

Archaeological Services

An Archaeological Excavation on Land Adjacent to the Former Nat West Bank, Greyfriars, Leicester (NGR SK 5861 0437)

Anthony Gnanaratnam & Roger Kipling



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An Archaeological Excavation on Land Adjacent to the Former Nat West Bank, Greyfriars, Leicester [NGR SK 5861 0437]

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For: Kaikoura Investments Limited

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Summary

An archaeological excavation was undertaken by staff of University of Leicester Archaeological Services on behalf of Kaikoura Investments Limited on land adjacent to the former Nat West Bank, Greyfriars, Leicester, between the 6th September and 2nd October 2007. Work revealed a well-preserved sequence of archaeological activity of Roman, medieval and early post-medieval date at a comparatively shallow depth. The predominately 2nd century AD Roman activity consisted of a substantial early gravel metalled surface overlying natural clay sealed beneath dump layers likely representing preliminary levelling for a timber building and an associated probable oven, an area of burning and cess or rubbish pits. Further dump layers subsequently sealed this activity. The absence of further Roman stratification hints at later truncation, possibly linked to an accumulation of a garden soil of 14th century or later date. Further medieval and early post-medieval activity was confined to pitting, tallying with the site's location close to the periphery of the Grey Friars monastic precinct and serving to emphasise the domestic character of the occupation during this period. The presence of high-status floor and roof tiles indicate highstatus occupation in the vicinity, likely linked to the monastic house. The site archive will be deposited with Leicester City Museum Service under the accession number *A9.2007.*

Introduction

An archaeological excavation was conducted by staff of University of Leicester Archaeological Services (ULAS) on land adjacent to the former Nat West Bank, Greyfriars, between 6th September and 2nd October 2007 on behalf of Kaikoura Investments Ltd.

Work was undertaken in accordance with Planning Policy Guidance Note 16 (PPG16, Archaeology and Planning, paragraph 30), the specification for which (Appendix Six) provided a written scheme of investigation for mitigation of the effects of development proposals on buried archaeological remains at the site of the former Natwest Bank, Greyfriars, Leicester, as required by the City Archaeologist, Leicester City Council as adviser to the planning authority. The scheme addresses the impact of firstly, the excavation of two trial holes to test foundations in the southern part of the site, and secondly the construction of flats in the south of the site, upon surviving archaeological deposits.

The Ordnance Survey Geological Survey of Great Britain Sheet 156 (Leicester) indicates that the underlying geology consists of river alluvium. The land lies at a height of c. 64.0m OD.

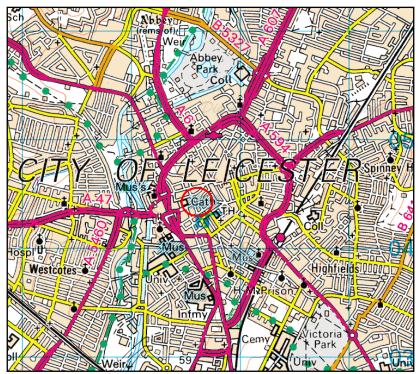


Figure 1: General Site Location. Scale 1: 50 000 Reproduced from Landranger 1:50 000 by permission of Ordnance Survey[®] on behalf of The Controller of Her Majesty's Stationery Office. © Crown copyright. All rights reserved. Licence number AL 100029495.

Aims and Methods

The principal aim of the project was to excavate and record any archaeological deposits which would be destroyed or damaged by the development proposals. The methodology followed the approved *Written Scheme of Investigation for Archaeological Excavation on Land Adjacent to the Former Nat West Bank, Greyfriars, Leicester* (SK 5861 0437) (Appendix Six). All work was undertaken in accordance with the Institute for Archaeologists' (IfA) Code of Conduct and adhered to their *Standards and Guidance for Archaeological Field Evaluation*.

The total site area measured approximately $195m^2$. The archaeological investigation involved the machine excavation of two contiguous trenches positioned at the centre of the development area, located on the site of a recently-demolished single-storey extension to the bank. Each trench measured $c.15m \times 2m$, representing a c.12% sample of the affected area. Space constraints dictated that the excavation be conducted in two phases with the first trench being backfilled prior to the opening of the second trench.

Overburden was removed in level spits using a JCB mechanical excavator equipped with a 1.5m toothless bucket under constant supervision to the top of archaeological deposits. The trench was subsequently hand excavated to building formation level, a depth of 64.0m OD. An exploratory sondage was dug down to the natural substratum at 63.66mOD. Archaeological deposits were planned at 1:20 scale. Following completion of archaeological investigation, trenches were machine-backfilled using excavated spoil.

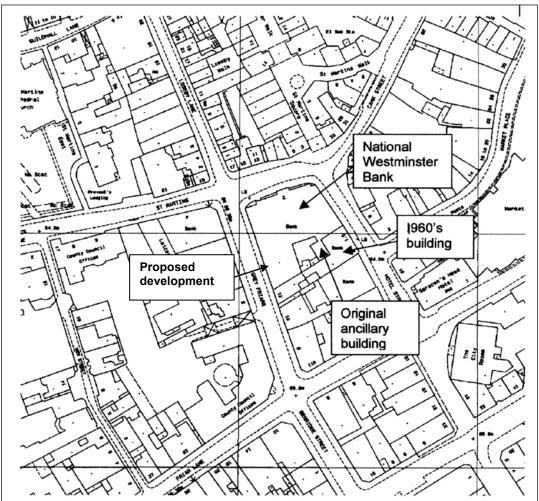


Figure 2: Site Location

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Archaeological and Historical Background

The site of the proposed development is located within the southern half of the walled Roman and medieval town, and the site is possibly situated within the precinct of the Greyfriars, the Franciscan friary. Likely to have been founded in the early 13th century, the friary passed into the ownership of the Herrick family following the Dissolution and the site was partially incorporated into the grounds of the Grey Friars House, the location of which is uncertain. The building was demolished in the early 18th century and the surrounding streets subsequently laid out.

Previous archaeological investigation in the vicinity of the development had revealed remains from the Roman period onwards at St. Martins Walk and Cank Street to the east and north-east of the site respectively, both at shallow depth. A preliminary archaeological evaluation on the present site in 2007 had revealed a well-preserved and complex occupational sequence dating from the Roman to late post-medieval periods and including several timber and masonry structures (Tate 2007).

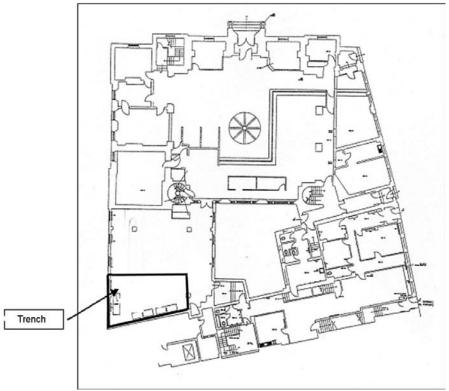


Figure 3: The excavation area (Scale 1:400)

The Results

The area of excavation targeted in 2007 had evidently been subject to considerable pitting activity during the medieval and/or post-medieval period(s), notably in the eastern part of the site. Consequently the majority, if not all of the horizontal stratified deposits within this area appeared to be absent, and hence investigation was focussed on the western part of the site close to the street frontage where horizontal stratified deposits were known to have survived.

Natural

The natural, observed in the sides of deeper pits partly emptied during the course of the evaluation phase, comprised a pale brown sand. Archaeological deposits immediately overlying the natural were not observed, being below development formation level.

Phase 1: Un-Numbered Cut Feature (date)

An exploratory sondage towards the western limit of excavation identified a probable archaeological feature cutting the natural clay at approximately 0.50m below formation level (Figure 4). The full width of the unexcavated, undated feature was not observed and it is unclear as to whether this represented a pit or ditch.

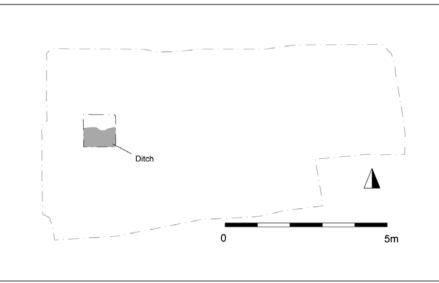


Figure 4: Phase 1 features

Phase 2: Oven - yards - hearth - pitting - possible structural activity (early to mid 2nd century AD)

Yard Surfaces G229 G222 - 222 215 G217 - 219 217=218 216

A coarse flint pebble metalled yard surface (G229) was identified directly overlying the natural clay and extending across the western part of the trench and the length of the modern street frontage (Figure 5, Figure 6). The metalling visibly slumped slightly towards the west. The yard surface produced pottery of early to mid 2nd-century date. The deposit was subsequently sealed by [222], a tightly packed pebble surface which covered the greater part of the western sector of the site, occupying a minimum area of 5m x 3m. An overlying grey silt [215] containing abundant animal bone fragments and 2nd-century pottery probably represented an occupation and/or abandonment layer. A rough clay and pebble surface in a clay matrix located at the northern end of the yard area measuring c. 1m x 1.5m probably represented a surface repair (G217), and which produced early to mid 2nd century pottery. Both G217 and G219 contained cattle scapulae with indications of chopping and hook marks, suggestive of their representing preserved shoulders of beef similar to others found at several sites in Leicester (Browning, this volume).

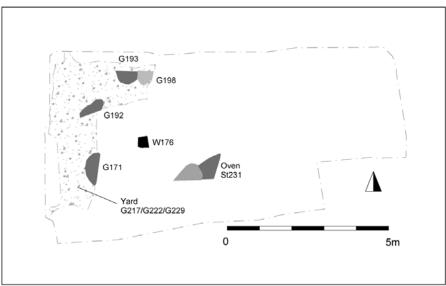


Figure 5: Phase 2 features



Figure 6: Phase 2 gravel yard surfaces; view south

Pit G171 [170, 171] Pit G193 [182, 190, 193] Pit G198 [197, 198] Hearth G200 [199, 200] Wall fragment W176 [174, 176] Gully G192 [191, 192]

Three small, shallow pits G171, G193 and G198, together with hearth G200 and truncated gully G192 represented the only activity associated with the aforementioned yard surfaces. G171 measured $c.1m \ge 0.30m \le 0.15m$ deep, (which produced 2nd-century pottery, possibly the first half of the century), G193 $c.0.48m \ge 0.38m$ (with early to mid 2nd-century pottery), and G198 $c.0.52m \ge 0.42m$ (producing 2nd-century pottery). There were no indications of function for the pits, although their lack of depth may imply that they represent post-holes. A possible hearth base (G200) of unknown dimensions was identified adjacent to pit G198 on the eastern site

boundary. The heavily truncated feature comprised a base and partial framework of cobbles and pebbles in a clay matrix (200) and overlying charcoal deposit (199). Safety considerations prevented excavation of the feature.

A small wall fragment (W176) flanked the pits, comprising roughly coursed large cobbles in a soil matrix and measuring $c.0.36m \ge 0.40m \ge 0.20m$ (Figure 7). Although only the end of the wall survived, it appeared to be aligned approximately east-west. The wall fabric [174] produced pottery of late 1st century or later date. A small truncated gully G192 measuring 0.90m east-west, 0.35m wide and 0.15m possibly represents a drainage ditch or boundary marker.



Figure 7: Wall fragment W176; view west

Oven G231 G231 – G205, construction cut G231 Tile floor 230 Wall G220/225 – 206, 207, construction 220/225, construction cut 226 Superstructure G205 Oven spreads 224, 227 Dump/levelling layers G208 – [208, 209, 210, 212, 213, 214]

The foundations of a probable oven structure (G231) were partially observed against the southern limit of excavation in association with the yard surface G217 (Figure 8, Figure 9). The feature consisted of a rounded cut [231] floored with scorched Roman ceramic wall tiles [230] including a complete *sesquipedalis* floor tile and late 1st or early 2nd century pottery. The oven lining comprised a rubble wall (G225) set against the sides of the construction cut, with a granite-footed wall (G220) leading from the cut and possibly representing a flue. Both walls included 2nd century pottery. The wall of the latter appeared to be of yellowish clay build set on a tile and granite rubble base. However, too little of the oven was observed to ascertain its precise form or function. The superstructure of the feature appeared to have undergone collapse, resulting in a spread of pinkish brown clay [205] measuring $c.1.26m \ge 1.68m$. The clay produced pottery of possible first half of the 2nd century date. The oven was flanked to the north by substantial, charcoal-rich spreads (224 & 227) likely representing waste rakings from the structure's interior, [227] producing 2ndcentury pottery. The immediate vicinity of the oven appeared to have been the subject of ground levelling and/or consolidation, possibly as a preliminary to construction of unknown building(s), as evidenced by a sequence of substantial clay and silt deposits [208, 209, 210, 212, 213 & 214] containing pottery dating to the first half of the 2nd century.



Figure 8: Oven 231; view north-east



Figure 9: Oven 231 with tile base; view east

Phase 3: Ground levelling (mid 2nd century AD)

Dump layers D188 – 188 D185 – 185 G195 – 194, 195

The Phase 2 yard was sealed by substantial probable dump layers, comprising predominately yellowish silty deposits, likely to represent of attempts at ground

levelling prior to building construction. There did not appear to be any refuse accumulation over the surface itself, which was sealed beneath G175. [195] produced mid to late 2nd-century pottery, whilst butchered sheep/goat and pig bone was recovered from [188].

Phase 4: Building 1 construction & ditch (mid 2nd century AD)

This phase comprised the construction of Building 1 and cutting of an associated ditch and the subsequent accumulation of deposits exterior to the building (Figure 10). However, the degree of truncation makes the sequence uncertain and it is probable that there were two developmental phases to the structure; namely, Phases 4 and 5.

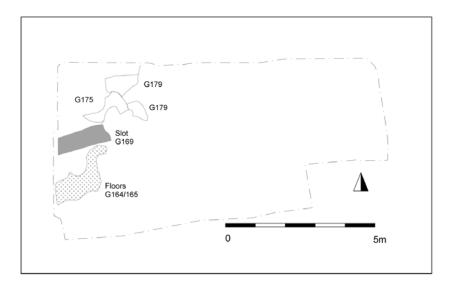


Figure 10: Phase 4 features

Building 1 Mortar floors G162 – 162 G164 – 164 G165 – 165 Beam slot/gully G169 – 166, 167, 168, 169

Phase 4 was dominated by the construction of a likely timber structure, Building 1, of which only the northern wall, represented by a single beam slot or gully, and fragmentary floors survived due to later truncation. The latter comprised patches of decayed mortar (G162 G164 and G165) which appeared to have weathered in situ prior to being buried. G164 and G165 produced early to mid 2nd-century pottery. The northern boundary appeared to coincide with the seemingly later gully G113 and to stop some way short of the more clearly associated shallow U-shaped gully G169, one of the fills of which (167 & 168) produced mid 2nd-century pottery (Figure 11). It was unclear as to whether G169 represented a beam slot accommodating a ground beam or, alternatively, a drainage ditch or gully. Cattle and sheep/goat bone

recovered showed indications of butchery marks and was dominated rib fragments, both indicative of food refuse (Browning, this volume).



Figure 11: Gully 169; view west

Silts G179 – 179 G175 – 172, 175

A sequence of yellowish silts at a similar level to the floors represented either external layers or more probably levelling up dumps for a truncated surface. G179 produced pottery of late 1st or early 2nd-century date.

Phase 5: Building 1 alterations/rebuild (second half 2nd century AD)

Post pads G151 [150, 151, 154] G155 [155, 157, 158] G160 [146, 159, 160]

Floors G162, G164 & G165

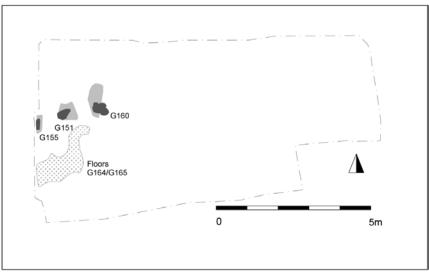


Figure 12: Phase 5 features

Phase 5 appeared to be characterised by alterations and/or rebuilds to Building 1, involving construction of a wall comprising three timber posts supported on substantial granite boulder post pads (G151, G155, G160) (Figure 12, Figure 13). In the case of G160 the top of the pad was composed of rubble laid on top of a granite boulder which in turn was sat over a re-used Millstone grit column drum. This may be indicative of a corner post or else that this pad was more load-bearing than its contemporaries. The post pads produced pottery of late 1st to 2nd century date. Faunal evidence was comparable to that of Phase 4; namely, a preponderance of sheep/goat and cattle domestic food waste (Browning, this volume).

The floors G162, G164 and G165 may have continued in use from Phase 4, although the ceramic evidence is insufficiently precise as to support this conjecture.



Figure 13: Building 1 with post pads & mortar floors; view south

Phase 6: Building 1 robbing & demolition (4th century)

Phase 6 was characterised by the demolition and possible robbing of Building 1 (Figure 14).

Clay layers G147 – [139, 147]

Building 1 was sealed beneath clay layers G147, possible comprising material derived from the demolition of the structure and including a single pottery sherd of possible 4th-century date.

Ditch G113 – [111, 112, 113, 116, 117]

A shallow ditch 113, containing quantities of granite rubble and 2nd- to 4th-century pottery, shared the same alignment as the Phase 4 feature G169 (Figure 14, Figure 15). Alternatively, G113 may have represented a wall robber trench, and hence that the clay dumps G147 formed the remnants of floor slabs or, more likely, the make-ups for truncated floors. In this scenario the robbed wall would have formed the northern limit of the building, with G169 representing an external drainage ditch. The replacement of the latter by the post settings would then result in a northern wall G113, with a narrow external strip and veranda. The build-up of clay against the wall would have had little bearing on its stratigraphic position. Bone from cattle, horse, sheep/goat, pig and domestic fowl were all recovered from the ditch.

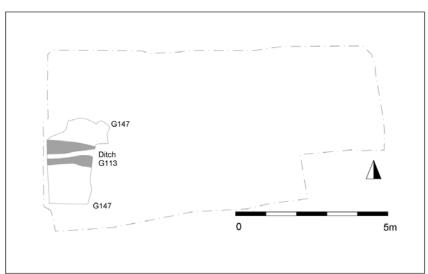


Figure 14: Phase 6 features



Figure 15: Gully 113; view west

Phase 7: Garden soil accumulation (Medieval; 13th-14th century)

Garden soil [110]

The later Roman sequence appeared to be entirely absent, possibly associated with the deposition of a garden soil deposit 110, identified across the western sector of the excavation area. Pottery recovered from the soil comprised a single sherd of Saxo-Norman Stamford ware, two sherds of 13th- or 14th-century Potters Marston and a single fragment of Chilvers Coton ware dating to c.1240/50 to c.1350.

Phase 8: Medieval pitting activity (Medieval; 14th century onwards)

 $\begin{array}{l} \textit{Pits} \\ G105 - [104, 105] \\ G107 - [106, 107] \\ G115 - [114, 115] \\ G120 - [118, 119, 121, 120] \\ G124 - [124, 125] \\ G127 - [126, 127] \\ G129 - [128, 129] \\ G131 - [130, 131] \\ G133 - [132, 133] \\ G138 - [136, 137, 138] \\ G143 - [142, 143] \\ G145 - [145] \end{array}$

The area set back from the modern street frontage was the subject of extensive pitting activity throughout the medieval and post-medieval periods (Figure 16, Figure 17). Given the constraints of the excavation these pits were not closely examined. The absence of structural evidence would be consistent with the position of the site on the periphery of the monastic complex.

Twelve small oval or circular pits were identified, each measuring less than 1m in diameter and *c*.0.5m in depth, with the single exception of a larger, rectangular stone-lined example. G120 measured 2.25m x 1.20m and 0.65m+ deep and was lined [121] with a combination of Dane Hills sandstone, granite, re-used Roman ceramic building material and including fragments of a stone coffin together with quantities of nibbed flat roof tile (Figure 18). The pit fill [118] produced further nib tile, including a near complete example, as well as part of a 14th or possible 15th century floor tile and a single fragment of late medieval Midland Purple ridge tile. Nib tile has been uncovered on other monastic sites in Leicester, and in this case the tile is likely to derive from the demolition and robbing of the nearby Greyfriars monastic complex, which is likely to have been the source of the remainder of the stone used in the wall.

A number of the pits produced cattle bone, but with sheep/goat and pig, horse, cat, domestic fowl, goose and cod bones also represented, the small assemblage confirming the domestic character of the occupation. Cut marks on a number of the bones suggest that professional butchery facilities were available (Browning, this volume).

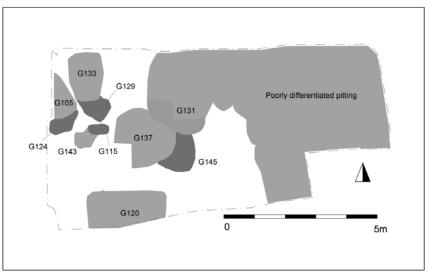


Figure 16: Phase 8 features



Figure 17: General view of pitting; view north



Figure 18: Cess pit 120; view west

A circular column base with deep wide vertical rebates may have derived from the house erected on the site of the Greyfriars following the Dissolution of the Monasteries and possibly formed part of an elaborate piece of window tracery, although the form appears unusual and would require research (Figure 19).



Figure 19: Column base

Discussion

Roman

The excavation served to confirm the preliminary indications supplied by the archaeological evaluation phase; namely, the survival of a well-preserved sequence – with the exception of the apparently truncated later Roman stratigraphy of archaeological activity of Roman, medieval and early post-medieval date at a comparatively shallow depth.

The excavation revealed an early 2nd century Roman gravel metalled yard surface associated with a probable domestic oven, with the faunal material lending credence to the notion of small-scale domestic consumption on the site during this earlier Roman period. This activity ceased in the mid-2nd century with the deposition of levelling material as a preliminary to construction of an insubstantial Roman timber structure incorporating post pads, one of which incorporated a reused column drum. Relatively thin dump deposits sealed this structure following its demolition in the 4th century. However, the absence of subsequent Roman stratification implies truncation of the later phases. The presence of yards and associated probable household productive activity in combination with insubstantial timber construction appears to reflect the site's probable location in yard areas to the rear of and set some distance from a street frontage.

Medieval

Whilst the evaluation phase produced (albeit limited) evidence for medieval masonry and, possibly, timber structural evidence, results from the excavation phase were restricted to an accumulation of a medieval garden soil and to pitting activity, tallying with the site location at the periphery of the Grey Friars monastic precinct. Faunal evidence from the pits serves to emphasise the domestic character of occupation on the site during the medieval period Browning, this volume). The incorporation of reused trough/coffin fragments, floor tile and substantial quantities of nib tile into a pit lining is of particular interest. Whist the pottery assemblage is typical of domestic as well as ecclesiastical sites in the medieval town, the floor and roof tile material point to the proximity to the site of high status buildings (Sawday, this volume). It is, therefore, feasible that the material derived from Grey Friars which lay in the vicinity and demolition of which commenced in 1538. The lack of post-medieval structural evidence is unsurprising given that the site is likely to have occupied the gardens of the Herricks' house.

Conclusions

The archaeological excavation undertaken at Greyfriars revealed a well-preserved stratified archaeological sequence dating from the early Roman to post-medieval periods. The results were dominated by evidence for early Roman yards surfaces and oven and, subsequently, a timber building of post pad and beam slot construction. This sequence of activity was notable for its narrow 2nd century date range. Later Roman features were largely absent, possibly explained by heavy medieval and post-medieval pitting activity, one of which pits featured reused masonry and roof tile fragments in its stone lining likely salvaged from the nearby Grey Friars friary.

The archive (incorporating the archive from the evaluation phase of the excavation and held under the same Museums Accession Number, A9.2007) consists of:

- Pottery sherds (1 box)
- Animal bone (1 box)
- 25 x small finds
- Ceramic building materials (1 box)
- 9 x environmental samples
- 231 x single context record sheets
- 5x monochrome photographs
- 106 x digital photographs
- 98 x drawing sheets

Publication

A version of the excavation summary (see above) will appear in due course in the *Transactions of the Leicestershire Archaeological and Historical Society*.

Acknowledgements

Anthony Gnanaratnam of ULAS undertook the archaeological excavation on behalf of Kaikoura Investments Ltd. The project was managed by Richard Buckley.

Bibliography

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- Tate, J., An Archaeological Field Evaluation on Land Adjacent to the Former Nat West Bank, Grey Friars, Leicester (SK 5861 0437). ULAS Report No.2007-123
- ULAS 2006 Written Scheme of Investigation for an Excavation and Watching Brief on the Site of the Former Nat West Bank, Leicester ULAS

Oasis Information

Project Name	An Archaeological Excavation on Land Adjacent to the Former Nat West Bank, Greyfriars, Leicester [NGR SK 5861 0437]
Project Type	Excavation
Project Manager	Richard Buckley
Project Supervisor	Anthony Gnanaratnam
Previous/Future work	Residential development
Current Land Use	Derelict land
Development Type	Apartments
Reason for Investigation	PPG16
Position in the	Pre-planning decision
Planning Process	
Site Co ordinates	NGR SK 5861 0437
Start/end dates of field work	6th September and 2nd October 2007.
Archive Recipient	Leicester City Council
Study Area	195m ²

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Appendix One: The Roman Pottery

Elizabeth Johnson

Assemblage size and condition

A stratified assemblage of 305 sherds of Roman period pottery weighing 7.772kg was retrieved from the excavations, along with a further 1.618kg of re-deposited material from post-Roman layers. The average sherd weight of 25.5g (18g discounting amphora), suggests a good level of preservation for material from urban excavations, though preservation is variable with some small sherds.

Methodology

The material was identified according to the Leicestershire Museums Fabric Series (Pollard 1994). Within the archive database specific fabrics were assigned to all sherds wherever possible, however in this report the generic ware groups summarised in the table below are used for clarity of quantified data presentation.

Table 1: Summary of Leicestershire Museums Fabric Series (Pollard 1994, 112-114).

Fabric Code:	Fabric Type:	Fabric Code:	Fabric Type:
Samian	Samian ware	OW	Oxidised wares
С	Colour-coated wares	BB1	Black Burnished ware
WW	White wares	GT	Grog tempered wares
WS	White-slip wares	AM	Amphorae fabrics
GW	Grey wares	MO	Mortaria
CG	Calcite gritted (shelly)		

Quantification was by sherd count, weight (grams) and estimated vessel equivalents (EVEs based on rims only). Average sherd weights (ASW) have also been calculated to provide an indication of the condition of the material and levels of preservation within the assemblage. Vessel forms were assigned where diagnostic sherds allowed, using the Leicestershire Form Series and other published typologies (Howe *et al* 1980; Holbrook and Bidwell 1991; Pollard 1994; Tyres 1996; Webster 1996). The complete dataset was recorded and analysed within an Excel workbook, which comprises the archive record.

Major Pottery Fabrics within the Assemblage

The table and chart below detail a summary of the major pottery fabrics within the assemblage as a whole. Grey, shelly and grog-tempered coarse wares account for 69.3% (EVEs), with grey and shelly wares fairly evenly represented at 34.7% and 31.9% respectively. The majority of these are most likely locally made and predominantly provide the utilitarian jars and bowls for general household use.

Fabric	Sherds	% Sherds	Weight (g)	% Weight	EVEs	% EVEs	ASW (g)
AM	13	4.3%	2521	32.4%	0.00	0.0%	193.9
BB1	26	8.5%	247	3.2%	0.35	5.9%	9.5
С	22	7.2%	162	2.1%	0.56	9.4%	7.4
CG	25	8.2%	651	8.4%	1.89	31.9%	26.0
GT	1	0.3%	55	0.7%	0.16	2.7%	55.0
GW	85	27.9%	1785	23.0%	2.05	34.7%	21.0
MO	7	2.3%	439	5.6%	0.08	1.3%	62.7
OW	11	3.6%	209	2.7%	0.35	5.9%	19.0
Samian	20	6.6%	321	4.1%	0.16	2.7%	16.1
WS	5	1.6%	114	1.5%	0.16	2.6%	22.8
WW	90	29.5%	1268	16.3%	0.18	3.0%	14.1
Total	305	100.0%	7772	100.0%	5.92	100.0%	25.5

Table 2: Major fabric groups present within the assemblage.

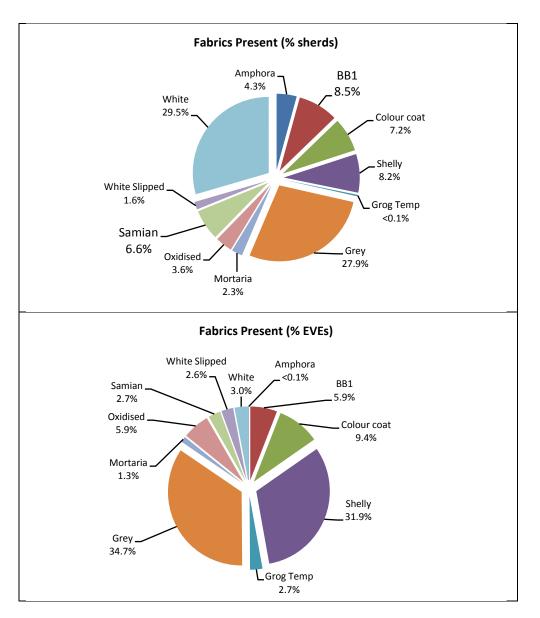


Figure 1: Fabrics present within the assemblage (% sherds and % EVEs).

Most of the grey wares are jars including rounded and everted rims with barbotine ring and dot or barbotine dot and burnished line decoration, typical of the 2nd century. Bowl forms present include a reeded rim bowl, s-shaped bowl and flat-rimmed bowls all dating to the 2nd century. A 'London-style' bowl from (173) dates from the late 1st to the middle of the 2nd century (Pollard 1994, 55). Two globular beakers and a lid are also present. The shelly wares are all jars, most of which are probably locally made comprising neckless ledge-rimmed and rounded-rimmed jars with combed decoration dating to the later 1st or 2nd century. Two jars from the South Midlands from ditch (117) date to the later 3rd or 4th century (Brown 1994). One jar (context 187) from Rutland or South Lincolnshire, possibly from the Bourne Greetham industry, dates to the later 2nd or 3rd century (Pollard 1994, 114). The single sherd of grog-tempered ware from layer (210) is a 'transitional' fabric, largely dating within the 1st century but possibly continuing into the early 2nd century (*ibid*, 74-75).

Other regional pottery supply to the site is demonstrated by the presence of Black Burnished ware, white, oxidised and white slipped wares. The Black Burnished wares comprise jars with acute lattice decoration and flat rimmed bowls dating from *c*.AD120 to the end of the 2nd century (Holbrook and Bidwell 1991). Most of the white and white slipped wares are flagons dating to the 2nd century. Almost half the white ware sherds were recovered from the yard surfaces (219) and (229) dating to the first half of the 2nd century. A jar in fabric WW1 dating from the late 1st to the mid-2nd century was also recovered from (219) (Pollard 1994, 113). The oxidised wares comprise everted and rounded rimmed jars with roulette and burnished decoration also dating within the 2nd century (*ibid*, 77-79). Likely sources for the oxidised, white and white slipped wares are Mancetter-Hartshill and Northamptonshire (Swan 1984, 98-101; Pollard 1994, 113-114).

Fine wares comprise a mixture of imported Gaulish Samian ware and Romano-British or Continental colour-coated wares. The samian is tableware (dishes, cups and bowls), typical of the late 1st and 2nd centuries. The Drag.18/31 dish dating to the first half of the 2nd century is the dominant form, accompanied by Form 27, 33 and 35 cups, also dating within the 2nd century. The latest datable vessel is one Form 38 bowl from dump layer (195). Although this form is most common during the second half of the 2nd century (Webster 1996, 51). Most of the colour-coated wares are beakers with cornice rims and clay roughcast or barbotine decoration suggesting a date firmly within the 2nd century. The clay roughcast beakers comprise a mixture of imported wares from Cologne and North Gaul and Romano-British products, probably from Colchester (Tyres 1996, 140; 146-147; 167-168). There are also a few Nene Valley colour-coated wares ranging from late 2nd and 3rd century beakers, through to a 4th century dish and later 3rd-4th century bowl (Howe *et al* 1980). These later colour-coated wares were recovered from the ditch (116) (117).

The specialist wares comprise small amounts of amphorae and mortaria. An example of a Cam 186 amphora was found in (165). This type is associated with the transport of fish sauce and dates to the late 1st-early 2nd century in Britain (*ibid*, 120-121). The remaining amphorae present are Baetican Dressel 20 olive oil vessels, dating from the later 1st century through to the middle of the 3rd (Peacock and Williams 1986, 136-140), and is the most common type found in Leicester. Most of the

mortaria are from Mancetter-Hartshill dating to the first half of the 2nd century. One late 1st to mid-2nd century vessel is possibly from Verulamium and one Nene Valley mortarium dates from the middle of the 2nd century onwards. An as yet unidentified mortarium in a coarse orange fabric is most likely from a Midlands source and probably dates within the 2nd century.

Conclusions

Overall the assemblage is typically 2nd century, with two-thirds of the phased assemblage dating within the first half of the 2nd century (phase 2). There is some evidence for later activity, particularly the later ditch G113 (phase 6), from which the later Roman shelly wares and later Nene Valley colour-coated wares were recovered. A scan of the pottery recovered from post-Roman features revealed some later material including funnel necked and folded beakers, an additional later shelly ware jar and an Oxfordshire red-brown colour-coated ware bowl, demonstrating some Roman activity continuing into the middle of the 4th century (Young 1977, Howe *et al* 1980, Brown 1994). However, most of the pottery reflected the essentially 2nd century character of the stratified assemblage. The variety of fabrics present is comparable to other urban assemblages from Leicester such as Causeway Lane (Clark 1999) and Vine Street (Johnson 2009).

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Roman Pottery Catalogue

Cut	Context	Fabric	Form	Sherds	Weight (g)	EVEs	Dating
113	111	Sam	Dish	1	13		late1st-early2ndC
113	111	CG	Jar	2	15		late1st-2ndC
113	111	GW	Jar	2	25		2ndC+
113	111	GW	Jar	1	3		2ndC+
113	111	С	Beaker	1	4		2ndC?
113	116	BB1	Bowl	1	6		mid2ndC+
113	116	CG	Jar	2	22		2ndC+
113	116	GW	Dish	1	11	0.05	mid2ndC+
113	116	BB1	Misc	1	5		mid2ndC+
113	116	GW	Jar	1	32		2ndC+
113	116	C	Beaker	1	20		later2ndC+
113	116	C	Beaker	1	2		later2ndC+
113	116	C	Beaker	1	1		later2ndC+
113	116	С	Beaker	1	1		3rdC
113	116	С	Beaker	1	5		3rdC+
113	117	GW	Jar	4	106		2nd-3rdC
113	117	GW	Jar	1	16		2ndC+
113	117	CG	Jar	2	118		2ndC+
113	117	CG	Jar	1	12	0.75	early4thC
113	117	CG	Jar	1	20	0.75	later3rdC+
113	117	WW	Flagon	1	4		2ndC
113	117	С	Bowl	1	40		late3rd-4thC
113	117	С	Beaker	1	15		3rdC+?
113	117	С	Dish	1	11		4thC
122	123	GW	Jar	2	20		late1st-mid2ndC
122	123	С	Misc	1	5		3rdC+
160	146	С	Beaker	1	3	0.2	later2ndC
	147	С	Jar	1	17	0.05	4thC
	148	CG	Jar	1	18	0.08	2nd-3rdC+
151	150	Sam	Dish	1	10		early-mid2ndC
	152	BB1	Jar	1	1		c.120-200
155	157	С	Beaker	1	2		2ndC
160	159	GW	Lid	1	12	0.1	late1st-2ndC
	163	GW	Jar	1	13		2nd+
	163	Sam	Cup	1	6		late1st-early2ndC
	164	GW	Bowl	1	10		2ndC
	165	OW	Lid	1	115	0.15	late1st-2ndC

	165	OW	Jar	1	30	0.1	late1st-2ndC
	165	AM	Amphora	1	37		late1st-early2ndC
Cut	Context	Fabric	Form	Sherds	Weight (g)	EVEs	Dating
	165	CG	Jar	1	23	0.1	mid/late1st-mid2ndC
	165	WS	Misc	1	6		late1st-2ndC
	165	GW	Jar	1	17		2ndC+
	165	GW	Dish	1	9	0.025	late1stC+
	165	WW	Flagon	3	61		late1st-2ndC
	165	WW	Misc	1	1		late1st-2ndC
	165	Sam	Cup	1	4	0.11	late1st-early2ndC
	165	Sam	Bowl	2	11		late1st-early2ndC
	165	МО	Mortarium	1	34		early-mid2ndC
169	167	С	Beaker	3	12		late1st-2ndC
169	167	С	Beaker	1	1	0.125	late1st-2ndC
169	167	BB1	Jar	3	29		c.120-200
169	168	CG	Jar	1	119		late1st-2ndC
169	168	WW	Flagon	1	4		late1st-2ndC
169	168	WW	Misc	1	5		late1st-early2ndC
169	168	BB1	Jar	1	2		c.AD120+
169	168	GW	Jar	3	61		2ndC+
171	170	WW	Misc	1	6		late1st-2ndC
171	170	CG	Jar	1	9		late1st-2ndC
	173	Sam	Dish	1	27		late1st-early2ndC
	173	WW	Jar	1	5		late1st-2ndC
	173	GW	Bowl	1	5	0.05	late1st-mid2ndC
176	174	AM	Amphora	1	218		late1stC+
	175	BB1	Jar	1	2		c.AD120+
	175	OW	Jar	1	3		2ndC
	177	AM	Amphora	1	380		late1stC+
	177	CG	Jar	1	6		2ndC+
	179	WW	Misc	1	3		late1st-2ndC
	179	GW	Jar	2	15		late1st-2ndC
	180	AM	Amphora	1	204		late1stC+
	180	Sam	Dish	1	5		late1st-early2ndC
	180	GW	Beaker	1	5	0.1	late1st-2ndC
	180	GW	Jar	1	41		2ndC
	180	С	Beaker	1	4		c.AD120-200
	181	AM	Amphora	1	463		late1stC+
	181	CG	Jar	1	37		2ndC
	181	OW	Jar	1	12	0.1	2ndC
	181	GW	Beaker	1	7	0.15	late1st-2ndC
	181	С	Beaker	1	10	0.18	c.AD120-200

	181	WW	Flagon	1	50		late1st-2ndC
	181	WW	Flagon	2	12		late1st-2ndC
Cut	Context	Fabric	Form	Sherds	Weight (g)	EVEs	Dating
	181	GW	Jar	1	36		late1st-2ndC+
	181	GW	Jar	1	11		2ndC
	181	MO	Mortarium	1	144		2ndC
	181	MO	Mortarium	1	128	0.075	late1st-mid2ndC
193	182	WW	Flagon	1	2		late1st-2ndC
193	182	Sam	Misc	1	5		early-mid2ndC
	183	WW	Misc	1	2		late1st-2ndC
	183	WW	Lid	1	5	0.175	late1st-2ndC
	184	Sam	Dish	1	52		early-mid2ndC
	185	GW	Jar	1	2		2ndC
	185	OW	Jar	3	14		2ndC
	187	GW	Jar	4	197	0.175	
	187	Sam	Dish	1	105		early-mid2ndC
	187	OW	Jar	1	7		2ndC
	187	OW	Misc	1	2		2ndC
	187	BB1	Bowl	2	36	0.15	c.AD120-200
	187	BB1	Jar	5	38		c.AD120-200
	187	WW	Flagon	3	29		late1st-2ndC
	187	МО	Mortarium	1	50		2ndC+
	187	МО	Mortarium	1	32		early-mid2ndC
	187	CG	Jar	2	8		mid/late2ndC+
	187	GW	Bowl	2	20		c.AD120-200
	187	GW	Jar	1	9		2ndC+
	187	GW	Misc	1	10		2ndC+
	188	OW	Jar	1	4		2ndC
	188	Sam	Misc	1	1		late1st-early2ndC
	189	GW	Misc	2	20		2ndC+
	189	GW	Jar	1	1		c.AD120+
193	190	GW	Jar	1	4		2ndC+
193	190	BB1	Jar	1	21	0.075	c.AD120+
	195	Sam	Bowl	1	17		mid-late2ndC
198	197	GW	Jar	1	30		2ndC+
198	197	GW	Jar	1	12		2ndC+
198	197	BB1	Jar	1	21	0.125	c.AD120+
221	204	GW	Jar	1	88		late1st-2ndC+
221	204	GW	Jar	1	8		late1st-2ndC+
221	204	WW	Misc	1	4		late1st-2ndC
221	204	WW	Flagon	1	5		late1st-2ndC
221	204	С	Beaker	1	3		c.AD120-180

231	205	WW	Flagon	1	14		late1st-2ndC
226	206	WW	Flagon	1	9		late1st-2ndC
Cut	Context	Fabric	Form	Sherds	Weight (g)	EVEs	Dating
226	206	GW	Jar	1	13		late1st-mid2ndC
226	206	GW	Jar	1	32		2ndC+
226	206	С	Beaker	1	1		2ndC?
208	209	WW	Flagon	1	9		late1st-2ndC
208	209	CG	Jar	1	14		late1st-2ndC
208	209	С	Beaker	1	5		late1st-2ndC
208	210	CG	Jar	1	65		late1st-2ndC
208	210	GT	Jar	1	55	0.16	late1st-early2ndC?
208	210	GW	Misc	1	7		late1st-2ndC+
208	210	BB1	Jar	1	6		c.AD120-200
	211	GW	Bowl	3	108	0.235	late1st-2ndC+
208	212	CG	Jar	1	11		late1st-2ndC
208	212	WW	Flagon	2	7		late1st-2ndC
208	212	GW	Jar	1	28	0.1	late1st-2ndC+
208	212	GW	Misc	1	3		late1st-2ndC+
208	212	BB1	Bowl	1	5		c.AD120+
208	213	WW	Flagon	1	2		late1st-2ndC
208	213	Sam	Misc	1	2		early-mid2ndC
222	215	CG	Jar	1	7		2ndC+
222	215	WS	Jar	2	26	0.155	2ndC?
217	216	WW	Flagon	3	43		late1st-2ndC
217	216	Sam	Dish	1	26		early-mid2ndC
217	217	AM	Amphora	1	318		late1stC+
217	217	CG	Jar	2	47	0.125	late1st-early2ndC
217	217	WW	Flagon	3	21		late1st-2ndC
217	217	WS	Misc	1	2		late1st-2ndC
217	217	MO	Mortarium	1	16		late1st-mid2ndC
217	217	Sam	Cup	1	1		late1st-early2ndC
217	217	GW	Jar	4	26		late1st-mid2ndC
217	217	GW	Jar	4	116		late1st-2ndC+
217	218	GW	Bowl	1	27	0.1	late1st-mid2ndC
217	218	GW	Misc	2	37		late1st-2ndC+
217	218	МО	Mortarium	1	35		mid2ndC+
217	219	WW	Flagon	23	387		late1st-2ndC
217	219	WS	Flagon	1	80		late1st-2ndC
217	219	OW	Misc	1	22		late1st-2ndC
217	219	CG	Jar	3	100	0.08	late1st-mid2ndC
217	219	Sam	Dish	2	31	0.05	late1st-early2ndC
217	219	WW	Jar	1	10		late1st-mid2ndC

217	219	GW	Jar	5	91	0.36	late1st-mid2ndC
217	219	AM	Amphora	4	141		late1stC+
Cut	Context	Fabric	Form	Sherds	Weight (g)	EVEs	Dating
217	219	GW	Jar	1	53		late1st-early2ndC
217	219	GW	Jar	3	49		2ndC+
217	219	GW	Jar	1	6		2ndC+
217	219	GW	Jar	1	5		2ndC+
217	219	GW	Jar	1	16	0.125	late1st-2ndC
226	220	Sam	Misc	1	2		early-mid2ndC
226	220	GW	Jar	1	34	0.18	2ndC
226	225	WW	Misc	1	12		late1st-2ndC
226	225	BB1	Jar	7	75		mid-late2ndC
	227	Sam	Bowl	1	3		late1st-early2ndC
	227	GW	Bowl	1	49	0.2	2ndC
	227	GW	Jar	4	211	0.1	2ndC+
	229	AM	Amphora	2	260		late1stC+
	229	GW	Jar	3	18		2ndC+
	229	WW	Flagon	32	556		late1st-2ndC
	230	AM	Amphora	1	500		late1stC+

Appendix Two: Roman Ceramic Tile Heidi Addison and Nicholas J. Cooper

Introduction

A total of 53 fragments of Roman ceramic tile, weighing 16.4kg was recovered. The material has been classified by form and fabric and quantified by count and weight by type. All the material occurred in the coarse sandy fabric typical of Roman tile found in the city and no more detailed fabric analysis has been undertaken. Samples of diagnostic material have been retained in the finds archive. The high average fragment weight of 309g is in accordance with the fact that nearly all of the material could be identified to type and the results of this quantified analysis are presented below (Table 1) and summarised in Table 2.

Results

Context	Form	Frags	Wght (g)
111	unclass	2	199
117	tegula	2	463
117	flue tile	2	276
117	pedalis	1	451
118	pedalis	2	452
128	pedalis	1	261
128	tegula	1	92
132	flue tile	1	193
163	tegula	1	448
164	flue tile	1	70
166	tegula	1	263
172	tegula	1	435
190	imbrex	2	1042
205	imbrex	2	238
206	imbrex	5	534
216	pedalis	1	165
219	tegula	1	69
220	imbrex	4	2214
220	tegula	1	613
225	tegula	1	277
225	imbrex	8	2310

Table 1: Quantification of Roman Ceramic Tile by Type

Total		53	16369
230	pedalis	11	5189
227	imbrex	1	115

Discussion

The results in Table 1 can be summarised to highlight the proportions of types in the assemblage (Table 2). Table 2 Quantified summary by tile type

Summary Material	of (Classified
Туре	Frags	%
Imbrex	22	43
Tegula	9	18
Pedalis	16	31
Flue	4	8
Total	51	100

As is typical, tile used in roofing (*tegula* and *imbrex*) is the most common, making up over 60% of the assemblage and examples of *pedalis* used in masonry building construction make up over 30%. The occurrence of flue tile, though low, does indicate the existence of hypocausted rooms within residential buildings in the vicinity.

Appendix Three: The Medieval Pottery

Deborah Sawday

The Finds

The stratified medieval and post-medieval pottery, 80 sherds, weighing 1834 grams, the medieval ridge tile, three fragments weighing 163 grams, the medieval floor tile, two fragments weighing 50 grams, and 45 fragments of nib roof tile, weighing 7784 grams, were catalogued with reference to the guidelines set out by the Medieval Pottery Research group, (MPRG, 1998 and 2001) and the ULAS fabric series (Sawday 1989), (Davies and Sawday 1999). The pottery record and totals are shown below (Tables 1 and 2), and that of the tile in Table 2.

Only the material from the excavations is discussed here.

Table 1: The medieval and post-medieval pottery by fabric, sherd numbers and weight (grams).

Fabric	Common Name	Sherds	Weight	Comments
Saxo Norman – Earlier High Medieval				
ST2	Fine Stamford ware	2	8	
ST1	Very Fine Stamford	1	5	
	ware			
PM	Potters Marston	29	561	
SP	Splashed ware	3	71	
CS	Coarse Shelly	1	15	
CO1	Coventry	1	4	
	Subtotal	37	664	
Later High Medieval				
CC1	Chilvers Coton	14	148	
CC2	Chilvers Coton	2	11	
MS2/3	Medieval Sandy	2	22	
NO3	Nottingham	4	71	
	Subtotal	22	252	
Later Medieval - I	Early Post-Medieval			
MS7/8	Medieval Sandy	3	38	
MP2/3	Midland Purple	14	797	
CW/MB	Cistercian/Blackware	2	37	
MY	Midland Yellow	2	46	
	Subtotal	21	918	
	Totals	88	1834	

Discussion

A single sherd of fine Saxo Norman Stamford ware, two sherds of 13th or 14th century Potters Marston and a single fragment of the Chilvers Coton fabric CC1, dating from *circa* 1240/50 to *circa* 1350, were found in the garden soil context (110).

The rest of the pottery, primarily jars, jugs and bowls in Potters Marston, Splashed ware, and Chilvers Coton, Coventry, Nottingham and Medieval Sandy wares, was apparently chiefly associated with medieval and later pitting. The later medieval and early post medieval material included Midland Purple, Cistercian/Midland Blackware

and Midland Yellow. Of particular note was the stone-lined cess pit [120]. The lining (121) was made up of both stone and fragments of nibbed flat roof rile, whilst the fill (118) of the same feature, also produced quantities of nib tile, including a near-complete example, as well as part of a 14th- or possible 15th-century floor tile and a piece of late medieval Midland Purple ridge tile.

The dimensions of the nib tile and the fabric suggest that much if not all of it may originate from the Chilvers Coton kilns at Nuneaton in Warwickshire, a major production centre in the region for both pottery and tile. However, to date none of the nib tiles found in Leicester, both on this site and, for instance, at the Austin Friars, (Allin 1981, fig.19.23) have the peg holes found on some of the Chilvers Coton tiles, (Mayes and Scott 1984, fig.116). Here, as at the Austin Friars, the positioning of the nib suggests that the tiles were hung on the roof with the sandy rather than the smooth side uppermost (*ibid.* 1981, 65-67).

Conclusion

The pottery occurred in a range of fabrics and domestic vessel forms commonly found in Leicester, for example, at Freeschool Lane, (Sawday 2009) and in the suburbs (Woodland 1981) during the Saxo Norman to the early post medieval period. The nib tile is not closely dated in the city but the dimensions of the one measurable tile broadly adhere to the standards as laid down by Parliament in 1477 of $10 \frac{1}{2} \times 6 \frac{1}{2} \times \frac{1}{2}$ inches (*c*. 265 x 165 x 15mm). A late-medieval or early-post-medieval date for the tile is also supported by the presence of late-medieval pottery in Midland Purple ware and Midland Yellow ware, the latter dating from *c*.1500 to *c*.1725, in the same pit. Similar tile has also been found in late medieval contexts at both Hinckley and Lutterworth to the south-west of the county.

Whilst the pottery assemblage is typical of both domestic and ecclesiastical sites in the city, the floor tile and the ridge and nib tile are indicative of high status buildings. It is not unlikely that this material is associated Greyfriars which lay in the vicinity, and which began to be demolished in 1538.

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Context	Fabric/Ware	Nos	Gr	Comments
Pottery from	n the evaluation.			
1	MP2 – Midland Purple ware 2	1	11	<i>c</i> .1375-1550
2	CW2/MB – Cistercian/Midland	1	33	Possibly a posset pot
	Black ware			base, c.1450-1650
11	PM – Potters Marston	1	5	?early - late 11-13th C
13	PM	1	9	12-13th C
13	CS – Coarse Shelly ware	1	15	с.1100-с.1400
13	CW – Cistercian ware	1	4	Jug rim, oxidised –
				<i>c</i> .1450+
29	PM	1	7	12-13th C
29	CC1 – Chilvers Coton ware 1	2	5	<i>c</i> .1250+
29	MS7 – Medieval Sandy ware 7	1	5	Later 13th or 14th C?
31	ST2 – Fine Stamford ware	1	2	Mid/late 11c-c.1200
31	РМ	8	66	12-13th C includes ext
				thickened bowl/jar rim
31	?CO1 – Coventry D ware	1	4	Or pos NO2, c.1150-
				<i>c</i> .1250
31	NO3 – Nottingham ware 3	1	1	<i>c</i> .1230/1250+
31	NO3	1	10	Heavily reduced
				internally, late 13th, early
				14th C.
31	CC1	3	9	c.1250+ - one hard fired
				post 14th C
31	MS8– Medieval Sandy ware 8	1	10	?14th – mid 15th C.
33	PM	1	12	12-13th C
33	NO3	1	55	Later 13th C, jug handle
				base
87	PM	1	29	12-13th C
96	CC1	1	1	<i>c</i> .1250+
98	PM	1	68	12-13th C. Storage jar
				body with thumbed
				applied clay strip
Pottery from the excavation.				
106 [107]	PM – Potters Marston	1	9	Convex basal angle,
pit				sooted post deposition
106	CC1 – Chilvers Coton 1	4	81	Green glazed jug body
106	CC1	1	27	Bowl, flat basal angle,
				green glazed internally
106	CC1	1	6	Body, very hard fired,
				reduced core.
106	CC2 – Chilvers Coton 2	1	7	Body – traces of brown
				glaze
106	MS2 – Medieval Sandy ware 2	1	19	Convex base, sooted

Table 2: The medieval and later pottery and post Roman tile by fabric, sherd/fragment numbers and weight (grams) by context.

				externally
106	MS3 – Medieval Sandy ware 3	1	3	Body, purple glaze externally
106	MS8 – Medieval Sandy ware 8	1	23	Body, orange glaze spots externally.
106	MP2 – Midland Purple 2	7	411	Jug body & neck, shape and decorative rilling, under dark brown glaze. Late medieval.
110 garden soil	ST1 – Fine Stamford	1	5	Shoulder, combed horizontal lines under thin green lead glaze
110	PM	1	29	Jar rim, everted externally thickened
110	PM	1	7	Flat topped bowl rim
110	CC1	1	10	Flat base, traces of yellow glaze & abraded underneath, c.1240/50 – 1350.
117 [113] ditch	CC2	1	4	Body, sooted ext, c.1300- 16th C.
118 [120] pit	NO3 – Nottingham 3	1	5	?jug shoulder with cordon, olive green glaze, dark grey reduced body
118	MY – Midland Yellow	2	46	Base – yellow glaze internally & burnt externally, c.1500-1725.
121	ST2 –Fine Stamford ware	1	6	Combed curvilinear & straight lines under green lead glaze, 1050-1200.
126 [120] pit	PM	1	114	Upright jar rim, patchy sooting ext (Davies & Sawday 1999, fig.91.83).
126	РМ	1	37	Flat topped bowl rim. Reduction on rim top, (Sawday 1989, fig.9.8).
126	РМ	2	39	Abraded flattish basal angle, external sooting, & abraded base. Absence of medieval sandy wares suggests a possible early/mid 13th C date
130 [131] pit	PM	2	15	Body/base. Dating as for (126) above.
132 [133] pit	SP3 – Leicester Splashed ware	2	34	Body sherds, one sooted externally one orange glazed externally
132	CC1	1	9	?Jug body sherd, wall pushed out evidently near

F				
				site of thumbed/plugged handle base. Clay strips decorated with trailed slip star or wheel patterns
132	MP3 – Midland Purple 3	1	177	under yellow glaze. Jar rim & shoulder, purple/black glaze externally, (Woodland 1981, fig.40.197).
132	MP2	5	198	Body/base sherds, two with purple /brown glaze on exterior. Late medieval, c.1375-1550.
136 [138] pit	РМ	1	33	Jug neck
136	РМ	4	68	Body/base, two externally sooted possible early/mid 13th C.
136	Splashed ware	1	37	Base, abraded, c.1000 - 1250.
137	РМ	1	14	Base, reduced internally, possible early/mid 13th C.
RIDGE TII	E			
106 [107] pit	MP1– Midland Purple 1	1	10	Late medieval, c.1375- 1550
118 [120] pit	MP2 – Midland Purple	1	128	Brown glaze on upper surface, & scar showing original location of tile crest. Late medieval, <i>c</i> .1375-1550, .
132 [133] pit	MS3 – Medieval Sandy ware 3	1	25	Orange/brown glaze spots upper surface.
FLOOR TI	LE			
118 [120]	CC2 – Chilvers Coton 2	1	50	Medieval floor tile. Monochrome, (no evidence of inlay), red body with white slip firing yellow under a transparent lead glaze.
NIB TILE		I	1	
118 [120]	CC2 5 1321	mc wo bro enc sm sar	mplete handmade tile, n a sanded rectangular ormer, with the nib (now aced at the middle of one tile & projecting from the de, so when hung, the le would have been t. Traces of torching (lime	

				plaster) are visible on the smooth side, and a lump of mortar survives near the nib. Some sooting on the sanded side. Dimensions - 11 inches x $6 \frac{1}{2} \times \frac{1}{2}$ inch thick (295 x 165 x c.15mm).
118	CC2	2	574	Nib made by pushing up clay at one end of tile & projecting c. 15mm (c. 5/8 inch) on the smooth side. Tile <i>c</i> .15mm thick.
118	CC2/EA	22	3301	Misc. fragments – some with evidence of torching/sooting.
121 [120]	CC2/EA	16	2388	Traces of 'torching' on both upper & lower surfaces & of sooting on the sandy side on many of the fragments. Some fragments have traces of glaze on the smooth surface & edges.

Appendix Four: The Small Finds from Greyfriars Nicholas J. Cooper

Objects of Roman date

Coin SF7 Area A. CuA Coin. Illegible late Roman coin 12mm. Probably 4th century

Vessel Glass

SF3 Vessel Rim

Colourless glass (green tinged) from a cup. Top of rim slightly offset and cracked off with flat, un-ground surface. Bands of wheel-cut horizontal lines immediately below and further down the body. Diameter 80mm. Probably from a cylindrical cup of mid-late 2nd-century date (Price and Cottam 1998, 95, fig.34)

SF4 Flat body fragment.

Undiagnostic fragment in colourless glass (green tinged). Thickness 1.5mm

Fastenings and Fittings

A total of at least 33 nails of Roman date was recovered notably from contexts (161), (164), (180), (182), (183) and (187), all of which have been x-rayed for archive. All appear to belong to Manning's (1985) Type 1 and complete examples vary in length from 40mm-95mm. Larger nails are indicated by larger heads but incomplete shafts. Such nails were commonly used in timber building construction during the Roman period.

Building Materials

SF23 Area A (175)

Eight small and abraded fragments of painted wall plaster (60g) were recovered. Pink or red paint was poorly preserved on two fragments.

Objects of medieval date

Household Utensils

SF1 Copper Alloy Spoon

Complete stem including decorative knop, with part of a shallow, round bowl preserved. The stem is flat at its junction with the bowl and tapers to one of square section below the knop which comprises a short length of more rounded stem, slightly wider than the rest, surmounted by an acorn. Preserved length 135mm, length of stem 116mm, width of stem at junction 8mm, width of stem below knop 3mm.

The acorn knop is paralleled on two examples from London (Egan 1998, 252, fig.198.774 and less closely fig.197.769) both from Ceramic Phase 12 (*c*.1400-1450). However, none of the examples from London in the period up to *c*.1450 is in copper alloy, which does not become a common material until the late 17th century due to the strength of the Pewterers' Guild whose lead-tin alloy spoons are the norm (Egan 2005, 117). The situation may have been different in Leicester as the form of the spoon is clearly of 14th- or 15th-century date, but the two similar examples from the Austin Friars (Clay 1981, 130, fig.45.4 and 5) are also in pewter. Ward Perkins lists a number of similar examples from London dating from the 14th to 15th century, including those with acorn or acorn-derived knops, one of which has a round bowl similar to the present example (Ward Perkins 1940 131 no. A9468, Pl.26.4). This spoon therefore represents an unusual find in Leicester.

Dress Accessories

SF2 Unstratified. Copper Alloy (?tinned) pin shaft

Short broken length of very fine pin shaft with a white metal (?tinned) coating. Preserved length 16mm, width of shaft 0.5mm.

Possibly from a fine dress pin of the kind that became popular in the 14th century (e.g. Egan and Pritchard 1991, 303 fig. 204)

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Appendix Five: The Animal Bone

Jennifer Browning

Introduction

This report presents the results of analysis of the faunal remains recovered from Roman and medieval levels during excavations at the former NatWest Bank, Greyfriars, Leicester (NGR SK 5861 0437). A total of 304 bones were recovered during hand-excavation, from 21 archaeological deposits.

Methodology

Specimens were identified with reference to comparative modern and ancient skeletal material held at the School of Archaeology and Ancient History, University of Leicester. Information was compiled directly into a spreadsheet with facility for recording data on species, bone element, state of epiphysial fusion and completeness to elicit information on species proportions, skeletal representation, age and condition. Where possible, the anatomical parts present for each skeletal element were recorded using the 'zones' defined by Serjeantson (1996), with additional zones ascribed to mandibles based on Dobney and Reilly (1988) and a simple system applied to skulls by the author (four commonly found recordable points were defined on each side of the skull to make assessment of zones present rapid and comparable: pre-maxilla; upper and lower orbit; and occipital condyle). Condition was assessed on a 4-point scale, following Harland et al (2003). Joining fragments were re-assembled and the resulting specimen counted as a single fragment. The location and nature of modifications such as burning, gnawing and pathologies were also recorded. Butchery marks were located by zone, where feasible, categorised, using simple codes, and described. Measurements were taken, as appropriate, following von den Driesch (1976), Payne (1969) for sheep/goat metacarpals and Payne and Bull (1988) for pigs. The assemblage was not of sufficient size to support analytical techniques such as the construction of age profiles or analysis of skeletal elements.

Where a positive identification could not be made, the bone was characterised as large mammal (likely to belong to cattle or possibly horse or red deer) or medium mammal (sheep or pig size) based on features such as size and cortical thickness. All fragments were counted.

Results

Condition and Taphonomy

Table 1: Condition of the assemblage (after Harland et al 2003)

Condition	Description	Ν	%
Excellent	majority of surface fresh or even slightly glossy; very localised flaky or		
	powdery patches.	33	10.9
Good	lacks fresh appearance but solid; very localized flaky or powdery patches.	242	79.6
Fair	surface solid in places, but flaky or powdery on up to 49% of specimen.	29	9.5
Poor	surface flaky or powdery over 50% of specimen.	0	0

The assemblage was fragmented, whole bones were rare and both old and modern breaks were present but the bones were predominantly in good condition (79.6%, see

table 1). Gnawing was observed on 4% of bones (n=13) and was not concentrated in any particular phase, which suggests that rubbish was usually rapidly buried. Phase 8 produced the largest number of bones; fewer than 50 bones were recovered from most phases (table 2).

Period	Phase	Main Archaeological Event	No. of Bones	% Assemblage
Roman		Oven, yards, possible hearth, pits, possible structural		
	2	activity	55	18
	3	Ground levelling	10	3
		Building 1 construction, possible external ditch		
	4		26	9
	4+5		4	1
		Building 1 alteration/rebuild:		
	5		11	4
	6	Building 1 robbing and demolition	24	8
Medieval	7	Garden soil accumulation	4	1
	8	Medieval pitting activity	102	34
undated	0	Possible SFB, layers and post holes	68	22
		Total	304	100

Table 2: Phase composition of the assemblage

Roman

Phase 2: Oven, yards, possible hearth, pits, and possible structural activity

	170	174	182	190	205	206	212	215	217	218	219	220	Total
cattle					3			4	1	2	1		11
sheep/goat	1			1			1	6	1	1	2		13
pig								1	1		2		4
domestic fowl		1											1
goose			1										1
large mammal	2			2		1	1	4			13	1	24
medium mammal						1							1
Total	3	1	1	3	3	2	2	15	3	3	18	1	55

Table 3: Phase 2 assemblage

Sheep/goat was the most common species in the assemblage, having slightly greater numbers than cattle. Pig, domestic fowl and goose were also identified. A third of the bones (31%, n = 17) were butchered, these were all affected by cleaver marks and two bones also had cut marks. Contexts 215 and 219 contained three cattle scapulae which had been chopped through the glenoid cavity and had the spinous process removed, as well as possible hook marks in the blade. These could represent preserved shoulders of beef similar to others found at several sites in Leicester, for example Castle Street (Score et al 2010). The oven (context 205 cut 231) appears to contain backfilled material which is not associated with the phase of use, since neither fragment was burnt (table 3).

Phase 3: Ground levelling

Ten bones were recovered from Phase 3 layers 173 and 188. The identified fragments included a sheep/goat radius and pig tibia, both with butchery marks. The unidentified bones were medium mammal shaft, skull and rib fragments.

Phase 4: Building 1 construction, possible external ditch

Phase 4 bones (n=26) were recovered from features associated with the construction of Building 1: layers: 165 and 179, beam-slots: 166, 167 and 168. Cattle and sheep-goat were identified in the assemblage. Half the bones exhibited butchery marks; both chop and cut marks were noted on cattle pelvis fragments, a sheep/goat metapodial and cattle-sized rib fragments. Ribs were particularly prevalent, constituting 50% of the assemblage; these elements are often associated with refuse from consumption.

Phase 5: Building 1 alteration/rebuild:

The eleven bones from Phase 5 were all from post-pad deposits (150 and 157). Two sheep/goat limb bones including a neonatal/juvenile specimen and a domestic fowl scapula were identified. Ribs were also common in this phase, comprising a third of the fragments and in two cases chopped transverse to their axis.

In addition to the above, four bones were recovered from a Phase 4/5 floor deposit (context 164). These included a complete domestic fowl tibio-tarsus, a butchered sheep/goat tibia, a cattle premolar and a large mammal shaft fragment.

Phase 6: Building 1 robbing and demolition

The Phase 6 bones were recovered from ditch [113](n=24). Examples of cattle, horse, sheep/goat, pig and domestic fowl were all identified.

Medieval

Phase 7: Garden soil accumulation

Four bones were recovered from garden soil context 110, including a thoracic vertebra from a large mammal, a cattle metacarpal, a pig astragalus and a large mammal shaft fragment.

Phase 8: Medieval pitting activity

Phase 8 produced the largest assemblage, numbering 102 bones, as well as the widest species variety. Cattle were most frequent and were produced by most pits. In addition to sheep/goat and pig, horse, cat, domestic fowl, goose and cod bones were also identified. Most contexts contained fewer than 10 bones, with the exception of contexts 106 (pit), 118 and 136. Butchery marks were noted on 32% of the assemblage, with cattle and large mammal bones most affected. Butchery marks were also observed on sheep/goat, pig and goose bones. Although a few had cut marks,

bones were more commonly chopped through the shaft using a cleaver or similar. Ribs were routinely cut into sections and the occurrence of split vertebrae suggests that professional butchering facilities were available. The cat bones are unlikely to represent food remains and could be accidental inclusions, although other Leicester sites have produced evidence for cat skins (e.g. Browning unpublished).

	104	106	118	125	126	128	130	132	136	137	142	Total
cattle	1	2	3	1			2	2	9	2	1	23
sheep/goat		6	1	1			1	1	2	1		13
pig		2	1	1			1		1	1		7
horse	1											1
cat			3									3
domestic fowl		4							1	1		6
goose		2										2
cf cod					1							1
cod									1			1
Total Identified												57
large mammal		13	5		2	1	2			1	1	25
medium mammal	1	7	3						2	1		14
fish (indeterminate)		1										1
indeterminate		2					1		2			5
Total	3	39	16	3	3	1	7	3	18	7	2	102

Table 4: Phase 8 assemblage

Unphased

	101	109	123	148	152	163	177	180	183	187	204	209	Total
cattle			1			2			1				4
sheep/goat	1					2				1	1		5
pig	1			1		4							5
domestic fowl	9					3							12
duck (cf		1											1
mallard)													
goose												1	1
large mammal	1		1		1		1	5	2	11	1		23
medium	1				1	3				1	1		8
mammal													
fish	7												7
(indeterminate)													
Unident.						2							2
Total	20	1	2	1	2	16	1	5	3	13	3	1	68

Table 5: The unphased assemblage

The unphased bones include material from a possible Sunken Featured Building (SFB) (context numbers: cut 100, fill 101). These consisted predominantly of wellpreserved domestic fowl bones (table 5) representing the partial skeleton (wing and sternum) of a single bird. A small number of fish bones (n=7) were also noted however, these were considered indeterminate and were not identified to species, (although it was suspected that some may have belonged to a gadid (cod family)). A single bone each of sheep/goat and pig were noted and the remainder were indeterminate large and medium mammal fragments.

The rest of the unphased bones were recovered from layers, post holes, which unfortunately could not be dated.

Conclusion

A small assemblage of well-preserved animal bones was recovered from the former NatWest building, Greyfriars Leicester, located within the Roman and medieval town. No groups were recovered which might suggest large-scale specialised activities and, in both the Roman and medieval periods, the range of species, coupled with the butchery evidence, are indicative of occupational debris from cooking and consumption. Unfortunately the assemblage from most phases was too small to allow consideration of economic patterns however the groups have provided useful information, such as measurements (see Appendix), which can contribute to wider studies. Phase 8 pits produced the largest quantity of bones. In the Roman period only domestic species are represented but a wider variety of species, including a greater number of birds and fish, were noted in the medieval assemblage. This is consistent with work on larger assemblages in Leicester, where increased species variety in the medieval period has been observed. The small assemblage appears to confirm the domestic nature of the occupation at Greyfriars and has demonstrated typical range and variety.

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Appendix: Phase Totals and Measurements taken

	0	2	3	4	4+5	5	6	7	8	Total
cattle	4	11		4	1		4	1	23	48
sheep/goat	5	13	1	5	1	2	1		13	41
pig	5	4	2				1	1	7	20
horse							1		1	2
cat									3	3
domestic fowl	12	1			1	1	1		6	22
goose	1	1							2	4
duck (cf mallard)	1									1
cod									1	1
cf. cod									1	1
large mammal	23	24		11	1	3	13	2	25	102
medium mammal	8	1	6	5		1	3		14	38
fish (indeterminate)	7								1	8
indeterminate bird				1						1
unident.	2		1			4			5	12
Total	68	55	10	26	4	11	24	4	102	304

Table 6: Phase totals for each species

 Table 7: Toothwear stages after Grant (1982)

ID	Phase	Context	Species	Bone	dp4	p4	m1	m2	m3
36	0	163	sheep/goat	mandible	e		с	С	
48	2	215	sheep/goat	mandible			h	g	e
49	2	215	sheep/goat	l molar			h	g	e
50	2	215	cattle	mandible		1/2	g	g	f
63	8	136	sheep/goat	mandible		g	g	g	f
155	8	125	sheep/goat	lm3					e
156	8	125	pig	mandible			g	e	b

Phase	Context	Bone	Species	GL	Bp	Bd	SD/SC	Dd	Dic	Did	Bf
0	101	carpo- metacarpus	domestic fowl	36.4						7.1	
0	101	coracoid	domestic fowl	53.5							12
0	101	humerus	domestic fowl	68.2	18	14.8	6.8				
0	101	radius	domestic fowl			6.5					
0	163	radius	domestic fowl	62.2		6.8					
0	101	ulna	domestic fowl	66.2						8.6	
0	163	ulna	domestic fowl							8.1	
6	111	radius	domestic fowl			6.7					
8	137	femur	domestic fowl	75	14.8		6				
8	136	radius	domestic fowl	66.2		7.1					
8	106	tarso- metatarsus	domestic fowl		13.8						
8	106	tarso- metatarsus	domestic fowl			13.3					
8	106	tarso- metatarsus	domestic fowl	69.5	11.9	12	5.6				
8	109	scapula	duck	70.8					12.7		
8	106	tarso- metatarsus	goose			19.8					
4 & 5	164	tibio-tarsus	domestic fowl	113			6.2	12.4			

Table 8: Measurements of bird bones

Table 9: Measurements of mammal bones

Phase	Context	Bone	Species	GL	Bp	Bd	SD	Dd	Dp	SLC	Bt	HTC	DC
8	118	humerus	sheep/ goat			28.1					28		
8	137	humerus	sheep/ goat			27.7					27.4	14	
4	167	metat	sheep/ goat			20.2		14.4					
2	217	scapula	sheep/ goat							17.9			
5	157	scapula	sheep/ goat							11.1			
2	212	tibia	sheep/ goat			23.3							
8	130	tibia	sheep/ goat			24.1		18.3					
4 & 5	164	tibia	sheep/ goat			22.9		17.8					
8	118	femur	cattle										41.4
2	218	humerus	cattle								75.1	31.1	
8	132	radius	cattle		65								
8	118	humerus	pig			43.1							

8	118	humerus	cat	87.5	16.5	16.3	5.5	17.7			
8	118	femur	cat	95.1	18.7	17.3	6.1				9.1
2	219	humerus	pig						31.6	19.2	
6	111	humerus	pig			40.3				22	

Table 10: Measurements of mammal teeth and mandibles

Record	Phase	Context	Bone	Species	L	W/WA	WP	Tooth-row length
36	0	163	dp4	sheep/goat	17.9	6.1		
36	0	163	lm1	sheep/goat	6.4			
48	2	215	lm3	sheep/goat	19.2	7.1		
48	2	215	lm2	sheep/goat	13.3	7.1		
48	2	215	lm1	sheep/goat	11.4	6.5		
49	2	215	lm3	sheep/goat	19.9	7.3		
49	2	215	lm2	sheep/goat	13.7	7.1		
50	2	215	lm3	cattle	34.2	11.7		
51	2	215	lm2	cattle	24.8	12.1		
52	2	215	lm1	cattle	22.3	12.2		
63	0	163	lm1	sheep/goat	11.3	7.3		
63	0	163	lm2	sheep/goat	14.2	8		
63	0	163	lm3	sheep/goat	21.5	7.8		
63	0	163	mandible	sheep/goat				70.4
155	8	125	lm3	sheep/goat	21.7	8.2		
156	8	125	lm3	pig	32.9	14.8	9.2	
156	8	125	lm2	pig	20.1	12.7	13.3	
156	8	125	lm1	pig	15.7	9.9	11	

Appendix Six: Design Specification

UNIVERSITY OF LEICESTER ARCHAEOLOGICAL SERVICES

Written Scheme of Investigation for an Excavation and Watching Brief on the site of the former Natwest Bank, Leicester

NGR SK 58619 04382 Client: Kaikoura Investments Ltd Planning Authority: Leicester City Council

1 Introduction

1.1 **Definition and scope of the specification**

1.1.1 In accordance with Planning Policy Guidance Note 16 (PPG16, Archaeology and Planning, para. 30), this specification provides a written scheme of investigation for mitigation of the effects of development proposals on buried archaeological remains at the site of the former Natwest Bank, Greyfriars, Leicester. The scheme addresses the impact of firstly, the excavation of two trial holes to test foundations in the southern part of the site, and secondly the construction of flats in the south of the site, upon surviving archaeological deposits.

1.1.2. The construction of the flats will require excavation to a depth of c.1m (c.64.01mOD) to mitigate its impacts. The trial holes will require an archaeological watching brief.

1.1.3 This addresses the requirements of the planning authority, as defined in the Brief issued by their archaeological adviser, City Archaeologist, Leicester City Council.

1.2 Archaeological and Historical Background

1.2.1 The site lies within the walls of the Roman and medieval town, in the south western quarter. Roman building remains have been found at St Martins Walk and Cank Street to the east and north east of the site at shallow depth. The site may lie within the precinct of the Greyfriars, the Franciscan friary founded probably in the early 13th century. Following the Dissolution, the friary passed into the ownership of the Herrick family. They built a large mansion on the site, the location of which is unknown. It was demolished in the early 18th century and the existing streets were laid out (Score 2006, 2.2.2). In order to better assess the archaeological survival within the area affected by the construction of the block of flats, an archaeological field evaluation was carried out by ULAS between the 6th-10th August 2007.

1.3. *Results of the Evaluation Stage*

The results are summarised from Tate (2007). A single trench was excavated across the area affected by the construction of a block of flats. The top of archaeological deposits was reached at a depth of around 400mm from current ground level at c.64.51mOD. The top of the natural substratum was observed at c.63.20mOD. The earliest Roman levels seen on site, consisted of uncertain cut features. The mid – later Roman features on site comprised at least two probable clay floor levels (Contexts 10 and 43) which indicate the presence of a building. Earlier medieval activity included possible structural remains, comprising a beamslot and postholes. This indicates the

possible presence of a building. Structures of this period are extremely rare within Leicester and this would be a significant find. Refuse pits of this period were also recorded. Later medieval activity consists of a gravel surface and building remains, possibly from a timber-framed structure. Archaeological evidence of medieval buildings is rare within Leicester, and so the find is of interest. Refuse pits of this period were also recorded.

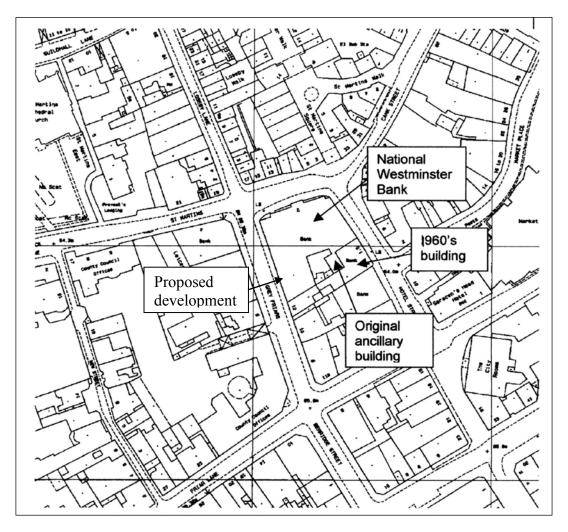


Fig. 1: Site Location

Reproduced from 1:1250 OS plan SK5804SW by permission of Ordnance Survey on behalf of The Controller of Her Majesty's Stationery Office. © Crown Copyright 1997. All rights reserved. Licence number AL 10002186.

2.1 Context of the Project

2.1.1 A planning application has been approved with conditions by Leicester City Council for the conversion of the former Natwest Bank building into a complex containing both a restaurant and domestic accommodation. Part of this development is the demolition of a single storey banking hall and the construction of a block of flats. The proposed building lies on Grey Friars, Leicester (SK58610391) (Fig 1).

2.1.2 The total site area is approximately 195 sq m, although the construction area for the flats is less than half that amount with the remainder being paved courtyard. None of the existing basements extend into this area although they may be some damage from the construction of the former building.

2.1.3 A Historic Building Impact Assessment of the proposals was previously commissioned from ULAS by Kaikoura Investments Ltd. (Ripper and Strachan 2004) 2.1.4 It is likely that the foundations to the new building will consist of CFA piles with groundbeams spanning between them. Allowing for the thickness of the floorslab, the underside of the ground beams will be *c*. 875-1000mm below modern ground level ie *c*64.01mOD.

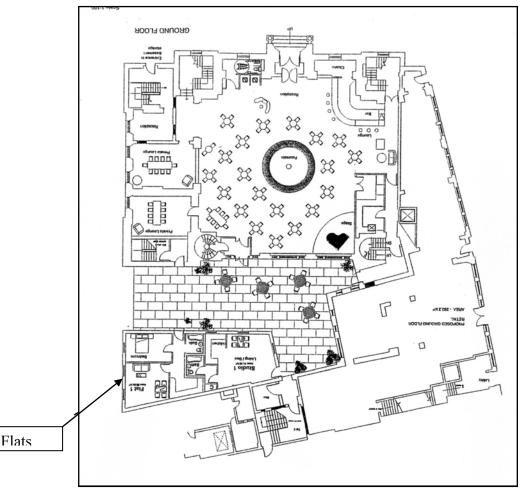


Figure 2 - The Proposed Development. Scale 1:400

3. **Project Aims and Objectives**

3.1 Watching Brief

• To characterise more fully the date range and significance of any archaeological deposits which would be destroyed by the excavation of two trial pits.

- To record significant archaeological deposits which will be destroyed by the excavation of the two trial pits.
- To produce an archive and report of the results.

3.2 *Excavation*

- To provide further clarification of the nature and extent of surviving archaeological remains on the site.
- To characterise more fully the date range and significance of any archaeological deposits to be affected by the development proposals
- To excavate and record significant archaeological deposits which will be destroyed or damaged by groundworks associated with the construction of the new building,
- To excavate and record significant archaeological deposits whose future integrity may be compromised by groundworks associated with the construction of the new building.
- To produce an archive and report of the results.

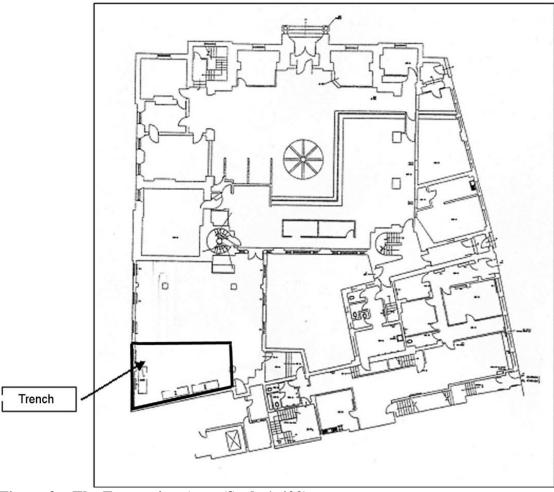


Figure 3 – The Excavation Area (Scale 1:400)

3.3 Draft Research Themes

The results of the initial evaluative works have indicated that the excavation may have the potential to address the following academic research themes:

• The chronology of Roman and medieval Leicester (the growth of the Roman town, periods of prosperity and decline, artefact dating)

• Land-use, town planning and settlement patterns (early activity, character of landuse and changes over time, zones of occupation)

• The built environment (building plans - typology and dating, constructional techniques, building materials, interior decoration)

• Evolving social conditions in Roman and medieval Leicester (food and drink, health, wealth and social status)

• Trade and industry (the town and its hinterland, commerce, raw materials, crafts, industries, trading links)

3.4 Site Specific Research Themes

Specific themes relating to the site might include;

- The nature and status of the Roman building. The apparent clay floors hint at a lower status building, relatively few of these have been excavated within Leicester, and any remains would add to the corpus of building types and techniques.
- The nature and status of the medieval building. Relatively few medieval buildings have been excavated within Leicester, and any remains would add to the corpus of building types and techniques.
- Excavation of the refuse pits may give some indication of status for dwellings in this part of the town.
- Understanding the medieval sequence might shed light on whether the site was within the friary precinct.

3.5 *Post fieldwork and reporting objectives*

• To create an ordered and fully documented archive to a recognised standard for storage in perpetuity.

• To present the results in sufficient detail to enable an assessment to be made of the archaeological impact of future development proposals without recourse to the site archive.

• To produce a report interpreting the significance of the results in a local, regional and national context to a high academic standard.

• To disseminate the results through publication in an appropriate academic journal.

4 Monitoring and standards

4.1. All work will follow the Institute of Field Archaeologists (IFA) Code of Conduct and adhere to their *Standard and Guidance for Archaeological Excavation and Standard and Guidance for Archaeological Field Excavations*. The project will also be undertaken in accordance with *Guidelines and Procedures for Archaeological Work in Leicester*.

4.2. Staffing, Recording systems, Health and Safety provisions and Insurance details are provided.

4.3. Unlimited access to monitor the project will be available to both the Client and his representatives and the Planning Archaeologist subject to the health and safety requirements of the site.

4.4. All monitoring shall be carried out in accordance with Institute of Field Archaeologists Guidelines.

4.5. The on-site works will be monitored internally by the ULAS project manager to ensure that project targets are being met and professional standards are being maintained. Provision will be made for external monitoring meetings with The City Archaeologist, representatives of the Planning Authority and the Client.

5 Methodology

5.1 Excavation

5.1.1 Modern overburden will be removed by mechanical excavator under archaeological supervision until the uppermost archaeological deposits are exposed. Where feasible, the machine will be equipped with a flat ditching bucket, but on occasion, a toothed bucket may be required to remove modern obstructions. Exposed deposits will then be subject to hand cleaning in order to clarify their nature and extent, to prepare an initial plan and formulate a detailed excavation strategy.

5.1.2 All archaeological deposits will be hand excavated, save for larger homogenous deposits or layers that can be justifiably removed by machine at the discretion of the site director. Excavation of archaeological deposits will continue to a depth of 64.01mOD. The pile locations would then be assessed to determine whether there are any obstructions which would impede the piling and would thus have to be dug out.

5.1.3 Any archaeological deposits located will be planned at 1:20 scale and sampleexcavated by hand as appropriate to establish the stratigraphic and chronological sequence. Archaeological deposits that are exposed but unexcavated will only be assigned context numbers and described where the full feature/deposit is observed.

5.1.4 All finds will be retained, except for unstratified material of the 19th century or later. The strategy for the retention or otherwise of specific groups of building materials located on the site will be agreed with the relevant staff at the Jewry Wall Museum. All plans will be tied into the Ordnance Survey National Grid. Section drawings will be made at a scale of 1:10 of any smaller excavated archaeological features and at 1:20 for large area sections, such as along the edges of the excavation area. All sections will be levelled and tied to the Ordnance Survey Datum. Spot heights will be taken as appropriate.

5.1.5 Archaeological deposits will be recorded using standard ULAS procedure.

5.1.6 Sections of any excavated archaeological features will be drawn at an appropriate scale. All sections will be levelled and tied to the Ordnance Survey Datum, or a permanent fixed benchmark.

5.1.7 The site area will be located using an electronic distance measurer. These will then be tied in to the Ordnance Survey National Grid.

5.1.8 Any human remains will initially be left *in situ* and will only be removed if necessary for their protection, under a Home Office Licence and in compliance with relevant environmental health regulations.

5.2 *Recording Systems*

5.2.1 The ULAS recording manual, fully compatible with the Leicester City Museums archives, will be used as a guide for all recording.

5.2.2. Individual descriptions of all archaeological strata and features excavated or exposed will be entered onto prepared pro-forma recording sheets. If the complexity of the archaeology warrants it, records will be computerised using the ULAS integrated Database system.

5.2.3 A site location plan based on the current Ordnance Survey 1:1250 map (reproduced with the permission of the Controller of HMSO) will be prepared. This

will be supplemented by a trench plan at 1:200 (or 1:100) which will show the location of the areas investigated in relationship to the investigation area and OS grid. 5.2.4 A record of the full extent in plan of all archaeological deposits encountered will be made on drawing film, related to the OS grid and be at a scale of 1:10 or 1:20. Sections including the half-sections of individual layers of features will be drawn as appropriate. The OD height of all principal strata and features will be calculated and indicated on the appropriate plans.

5.2.5 A photographic record of the investigations will be prepared illustrating in both detail and general context the principal features and finds discovered. The photographic record will also include 'working shots' to illustrate more generally the nature of the archaeological operation mounted.

5.2.6. This record will be compiled and fully checked during the course of the excavations. A copy of the ULAS recording manual is lodged with Leicester City Museums Service.

5.3 Environmental Sampling

5.3.1 If significant archaeological features are subject to excavation, the sampling strategy will include the following:

i. A range of features to represent all feature types, areas and phases will be selected on a judgmental basis. The criteria for selection will be that deposits are datable, well sealed and with little intrusive or residual material.

ii. Any buried soils or well-sealed deposits with concentrations of carbonised material present will be intensively sampled taking a known proportion of the deposit.

iii. Spot samples will be taken where concentrations of environmental remains are located.

iv. Waterlogged remains, if present, will be sampled for pollen, plant macrofossils, insect remains and radiocarbon dating provided that they are uncontaminated and datable. Consultation with the specialist will be undertaken.

5.3.2 Wet sieving with flotation will be carried out using a York Archaeological Trust sieving tank with a 0.5mm mesh and a 0.3mm flotation sieve. The small size mesh will be used initially as flotation of plant remains may be incomplete and some may remain in the residue.

5.3.3 The residue > 0.5mm from the tank will be separated into coarse fractions of over 4mm and fine fractions of > 0.5-4mm. The coarse fractions will be sorted for finds. The fine fractions and flots will be evaluated and prioritised; only those with remains apparent will be sorted. The prioritised flots will not be sorted until the analysis stage when phasing information is available.

5.3.4 Flots will be scanned and plant remains from selected contexts will be identified and further sampling, sieving and sorting targeted towards higher potential deposits.

5.4 Finds and Samples

5.4.1. The IFA Guidelines for Finds Work will be adhered to.

5.4.2 All antiquities, valuables, objects or remains of archaeological interest, other than articles declared by Coroner's Inquest to be subject to the Treasure Act, discovered in or under the Site during the carrying out of the project by ULAS or during works carried out on the Site by the Client shall be deemed to be the property of ULAS provided that ULAS after due examination of the said Archaeological Discoveries shall transfer ownership of all Archaeological Discoveries unconditionally to Leicester City Museums Service for storage in perpetuity.

5.4.3 Before commencing work on the site, a Museums accession number will be obtained from the Keeper of Archaeology, Jewry Wall Museum, and Leicester City Council's terms and conditions for deposition of the finds and archive will be adhered to.

5.4.4 During the excavations different sampling strategies may be employed according to the perceived importance of the strata under investigation. Close attention will always be given to sampling for date, structure and environment.

5.4.5 All identified finds and artefacts are to be retained, although certain classes of building material will, in some circumstances, be discarded after recording with the approval of the Planning Archaeologist. The IFA Guidelines for Finds Work will be adhered to.

5.4.6 All finds and samples will be treated in a proper manner. Where appropriate they will be cleaned, marked and receive remedial conservation in accordance with recognised best-practice. This will include the Site code number, finds number and context number. Bulk finds will be bagged in clear self sealing plastic bags, again marked with Site code, finds and context numbers and boxed by material in standard storage boxes (340mm x 270mm x 195mm). All metal objects will be x-rayed and then selected for conservation. All materials will be fully labelled, catalogued and stored in appropriate containers

6 Report and Archive

- 6.1 The report will comprise:
- a non-technical summary
- appropriate illustrative material, including maps, plans, drawings and photographs;
- a summary of the academic and research potential of the remains should be assessed with reference to current or proposed research themes
- recommendations for appropriate archaeological mitigation of any proposed development impact, or where necessary, for further evaluation of the archaeological potential

6.2 The fieldwork report will be in A4 format and will follow within eight weeks of completion of the fieldwork, if possible. In addition to any copies required by the Client, two copies of the-report will be provided to the City Archaeologist as advisors to the planning authority, one for verification, assessment and to facilitate on-going project monitoring, and the second for deposition with the City's SMR.

6.3 ULAS is participating in the Archaeology Data Service and National Monuments Record OASIS project and will complete the appropriate OASIS forms upon completion of the report

7 Archive

A full copy of the archive as defined in the 'Guidelines for the preparation of site archives' (Roman Finds Group and Finds Research Group AD 700-1700 1993) will be presented to Leicestershire Museums Service within six months of the completion of fieldwork. This archive will include all written, drawn and photographic records relating directly to the investigations undertaken.

8 Health and Safety

8.1 ULAS is covered by and adheres to the University of Leicester Archaeological Services Health and Safety Policy and Health and Safety manual with appropriate risks assessments for all archaeological work. A draft Health and Safety statement for this project is attached as Appendix 1. The relevant Health and Safety Executive guidelines will be adhered to as appropriate. The HSE has determined that archaeological investigations are exempt from CDM regulations.

8.2 A Risks Assessment form will be completed prior to work commencing onsite, and updated as necessary during the site works.

8.3 The location of the majority of services on the site is known. Clarification of the location of services and excavation areas will need to be made.

8.4 The site is currently well fenced.

8.5 The HSE have advised the Institute of Field Archaeologists that archaeological investigations are exempt from CDM regulations.

9 Insurance

All employees, consultants and volunteers are covered by the University of Leicester public liability insurance, £20m cover with St. Paul Travellers (policy no. UCPOP3651237). Professional Indemnity Insurance is with Lloyds Underwriters 50% and Brit Insurance 50%, £10m cover (policy no. PUNIO3605). Employer's Liability Insurance is with St. Paul Travellers, cover £10m (policy no. UCPOP3651237).

10 Copyright

The copyright in all finished documents shall remain vested in ULAS.

11 Acknowledgement and Publicity

11.1 ULAS shall acknowledge the contribution of the Client in any displays, broadcasts or publications relating to the site or in which the report may be included.

11.2 ULAS and the Client shall each ensure that a senior employee shall be responsible for dealing with any enquiries received from press, television and any other broadcasting media and members of the public. All enquiries made to ULAS shall be directed to the Client for comment.

11.3 University of Leicester Archaeological Services is the local archaeological unit for Leicester and the counties of Leicestershire and Rutland. ULAS is heavily committed to disseminating archaeological information to the general public.

11.4 ULAS often contributes articles to the local county archaeological journal, *Transactions of the Leicestershire Archaeological and Historical Society.*

11.5 Archaeological sites, excavated by ULAS, have often received and encouraged media coverage, as seen by recent BBC Radio Leicester interviews and television coverage during the St. Nicholas Place evaluation, Radio Leicester interviews regarding the recent Cossington barrow excavation and Abbey Park evaluation. Articles have regularly appeared in the Leicester Mercury regarding ULAS archaeological work, such as at Leicester Abbey, 9 St. Nicholas Place, Husbands Bosworth, Huncote and Hemington Quarry. Within the last few years, world wide media coverage has occurred after Palaeolithic findings at Glaston in Rutland and the discovery of the east Leicestershire hoard. It could be seen as good publicity for both the Client and ULAS for such media attention to be encouraged during the archaeological excavation.

12 Timetable and Staffing

12.1 Details of the project team are included in Appendix 1. A start date for the project has yet to be finalised, but will follow demolition of the extant buildings.

13 Bibliography

Tate J., 2007 An Archaeological Field Evaluation on land adjacent to the

former Nat West Bank, Grey Friars, Leicester (SK 5861 0437) ULAS rept 2007-123

Appendix 1 The Project team Project Manager: Director, ULAS

Richard Buckley BA (Hons) Archaeology University of Durham 1979 Hon Museums Research Fellow Leicester University (1992-3), Hon Research Fellow De Montfort University (1994); MIFA, FSA

Richard Buckley was a Field Officer with Leicestershire Archaeological Unit from 1980-1995, and formed ULAS with Patrick Clay in 1995. Between 1980 an 1989 he worked mainly in the field as director/asst. director of a number of excavations of various periods, and co-directed the Shires Excavations, a major urban project in Leicester. During this period he also carried out post-excavation analysis on Leicester urban backlog excavation projects and on finds such as Roman painted wall plaster, Roman coins and medieval roofing furniture. His publications include Leicester Town Defences (with J. Lucas, 1987), Leicester Castle Hall (with N.W. Alcock, 1987) and Roman and Medieval Occupation in Causeway Lane, Leicester (with A. Connor 1999) along with a number of interims and notes in Transactions of the Leicestershire Archaeological and Historical Society, a journal which he has edited since 1990. He has also written two articles on the archaeology of Leicester abbey, published in 2006. With the advent of PPG16, his role changed to that of Project Manager, mainly of urban projects from initial desk-study through the stages of evaluation, excavation and post-excavation. The sites managed have varied in scale, the largest being the Causeway Lane excavation in 1991 (team of 50). He has also been involved in survey, interpretation, evaluation and recording of historic buildings through PPG15 legislation, and has attended an English Heritage one-week master class on the Conservation and Recording of Historic Buildings (1996). As both a consultant and contractor, he has been a member of the project team for two major schemes for the display and interpretation of Scheduled Ancient Monuments - Leicester Abbey and Leicester Castle. He has also acted as a consultant and expert witness for clients at two public enquiries. He is currently managing a number of large-scale urban projects in the City of Leicester.

Site Director:

Dr Roger Kipling BA MA PhD Field Officer

After gaining an HND in Practical Archaeology at the Dorset Institute of Archaeology in 1981, Roger worked throughout the 1980s with archaeological field units in Hampshire, principally on multi-period excavations in Winchester and Southampton, and in Lincolnshire as a site photographer and supervisor. He has been based at the University of Leicester since 1991 when he commenced a BA (Hons.) degree in 'Archaeology', following which he gained an MA (with a distinction) in 'Landscape Studies'. In April 2000 he completed a Doctoral Research Studentship on the subject of urban development in England, Gaul, Ireland and Scandinavia between c.AD 300-1050. Throughout this period he also undertook supervision of teams of Birmingham and Leicester undergraduates on archaeological fieldwork projects in Britain, France and Italy. Roger joined ULAS full-time in 2000, subsequently undertaking a wide range of urban and rural archaeological projects across the East Midlands, since 2003 in the capacity of Field Officer. Most recently, his special interest in urban archaeology resulted in his direction of significant excavations at St. Nicholas Place and Bath Lane in Leicester, the former constituting one of the largest excavation projects undertaken in the city for the last thirty years. Desk-based projects have included joint authorship of the project design for the Urban Archaeological Database (UAD) for Leicester, jointly funded by English Heritage and Leicester City Council, and he is currently involved in the preparation of a number of backlog excavations from the city for publication as part of the Highcross post-excavation project.

Finds Officer: Roman Pottery

Elizabeth Johnson BSc MA, Finds Officer, member of the Roman Pottery Study Group

Liz has over 7 years of experience working with Roman pottery in the East Midlands and since starting work for ULAS in 2004 has reported on the huge assemblages from the Highcross, Leicester Project and numerous other urban and rural sites. She has also reported on late prehistoric pottery from sites in the East Midlands such as Lockington. She is currently working on an assemblage from Northamptonshire and is familiar with fabrics across the region. Her research interests include the transition from the late pre-Roman Iron Age to the Early Roman period.

Saxon and Medieval Pottery Consultant

Debbie Sawday BA, Finds Officer, Member of the Medieval Pottery Research Group

Debbie Sawday has over 30 years experience in the analysis of Post Roman pottery of the East Midlands. She has produced numerous reports and her publications include the post-Roman pottery from Causeway lane, Leicester (1999) and has recently completed reports of the Highcross, Leicester project, the largest ever from the city. Debbie has established the ULAS type series covering the East Midlands and has reported on material from Lincolnshire, Nottinghamshire and Cambridgeshire using the relevant County Fabric Series.

Environmental: Plant remains

Angela Monckton BSc(Hons) Botany (University of Leeds)

Angela obtained her BSc in Botany at the University of Leeds, she also holds a Leicester University Extra Mural Advanced Certificate in Archaeology, and is a Member of the Institute of Field Archaeologists and the Association of Environmental Archaeologists. Angela began work in field archaeology in 1985 and has worked on various excavations in various roles, including supervisor and site environmentalist. From 1989 she specialised in the environmental aspects of archaeological excavation and was Environmental Supervisor on a number of sites including the major urban excavations at the Shires and Causeway Lane, Leicester. Angela is currently Environmental Officer for ULAS where she co-ordinates the sampling and processing strategies for sites. She is also working towards the publication of the environmental data for a number of sites, as well as contributing reports on her own specialisms. Angela has published reports in Transactions of the Leicestershire Archaeological and Historical Society, has contributed to the East Midland Research frameworks volume, and has a number of published reports and Ancient Monuments Laboratory Reports

on Midland sites. Prior to joining ULAS she worked for the Leicestershire Archaeological Unit and was an English Heritage contractor during 1996-7 at Birmingham University.

Environmental: animal bone Jennifer Browning BA, MA Field Officer

Jennifer Browning has worked for ULAS since 1996. She is currently a Field officer who has directed numerous survey, evaluation and excavation projects She also specialises in the analysis of animal bone having studied with Dr Annie Grant. Her recent reports include the major Iron Age feasting deposit at Hallaton and Highcross, Leicester.

Environmental: human bone consultant

Harriet Jacklin BSc MA, Human Bone analyst, member of BABAO

Hari Jacklin is a human bone analyst with ten years experience, having studied with Dr Jenny Wakeley at the University of Leicester. Since 2002 she has been employed with ULAS where she spent time analysing the Leicester, St Margaret's assemblage comprising 1344 medieval burials. Since then she has produced reports on numerous bone assemblages and is working on a database for national standards.

Appendix 2:

ULAS Staff structure Director Professor Marilyn Palmer MA, Phd, FSA, MIFA Directors Patrick Clay BA, Phd, FSA, AMA, MIFA Richard Buckley BA, MIFA, FSA

Project Officers

Matthew Beamish BA Lynden Cooper BA Neil Finn Susan Ripper BA Vicki Priest BA John Thomas BA

Field Officers

Tim Higgins Jon Coward Wayne Jarvis BA MA Roger Kipling BA, MA, PhD, AIFA Steve Jones Jennifer Browning BA, MA Sophie Clark BA

Finds Specialists

Deborah Sawday BA DipEd (post-Roman pottery and tile) Nicholas Cooper BA, MA (Roman pottery and small finds) Tony Gnanaratnam BA, MA (Building materials) **Environmental Specialist** Angela Monckton BSc, AIFA

Appendix 3

Draft Project Health and Safety Policy Statement

Former Natwest Bank Greyfriars, Leicester. Archaeological Excavation

1. Nature of the work

1.1. The work will involve machine excavation by wheeled mechanical excavator during daylight hours to reveal underlying archaeological deposits. Overall depth is likely to be c.1.0m. Where depth to the top of archaeological deposits is greater than 1.2m, trenches will be stepped at the sides and ends to achieve safe working conditions. Spoil will be stockpiled no less than 1.5 m from the edge of the excavation. Remaining works will involve the examination of the exposed surface with hand tools (shovels, trowels etc) and excavation of archaeological features. Deeper features will be fenced with lamp irons and hazard tape, and shored where necessary. Two staff will initially be used on the excavation.

1.2. All work will adhere to the University of Leicester Health and Safety Policy and follow the guidance in the Standing Committee of Archaeological Unit Managers manual, as revised in 1997, together with the following relevant Health and Safety guidelines.

HSE Construction Information Sheet CS8 Safety in excavations.

HSE Industry Advisory leaflet IND (G)143 (L): Getting to grips with manual handling.

HSE Industry Advisory leaflet IND (G)145 (L): Watch Your back.

CIRIA R97 Trenching practice.

CIRIA TN95 Proprietary Trench Support Systems.

HSE Guidance Note HS(G) 47 Avoiding danger to underground services. HSE Guidance Note GS7 Accidents to children on construction sites

2. Risks Assessment

2.1. Working on an excavation site

Precautions. Trenches to be stepped, if necessary, to ensure that the depth does not exceed 1.2m. Spoil will be kept 1.5m away from the edge of the excavated area to prevent falls of loose debris. Loose spoil heaps will not be walked on. Protective footwear will be worn at all times. Hard hats will be worn when working in deeper sections or with plant. A member of staff qualified in First Aid will be present at all times. First aid kit to be kept in site accommodation. Mobile phone to be kept on site in case of emergency.

Staff welfare will be catered for by the provision of a mess cabin, portaloo and tool store.

A ULAS project risk assessment form will be completed on-site prior to the commencement of the excavation.

2.2. Working with plant

Precautions. Archaeologists experienced in working with machines will supervise topsoil stripping at all times. Hard hats, protective footwear and hazard jackets will be worn at all times. Machine driver to be suitably qualified and insured. If services or wells are encountered machining will be halted until extent has been established by hand excavation or areas where it is safe to machine have been established. Machines will normally be supervised by two archaeologists. On this site, machining will be undertaken adjacent to open cellars which will have their retaining walls intact. Particular attention will be paid to ensuring that the machinery does not work too close to the edge. Following demolition, cellar edges are to be protected with safety barriers/handrails by the demolition contractors for the protection of personnel.

2.3. Working within areas prone to waterlogging

If waterlogging occurs on site preventing work continuing it is proposed to excavate a sump, suitably fenced and clearly marked to enable the water to drain away. If this is insufficient a pump will be used. The sump will be covered when not in use and backfilled if no longer required. Protective clothing will be worn at all times and precautions taken to prevent contact with stagnant water which may carry Vialls disease or similar.

2.4. Working with chemicals

If chemicals are used to conserve or help lift archaeological material these will only be used by qualified personnel with protective clothing (i.e a trained conservator) and will be removed from site immediately after use.

2.5. Other risks

Precautions. If there is any suspicion of unforeseen hazards being encountered e.g. chemical contaminants, unexploded bombs, hazardous gases, work will cease immediately. The client and relevant public authorities will be informed immediately.

2.6. Other constraints

No other constraints are recognised over the nature of the soil, water, type of excavation, proximity of structures, sources of vibration and contamination.

Contact Details

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