was a Roman route believed to run from Leicester to Lutterworth. It is thought to follow the line of Aylestone Road out of Leicester, as indicated by the remains first uncovered during the excavations at Bonners Lane in 1994 (Finn 1994: 167) and confirmed by more recent sites on Grange Lane. The suggested projection of the road may pass through the Royal Infirmary site.

## Medieval

The former chapel of St. Sepulchre was located beyond the south wall of the medieval town and formed the boundary of the Castle ward. The chapel belonged to St. Mary de Castro and is known that been in existence before the end of the 12th century (Billson 1920: 227). It is possible that the chapel was preceded by a shrine for wayfarers (Frizelle 1971: 227). Several medieval sources make reference to a well.

The public gallows were located nearby and the bodies of those executed were buried within the cemetery of the St. Sepulchre. By the beginning of the 16th century the chapel was known both as St. Sepulchre and St. James and was in poor state of repair. A number of burials have been found during the construction of the Royal Infirmary buildings, towards the north side of the site.

During the development of the Infirmary in the 1960s a stone coffin containing a female burial was discovered. These were not the only remains recovered as the governors ordered that two coffins be made available to contain the human remains that were revealed.

Nine more skeletons were found in May 1961. These were two feet below the surface of a trench dug across the Infirmary Road entrance (Leicester Sites and Monuments Records).

The programme of research carried by APS in 1999 revealed over twenty full or partially surviving burials and the remains of at least thirty individuals were recorded (Taylor 2000). The orientations of the graves suggested two phases of burial and their distribution also indicated the possible northern and eastern limits of the cemetery, although no formal boundaries were revealed. Only one coffin burial was clearly identified. A possible shroud pin was recovered from a separate burial and few sherds of 12th-century pottery from one burial represented the only dating evidence retrieved from graves.

### Post-medieval and Modern

Contemporary accounts of the Civil War indicate that the Royalists modified the Rawdykes. A battery was built opposite the southern wall of the Newarke (Courtney 1992: 55). This was potentially a substantial earthwork, which exact location is uncertain, but the range of the cannon suggests that it would have been in the vicinity of the Infirmary site.

The Royal Infirmary was established in 1771 south of Leicester on a five-hectare site immediately south of the city known as 'Chapel Close' (Frizelle 1971: 35). After severe damage caused in 1645, the town gates had been finally taken down in 1774 (Frizelle 1971: 13). This provided impetus for settlement outside the earlier town limits. Within a few years the expansion of the city was already threatening to engulf the hospital.

In the 1830s the Infirmary acquired more land. The hospital limits were now defined by Cow Lane (Bridge Street), Infirmary Street and Parliament Street (Frizelle 1971: 124). The 19th century, there was further expansion southwards resulting in the demolition of houses on Parliament Street, which dated to the 1820s.

Since the early 20th century, the Royal Infirmary had been buying houses close to the hospital with a view to expansion. A large scale programme of 'slum clearance' was undertaken in the middle of the century in order to make way for further expansion of both the Royal Infirmary and the former Polytechnic (De Montfort University). This expansion began with the destruction of Knighton Street in the 1930s and continued until the 1970s (Hyde N.D. 69). The redevelopment of the area was controversial following the compulsory purchasing and demolition of whole streets.

## 4. Aims and Objectives

The purpose of the current archaeological work was:

- To identify the presence/absence of any archaeological deposits.
- To establish the character, extent and date range for any archaeological deposits to be affected by the proposed ground works.
- To record any archaeological deposits to be affected by the ground works.
- To look for evidence for the survival of palaeo-environmental deposits.
- To advance understanding of the heritage assets
- To produce an archive and report of any results.

### 5. Methodology

The programme of work comprised the excavation of a series of trial pits conforming to geotechnical specifications, excavated by hand. The trial pits generally measured 0.4x0.4m. The depth of each trial pit was 1.20m. The trial holes were visually inspected and the removed soil was described and checked at each change for signs of archaeological activity or potential. The *in-situ* observation of deeply buried deposits and the interfaces between soil horizons was not possible as the pits were too narrow to enter; therefore all observations were made from current ground level.

The work adhered to their *Standard and Guidance for Archaeological Watching Briefs* (rev. 2008).

### 6. Results

Seventeen trial pits were excavated: TPBHL103, TPBHL104, TPBHL106, TPBHL107, TPWSL202, TPWSL203, TPWSL204, TPWSL205, TPWSL206, TPWSL207, TPWSL209, HPL301, HPL302, HPL203, HPL304, HPL305 and HPL306.

### TPBHL103

Summary Fill/made ground: 1.20 m deep. No archaeological deposits were observed.

#### Description

The topsoil and made ground was 0.62m deep and consisted of three layers: a 0.02m layer of brown fine to coarse sand and angular fine to coarse granite gravel (1) with inclusions of concrete (2) slate, brick, and quartzite (3). The subsoil (4) was 0.80m deep consisting of a stiff reddish-brown slightly sandy clay with light greenish-grey fine sand pockets.

#### Interpretation

Topsoil sealing modern tipped deposits over natural subsoil.

### TPBHL104

Summary Fill/made ground: 1.20 m deep. No archaeological deposits were observed.

#### Description

The topsoil and made ground was 0.67m deep and consisted of three layers: a brown sandy gravel of subangular fine to coarse granite (1), concrete with brick fragments and granite gravel (2) and a stiff brown slightly sandy gravelly clay (3). The gravel was angular to rounded fine to coarse quartzite, brick and rare coal. The subsoil (4) a stiff reddish brown slightly sandy clay with rare light greenish grey fine sand pockets was 0.80m deep.

*Interpretation* Topsoil sealing modern tipped deposits over natural subsoil.

#### **TPBHL106**<sup>1</sup>

Summary Fill/made ground: 1.20 m deep. No archaeological deposits were observed.

#### Description

The topsoil and made ground was 1.20m deep and consisted of two layers: a multi-coloured gravel of rounded medium quartzite and sandstone (1) and a stiff brown slightly sandy slightly gravelly to gravelly, becoming gravelly sandy clay (2). The gravel was angular to rounded fine to coarse brick concrete, quartzite and macadam.

#### Interpretation

Topsoil sealing modern tipped deposits over natural subsoil.

#### TPBHL107

Summary Fill/made ground: 1.20 m deep. No archaeological deposits were observed.

#### Description

The topsoil and made ground was 0.45m deep and consisted of two layers: a fine to medium gravel (1) and a brown and reddish brown sand and gravel with medium cobble content (2). Sand was fine to coarse. Gravel was angular to subangular fine to coarse brick, concrete and granite. Inclusions were rare wire and plastic. The cobbles were granite, brick and concrete. The subsoil (3) was 0.75m deep of a firm orangish brown slightly gravelly sandy clay with occasional coarse gravel size still clay pockets. Gravel was rounded fine to medium quartzite.

#### Interpretation

Topsoil sealing modern tipped deposits over natural soils (possibly alluvial).

<sup>&</sup>lt;sup>1</sup> Bore Hole TPBHL106 seems to have been relocated towards the northwest from the original plan.

#### TPWSL202

Summary Fill/made ground: 1.20 m deep. No archaeological deposits were observed.

#### Description

The topsoil and made ground was 1.20m deep and consisted of three layers: macadam (1), concrete (2) and firm brown slightly sandy gravelly clay (3) with occasional reddish-brown clay pockets. Gravel was angular to rounded fine to coarse quartzite, brick concrete, coal and sandstone.

*Interpretation* Topsoil sealing modern tipped deposits over redeposited natural.

#### TPWSL203

Summary Fill/made ground: 1.20 m deep. No archaeological deposits were observed.

#### Description

The topsoil and made ground was 1.20m deep and consisted of three layers: stiff brown slightly sandy gravelly clay (1). The gravel was angular to rounded fine to coarse quartzite, granite and brick. Frequent rootlets. A layer of firm to stiff brown and reddish-brown slightly sandy gravelly clay (2). Gravel was angular to rounded fine to coarse coal, brick concrete, sandstone and quartzite. Occasional roots and rootlets (topsoil). A firm reddish brown slightly gravelly sandy clay (3), the gravel was subangular to rounded fine to coarse quartzite.

#### Interpretation

Topsoil sealing modern tipped deposits

#### TPWSL204

Summary Fill/made ground: 1.20 m deep. No archaeological deposits were observed.

#### Description

The topsoil and made ground was 1.20m deep and consisted three layers: macadam (1), concrete (2) and a firm brown mottled reddish brown, rarely brownish grey, slightly gravelly sandy clay (3). The gravel was predominantly angular fine to medium sandstone, concrete and coal with occasional rounded fine to coarse quartzite.

#### Interpretation

Topsoil sealing modern tipped deposits

## TPWSL205

Summary Fill/made ground: 1.20 m deep. No archaeological deposits were observed.

#### Description

The topsoil and made ground was 1.20m deep and consisted of two layers. A stiff dark brown slightly gravelly sandy clay (1). The gravel was subangular to rounded fine to medium brick, quartzite and concrete; frequent rootlets (topsoil). A stiff brown and reddish-brown slightly sandy gravelly clay (2). The gravel was angular to rounded fine to coarse coal, quartzite, brick and sandstone and occasional rootlets.

*Interpretation* Topsoil sealing modern tipped deposits over possible natural soils.

### TPWSL206

Summary Fill/made ground: 1.20 m deep. No archaeological deposits were observed.

#### Description

The topsoil and made ground was 1.20m deep and consisted of three layers. A firm dark brown sandy slightly gravelly clay (1). Gravel was angular to rounded fine to coarse brick, tile and quartzite, inclusions of wood fragments and frequent rootlets (topsoil). The second layer was a stiff reddish-brown slightly sandy gravelly clay (2). Gravel was angular to rounded fine to coarse quartzite, mudstone and sandstone with inclusions of occasional rootlets. A firm brown slightly sandy gravely clay (3) with angular to rounded fine to coarse quartzite, tile, mudstone, sandstone and concrete

#### Interpretation

Topsoil sealing modern tipped deposits

### TPWSL207

Summary Fill/made ground: 1.20 m deep. No archaeological deposits were observed.

#### Description

The topsoil and made ground was 0.95m deep and consisted of two layers. A stiff dark brown slightly gravelly sandy clay (1). The gravel was angular to rounded fine to coarse brick, quartzite, sandstone and concrete, and frequent roots and rootlets (topsoil). A second layer of firm to stiff reddish brown and brown slightly sandy gravelly clay (2). The gravel was angular to rounded fine to coarse brick, quartzite and slag. Occasional ash and coal pockets were present. The subsoil was a layer of stiff to very stiff reddish brown, occasionally light grey, slightly sandy clay.

#### Interpretation

Topsoil sealing modern tipped deposits over redeposited natural soils

#### TPWSL209

#### Summary Fill/made ground: 0.60 m deep. No archaeological deposits were observed.

#### Description

The topsoil and made ground was 0.60m deep and consisted of three layers: a brown fine to coarse sand and gravel (1) made of angular to subangular fine to coarse granite, below was a layer of concrete with subangular granite gravel over 0.40m of brown clayey sand and gravel. The sand was fine to coarse and the gravel was angular to subrounded fine to coarse brick, concrete and granite.

*Interpretation* Topsoil sealing modern tipped deposits

### HPL301

Summary Fill/made ground: 1.30 m deep. No archaeological deposits were observed.

#### Description

The topsoil and made ground was 0.48m deep and consisted of three layers: concrete slab (1) and concrete with brick fragments (2) over a layer of firm brown slightly sandy slightly gravelly clay. The gravel was angular to rounded fine to coarse quartzite, brick and macadam. The subsoil was a layer of 1.05m if stiff reddish brown slightly sandy clay with rare light greenish grey fine sandy clay pockets.

#### Interpretation

Topsoil sealing modern tipped deposits over natural soils

#### HPL302

Summary Fill/made ground: 1.20 m deep. No archaeological deposits were observed.

#### Description

The topsoil and made ground was 1.20m deep and consisted of two layers: macadam over concrete (1) and a firm light brown and reddish brown slightly sandy gravelly clay (2) (0.85m deep). Gravel is angular to rounded fine to coarse concrete, brick, quartzite, sandstone and coal.

#### Interpretation

Topsoil sealing modern tipped deposits.

#### HPL303

*Summary* Fill/made ground: 1.25 m deep. No archaeological deposits were observed.

#### Description

The topsoil and made ground was 0.55m deep and consisted of a layer of brown sand and gravel (1) the sand was fine to coarse and the gravel angular to subangular, fine to coarse granite and rare brick. The subsoil was 0.70m deep stiff reddish brown slightly sandy slightly gravelly clay with rare light greenish-grey fine sand pockets (2). Gravel was subrectangular fine, becoming medium, mudstone (possible reworked).

*Interpretation* Topsoil sealing modern tipped deposits over redeposited natural soils.

### HPL304

Summary Fill/made ground: 1.20m deep. No archaeological deposits were observed.

#### Description

The topsoil and made ground was 0.60m deep and consisted of three layers: macadam (1), concrete with brick gravel and cobbles and wire (2) and a 0.90m layer of firm brown slightly sandy slightly gravelly clay (3). Gravel is angular fine to coarse brick, concrete and rounded quartzite with rare clinker and tile.

*Interpretation* Topsoil sealing modern tipped deposits

#### HPL305

Summary Fill/made ground: 1.20m deep. No archaeological deposits were observed.

#### Description

The topsoil and made ground was 0.70m deep and consisted of two layers: a brown sand and gravel (0.40m) (1), the sand was fine to coarse. The gravel was angular fine to coarse granite with rare macadam and brick. A second layer (0.30m deep) was made of brown mottled reddish-brown slightly gravelly sandy clay (2). Gravel was angular to rounded fine to coarse quartzite, rare brick and sandstone, with rare glass fragments inclusions. A 0.50m layer of firm reddish-brown slightly sandy clay with occasional light greenish grey fine sand pockets (probably reworked).

#### Interpretation

Topsoil sealing modern tipped deposits over possible redeposited natural subsoil

## HPL306

Summary Fill/made ground: 0.90m deep. No archaeological deposits were observed.

#### Description

The topsoil and made ground was 0.90m deep and consisted of three layers: a brown sandy gravel of angular fine to coarse granite (1) over 0.30m of concrete with bricks (2). Below, a 0.60m layer of brown slightly sandy slightly gravelly cobbles and boulders of angular brick and concrete (3) with rare inclusions of glass, tile, wood fragments, carpet and wire.

#### Interpretation

Topsoil sealing modern tipped deposits and rubbish

### 7. Conclusion

An archaeological watching brief was undertaken in locations in the Leicester Royal Infirmary during June 2014. No deposits of archaeological origin were identified during the work.

Although the depth of made-ground varied according to previous land-use, the observed stratigraphic sequence remained broadly similar in most of the test pits. This sequence generally comprised overburden and subsoils overlying natural alluvial clays. Sands and gravels were encountered at the lowest levels investigated.

### 8. Archive

The site archive will be held by Leicester City Council, under the Accession No: A17.2014.

The archive contains site notes (trial pit pro forma recording sheets), digital photographs and photograph index.

The report is listed on the Online Access to the Index of Archaeological Investigations (OASIS) held by the Archaeological Data Service at the University of York. Available at: <a href="http://oasis.ac.uk/">http://oasis.ac.uk/</a>

### 9. Publication

A summary of the work will be submitted for publication in the local archaeological journal *Transactions of the Leicestershire Archaeological and Historical Society* and *Rutland Record* in due course. The report will be added to the Archaeology Data Service's (ADS) Online Access to the Index of Archaeological Investigations (OASIS) database held by the University of York.

### OASIS Information

Project Name	Leicester Royal Infirmary Emergency Department
Project Type	Archaeological Watching Brief
Project Manager	R. Buckley
Project Supervisor	J. Browning
Previous/Future work	Previous
Current Land Use	Hospital Car Park
Development Type	
Reason for Investigation	
Position in the Planning Process	
Site Co ordinates	NGR SK 587 036
Start/end dates of field work	16.06.2014-20.06.2014
Archive Recipient	Leicester City Council
Study Area	

### 10. Bibliography

Billson, C.J. (1920). Medieval Leicester. Edgar Backus, Leicester.

Brown, D. (2008). *Standard and guidance for the preparation of Archaeological Archives* (Institute for Archaeologists).

Courtney, P. and Courtney, Y. (1992). A siege examined: the Civil War archaeology of Leicester. *Post-Medieval Archaeology* 26: 47-90.

Finn, N. (1994). Bonners Lane, Leicester. *Transactions of Leicestershire Archaeological and Historical Society* 68: 165-170.

Frizelle, E.R., and Martin, J.D. (1971). *The Leicester Royal Infirmary 1771-1971*. Leicester No. 1 Hospital Management Committee.

Institute for Archaeologists (IfA) (rev. 2012). Code of Conduct.

Institute for Archaeologists (IfA) (rev. 2008). Standard and Guidance for Archaeological Watching Briefs.

Taylor, G. (2000). Infirmary Road, Leicester Royal Infirmary Victorian Building. *Transactions Leicestershire Archaeological and Historical Society* 74: 224-225

#### 11. Acknowledgements

The fieldwork was undertaken by Jennifer Browning on behalf of the University Hospitals of Leicester Trust. I am grateful to the contractors for their cooperation on site and to Mireya Gonzalez Rodriguez for her assistance with the post-excavation work. Richard Buckley also of ULAS managed the project.

Jennifer Browning/Mireya Gonzalez Rodriguez University of Leicester Archaeological Services University Road Leicester LE1 7RH Tel: 0116 2522848 Fax: 0116 252 2614 ULAS Report No: 14-124

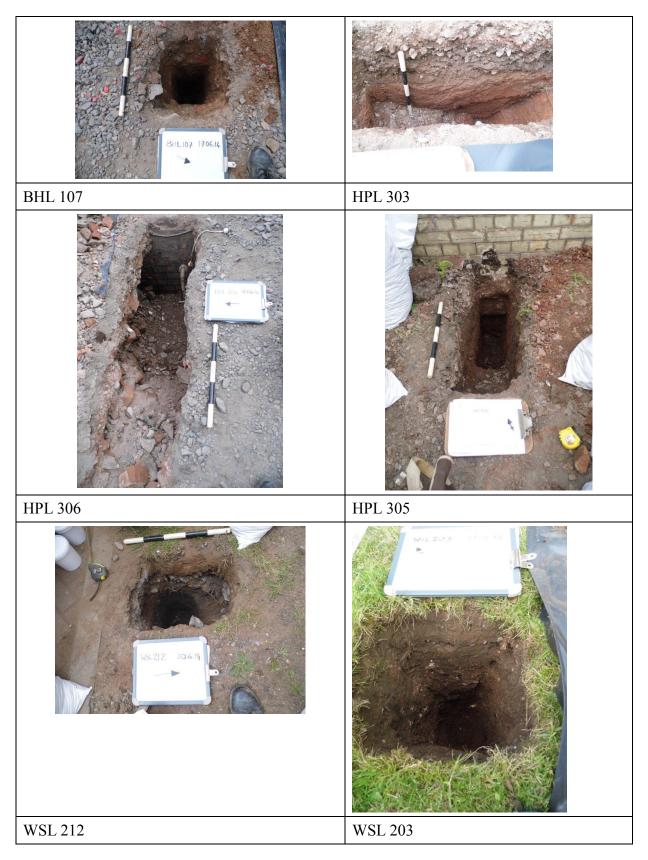


Figure 3 Selection of photographs of BHL, HPL and WSL samples

**Contact Details** 

Richard Buckley or Patrick Clay University of Leicester Archaeological Services (ULAS) University of Leicester, University Road, Leicester LE1 7RH

T: +44 (0)116 252 2848 F: +44 (0)116 252 2614 E: ulas@le.ac.uk w: www.le.ac.uk/ulas



## **Archaeological Services**







INVESTOR IN PEOPLE

