STRELIZIA

Michaelgate, Lincoln

Archaeological Watching Brief

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Network Archaeology Ltd

for

Mr D. Lewis

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NON-TECHNICAL SUMMARY

Monitoring of deep excavation pile drilling and other groundworks on land at Strelizia, Michaelgate, Lincoln, Lincolnshire, was undertaken by Network Archaeology Ltd between April and October 2007.

The development site lies within Scheduled Ancient Monument (SAM) 115, the Roman *Colonia* of Lindum. Previous archaeological work within the SAM immediately to the south of the site revealed both Roman and medieval layers and structures.

This watching brief located an upstanding Roman wall and an associated occupation layer within the northern terrace bank, as well as the remains of an earlier Roman occupation layer and levelling deposits. The later wall and occupation layer represent the most significant archaeological remains exposed during the watching brief, and they were sealed by a thick deposit of early modern material including demolition debris.

1 INTRODUCTION

This report presents the results of an archaeological watching brief undertaken by Network Archaeology Ltd for Mr D Lewis, proprietor of Strelizia.

1.1 The Development

The development is a three storey residential building with attached rear garage and landscaped garden, including a series of large water features.

The building has been constructed on ground beams raised above existing ground levels on piled foundations, of which twenty-four 0.45m diameter piles were drilled to a depth of 8m.

Clearing of the site took place to the north of the main building in an area planned for the rear garage. The ground was on a slight incline created by modern dumping, which was subsequently cleared down to a level surface, for the erection of a retaining wall.

The retaining walls for the water features were planned for below the existing ground level. However, following the results of an archaeological evaluation previously conducted by Network Archaeology Ltd (NAL 2005), the retaining walls were positioned above the level of known archaeological deposits.

An archaeological watching brief took place during the piling and all other groundworks. This archaeological work occurred intermittently between April and October 2007, and was carried out by an experienced archaeological Project Supervisor.

1.2 Legislation, Regulations and Guidance

The development site lies within the Scheduled Ancient Monument of the Roman city of Lindum (SAM 115). An application for Scheduled Monument Consent (SMC), to carry out an archaeological evaluation on the site, was submitted by LKR Architects LLP on behalf of Mr David Lewis, to the Department for Culture, Media and Sport (DCMS), on 5th August 2004. Subsequently, LKR received a letter from the DCMS (dated 6th September 2004) granting SMC, subject to the works being carried out to the satisfaction of the regional English Heritage (EH) inspector Dr Glyn Coppack (on behalf of the Secretary of State), and the approval by Dr Coppack of a Written Scheme of Investigation (WSI), to be written by the archaeological contractor.

Network Archaeology Limited produced a scheme of works (NAL 2004) and Mr Lewis submitted planning application 2004/0900/F, prior to NAL undertaking an archaeological evaluation on the site. The latter revealed Roman deposits sealed below post-medieval and modern terracing (NAL 2005). Following the completion of the archaeological evaluation report, the architectural plans were modified to minimise impact on the archaeologically significant deposits.

Planning Permission for application number 2004/0900/F for the “Erection of a three storey house with associated access and landscaping works including formation of a terraced pond (In accordance with revised plan No. LK/276 (08) 003 A01 and plan No's (08) 004 A00, (08) 005 A00 and (08) 006 A00)” was granted on the 13th February 2006, with conditions including that English Heritage would need to be satisfied that no further archaeological remains would be impacted on by development work. Dr Coppack subsequently requested that a watching brief be maintained on all groundworks associated with development of the site. This report details the results of the monitoring scheme.

1.3 Aims

The objectives of the archaeological works were to:

- allow the preservation by record and the interpretation of archaeological deposits, the presence and nature of which could not be established in advance of development;
- produce a project archive for deposition with The Collection;
- provide information for accession to the County Historic Environment Record (HER) (see Appendix 2) and the Lincoln Urban Archaeological Database (UAD) (see 8.2.15).

1.4 Limitations

Visibility of archaeological remains can often be a significant factor during archaeological monitoring. Visibility is dependent on many factors including machine type, depth of trench, weather, and geology.

In this instance, the piles were very small in relation to the size of the development, so this limited the potential for locating any archaeological remains. However, the areas exposed in the terrace to the north and south of the site did provide good visibility for the recording of archaeological features.

1.5 Field Records

Project Code

The project code for the Strelizia watching brief is SMLI07.

Written Records

Network Archaeology Ltd uses a system of pro forma record sheets for on-site recording. This system is in a format acceptable to the I*f*A. All archaeological deposits during the watching brief were recorded.

A total of fifty-nine context numbers were issued during the work.

Drawn Records

Drawn records took the form of 1:20 scale section drawings of the soil profiles revealed in the sides of the excavated trenches, and 1:20 scale plan drawings of the locations of excavated areas.

Photographic Records

A photographic record was maintained in colour slide, monochrome and digital formats.

Survey

The surveying was achieved by feeding into the data provided by Stephen Johnson Consulting Engineers Ltd, and through on-site observations and measurements.

1.6 Artefact Processing

In total, 352 artefacts including animal bone, pottery and ceramic building material were recovered from twenty-six contexts. All retained artefacts were cleaned, marked, packaged and stored in accordance with current I*f*A guidelines.

Assessment reports, detailing the potential for further analysis, have been produced for each artefact type by the following specialists:

Assessment	Specialist
Animal bone	Jennifer Wood
Ceramic building material	Jane Young
Glass	Jenny Mann
Recorded finds	Kevin Leahy
Post-Roman pottery	Jane Young
Production residues	Roderick Mackenzie
Roman pottery	Ian Rowlandson
Shell	Janey Brant
Worked stone	Ruth Shaffrey

1.7 Archive and Archive Deposition

The project archive has been prepared in accordance with the guidelines outlined in Management of Archaeological Projects, second edition (MAP 2) (English Heritage 1991, Appendix 3) and to established professional standards (IfA 2008). The archaeological document archive will include all reports, fieldwork records, notebooks, plans, and photographs, as defined in MAP 2 (English Heritage 1991, para. 5.4 & Appendix 3). An accession number (LCNCC: 2007.91) has been obtained in accordance with relevant national guidelines (UKIC 1990, MGC 1992), for a copy of the project archive to be deposited with Lincolnshire Museum Services. The completed report will also be uploaded onto OASIS, in accordance with their current policies.

1.8 Location and Topography

The development site is located between Michaelgate and St Martin's Street, to the rear of the former St Cuthbert's Nursery School, in Lincoln city centre (Figure 1). The site lies on a terrace situated on the steep south-facing slope of the limestone ridge, approximately 0.3km south-west of Lincoln Cathedral at c.37.5m above Ordnance Datum (Plate 1).

1.9 Geology, Soils and Land use

The immediate underlying natural geology of this site is that of Middle and Upper Lias clay (Plate 4) and shale (British Geological Survey 1973). It is believed that the local soil (Elmton

1), a shallow well-drained calcareous fine loamy soil, no longer remains on site because of the urban setting (i.e. it has been re-worked/removed and incorporated into anthropogenic deposits over a long period of time).

Prior to the development, the site was rough ground used as a car park. Prior to this, the site had largely been occupied by tennis courts, surrounded by residential housing.

1.10 Archaeological Background

Prehistoric Era (10,000 BCE - 60 AD)

The development site lies in what would have been an area of hillside springs, streams and pools in Lincoln during the prehistoric period and on a long-distance route known as the Jurassic Way. This route may have been utilised in early prehistory as a track across the county, passing through a gap in the limestone ridge near the modern city (Jones *et al* 2003, 34). Evidence for prehistoric settlement within the area is limited. However, the Witham valley itself has produced find spots of worked flint, pottery, and preserved wooden artefacts from the Mesolithic to Bronze Age, within waterlogged sediments.

Roman Military Era (60 - 90 AD)

The area of the development site would have lain on the hillside to the south of the Neronian fortress. Previous excavations have not revealed well-stratified Roman Military Era layers because of the lack of penetration to a suitable depth and in many cases heavy disturbance from later terracing activity has removed them altogether (Jones *et al* 2003, 47). The site lies immediately west of the main road up the northern hill slope and it is believed this area may have been occupied by secular housing for native populations (Jones *et al* 2003, 55).

Roman Colonia Era (90 – 410 AD)

Lincoln became a thriving commercial and 'ritual' centre during this period. The development site lies in what would have been an area of housing within the walled lower city beside hillside springs and pools (Jones *et al* 2003, 140) with little evidence for industrial activities. Excavation has revealed little of the early housing within the lower walled city. Investigations at the former St Cuthbert's School suggest the bottom of the lowest features from this period may be at a depth greater than 7m below the existing ground level (Jones *et al* 2003, 84). Heavy terracing on the northern hill slope from the Medieval Era onwards has left many Roman deposits in this area disturbed.

The site lies within the area covered by the Scheduled Ancient Monument of the Roman *Colonia* of Lindum, County Monument Li 115. Consequently, any archaeological remains on the site, of any date and of any type, are, by legal definition, of national importance.

Early Medieval Era (410 – 850 AD)

This land around the city would potentially have continued to have been used for housing, enclosed and defined by the Roman city walls (Jones et al 2003, 152). Evidence for occupation on the northern hill slope during the Early Medieval Era is restricted almost exclusively to potsherds located in later deposits.

High Medieval Era (850 – 1350 AD)

The area of the development site lies just north of the site of St. Martin's church on West Gate. Late Saxon pottery finds indicate that occupation had reached Michaelgate by the mid

10th century, and by this time pottery was found all over the lower city (Jones *et al* 2003, 194). No evidence has yet been uncovered to suggest much activity north of West Gate prior to this, and what little is known would indicate a greater concentration in the southern half of the lower city. It is possible that small subsidiary markets were located to the north, a precursor to the later Medieval market place that occupied the area enclosed by Michaelgate and Steep Hill.

Documentary evidence from the first half of the 11th century suggests that Michaelgate was central within the specialised market district of Lincoln. The development site would have lain in the Medieval skin market, bounded by the hay market at St. Martin's church, and the cloth market where Michaelgate meets Steep Hill (Jones *et al* 2003, 263).

Early Modern Era (1350 – 1750 AD)

The city's economy collapsed in the 14th century with the demise of the cloth industry, the plague, and the loss of a strong clerical presence (Jones *et al* 2003, 303). The lower city had become heavily depopulated by the 15th century, with many parishes from this area exhibiting less than 10 parishioners in 1428 (Jones *et al* 2003, 310). With the collapse of the city's cloth weaving industry by the late 13th century, little is known of activity on Michaelgate, although ovens of an unknown function have been excavated at its northern end dating to the 14th and 15th century (Jones *et al* 2003, 317).

By the post-Medieval period (c.1550 - c.1750 AD) the lower city is believed to have housed the largest proportion of Lincoln's inhabitants, although a gentle decline is observed from the early 18th century (Jones *et al* 2003, 321)

Industrial Era (1750 – 1945 AD)

By the late 18th century Lincoln had begun to expand in size and national importance, stimulated by large amounts of capital investment in the industrial sector. Industry grew around the newly created supply routes: turnpike roads, canals and the railway network. The site of the development lies in one of the many areas of Lincoln that saw working-class housing estates emerge in the mid 19th century as a direct result of this industrialisation of areas along the waterfront (Jones *et al* 2003, 366).

2 RESULTS

The watching brief produced a variety of archaeological remains from five different areas of the development site (Figure 2). Piling produced twenty-three sherds of pottery dating from the mid 2nd to 20th centuries, along with six fragments of ceramic building material. An upstanding section of Roman wall and the remains of an undated wall and possible robber trench were revealed in the northern terrace, while the southern terrace produced post-medieval demolition deposits. Drainage trenching produced deposits with Roman material, and a BT service trench revealed a modern levelling deposit.

Drilled Piles

A total of 23 piles, each 0.45m in diameter, were drilled to an approximate depth of 8m (Figure 2, Plate 7). These produced a small assemblage of material culture which unfortunately does not enhance the dating of the site.

Drilled piles do not allow for stratified recording of deposits and their associated finds, and it is because of this that each pile was assigned a context number to which all finds would be attributed.

Pile 4, located in the north-west part of the site, produced a single fragment of Roman Tegula. This tile may be associated with the quantities of Roman material located in the northern terrace.

A single sherd of non-local early medieval jug was retrieved from Pile 6, located towards the north-east part of the site, dating from 1150-1230 AD.

Pile 7, located in the north-east corner of the site, produced three sherds of pottery, the earliest being a single sherd of Stamford Ware dating from 970-1200 AD.

Piles 13 and 13a, located centrally on the site, produced seven sherds of pottery of mixed dates, the earliest being three sherds of Lincoln kiln-type shelly ware dating from 850-1000 AD.

A jar sherd of pottery in Torksey ware was recovered from Pile 15, dating from 850-1100 AD.

A single sherd of pottery was recovered from Pile 17, located in the south-eastern corner of the site; this is a Lincolnshire Fine-shelled ware dating from 970-1200 AD.

The remaining piles either were devoid of inclusions or contained post-medieval and early modern material.

The Northern Terrace

An area approximately 5.4m by 3.6m was cleared in the position intended for the northern retaining wall. A stratified archaeological sequence was recorded against the northern terrace in the south-facing section (Figure 3b), with all other visible remains recorded in plan (Figure 3a). The depositional sequence exposed during the watching brief is summarised below.

Depth below ground surface	Context No.	Description	Interpretation	Height of deposit above Ordnance Datum	Lincoln deposit model surface	Date
0-1.40m	5000	Dark brown loose silty clay with frequent brick rubble	Made-ground	40.95m	MODT	Modern
1.00-1.84m	5001	Mid yellow limestone and mortar rubble	Demolition rubble	39.05m	EMODB	Saxon or later
2.26-3.30m	5002	Mid greyish brown silty clay	Levelling deposit	38.27m		Late Roman
1.66-1.90m	5003	Mid brown silt with frequent limestone rubble	Demolition rubble	38.00m		Late Roman
3.06-3.16m	5004	Single course E-W limestone wall	Wall	37.77m		Late Roman
3.30-3.35m	5005	Yellow mortar and crushed limestone	Occupation layer	37.65m		Mid Roman
Unknown	5006	Sub-square in plan, steep sides and irregular base in section	Robber trench	37.65m		Saxon or later
Unknown	5007	Dark greyish brown friable silty clay	Primary fill of robber trench	37.63m		Saxon or later
Unknown	5008	Mid reddish brown friable silty sand	Secondary fill of robber trench	37.65m		Saxon or later
Unknown	5009	Limestone rubble	Wall foundation	37.45m		Medieval or earlier
1.80-3.80m	5010	N-S limestone wall with no bonding	Wall	39.25m	LROMT	Late Roman
1.88-2.34m	5011	Mid yellowish grey clay	Redeposited clay	38.90m	EMODB	Saxon or later
2.68-2.94m	5012	Mid yellow mortar and limestone rubble	Demolition rubble	38.39m		Late Roman
2.34-2.68m	5013	Mid greyish brown silty clay	Levelling deposit	38.77m		Saxon or later
3.30-3.31m	5014	Compact pink limestone and mortar	Floor surface	37.65m	MROMT	Mid Roman
2.90-3.48m	5015	Limestone blocks	Demolition rubble	38.07m		Late Roman
1.88-2.60m	5016	Friable light yellowish grey silt with limestone rubble	Levelling deposit	38.87m	EMODB	Saxon or later
2.88-3.30m	5017	Mid grey silty clay with orange mottling	Levelling deposit	38.07m		Late Roman
2.82-3.14m	5018	Mid yellow crushed limestone and mortar	Levelling deposit	38.05m		Late Roman

2.48-2.70m	5019	Dark grey silty clay	Occupation layer	38.29m	LROMT	Late Roman
2.82-3.80m	5020	Steep sides, flat base	Foundation trench	38.05m	LROMB	Late Roman
3.35-4.20m	5021	Mid grey silty clay	Upper Lias clay	37.60m		Jurassic
2.82-3.80m	5022	Mixed mid yellowish grey silty clay and mortar	Fill of foundation cut	38.09m	LROMB	Late Roman

At a depth of up to 1.4m and containing fragments of modern ceramic building materials and pottery, deposit 5000 represents recently made-ground, most likely through clearing prior to its current use.

A north-south aligned limestone wall with single tile course, 5010, was exposed in the south facing section (Plate 2). This masonry lay within a 0.60-1.4m-wide foundation trench **5020**, and had been backfilled on the eastern and western sides by deposit 5022.

Wall foundation trench **5020** had cut through four earlier layers on its eastern side: 5002, 5005, 5014 and 5018. Layer 5005 (Plate 5) represents the earliest recorded deposit on site, lying on top of the underlying Upper Lias clay geology, 5021, and recorded across the entire area exposed. It consisted of crushed limestone rubble and mortar, and formed a level surface with pottery inclusions and an intrusive sherd of post-Medieval glass. A crushed pink limestone and mortar patch 5014 was recorded in section and may be the remnants of the floor surface. The pottery found from this occupation layer dates this phase of the site to the 3rd century.

Layer 5005 was observed in section being cut by wall foundation trench **5020** to the west of wall 5010, although a limestone blocks rubble deposit 5015, believed to be demolition rubble from the adjacent wall, obscured it.

Three layers of made-ground (Plate 3) had been deposited and levelled on top of the occupation layer represented by 5005 and 5014, which stratigraphically were cut by wall foundation trench **5020**. Deposit 5017 was an archaeologically sterile layer of grey silty clay, overlain by greyish brown silty clay 5002, the latter producing sherds of early to mid 4th century Romano-British pottery. These layers were at their highest to the east, and sloped gently down to the west. Wall foundation trench **5020** truncated levelling deposit 5018, which overlay deposit 5002. This effectively levelled the site prior to the original construction of wall foundation trench **5020**.

A dark grey silty clay layer, 5019, overlay these deposits of made-ground and levelling, and spread to the west to abut wall 5010. This layer was up to 0.22m thick at its western limit, and appeared as a layer of fine ash to the east where it overlay deposit 5002. Layer 5019 contained Roman tile and pottery, the latter dating to the late 3rd to 4th century, making it roughly contemporary with the deposits it sealed.

Deposits 5001, 5012 and 5016 recorded above layer 5019 have been interpreted as demolition rubble and subsequent made-ground following the disuse of wall 5010**,** due to similarly-sized limestone blocks in their fill. Roman pottery and tile was also recovered from these deposits.

A different sequence of stratigraphic deposits was observed to the west of wall 5010. Mortar and limestone rubble layer 5012 was overlain by two further demolition related deposits 5013 and 5011, which represented the depositional sequence since the construction of wall

foundation trench **5020**. No finds were collected from these layers; however, stratigraphically, they must be of post-Roman date.

A single-coursed east-west aligned limestone wall 5004 was present 1.65m south of the recorded south-facing section (Plate 6). This wall consisted of small limestone blocks bonded with a mid yellow sand mortar, each measuring approximately 0.34m by 0.23m by 0.12m, and extended for 1.93m. This line of masonry did not have a visible foundation trench cut. It may be that 5004 formed part of a series of footings for a wall pre-dating or even contemporary with 5010, although this is little more than speculation as it is not stratigraphically related to the deposits observed to the north.

A sub-square feature **5006** was excavated 1m south of the western extent of wall 5004. This feature had a sharp break of slope and contained a level deposit of limestone rubble 5009 at its base. This has been interpreted as the possible foundation for a wall, post-pad or other earlier layer, thus inferring the purpose of the cut was for robbing building material from a feature. Deposits 5007 and 5008 filled cut **5006**, and contained several sherds of Roman pottery and a single sherd of late Saxon pottery. This later find may signify the feature represents a robber cut or pit dating from 850-1000 AD.

The Southern Terrace

The groundworks undertaken along the length of the southern terrace were stepped to a maximum depth of 2.5m to facilitate the insertion of steel shuttering. The depositional sequence exposed during this stage of work is summarised below.

Depth below ground surface	Context No.	Description	Interpretation	Height of deposit above Ordnance Datum	Lincoln deposit model surface	Date
0-.24m	6000	Dark brown clayey loam	Topsoil	37.00m	MODT	Modern
0.24-0.61m	6001	Dark brown silty clay	Levelling deposit	36.76m		Modern
0.61-0.90m	6002	Dark greyish brown clayey loam	Levelling deposit	36.39m	EMODT	Post-Medieval
0.90-1.90m	6003	Dark brownish grey silty clay	Demolition deposit	36.10m		Undated
0-0.80m	6004	Dark brown clayey loam	Topsoil	37.00m	MODT	Modern
0.80-1.00m	6005	Dark greyish brown silt	Levelling deposit	36.20m		Undated
1.00-1.40m	6006	Mid brown clayey loam	Levelling deposit	36.00m		Undated
1.40-1.90m	6007	Dark greyish brown clayey loam	Levelling deposit	35.60m		Undated
1.90-2.50m	6008	Very dark brown clayey loam	Buried soil	35.10m		Undated

The earliest deposits revealed were located at the eastern end of the works and consisted of an undated buried soil of dark brown silty sand 6008.This soil was relatively near the topsoil in sequence, indicating a probable post-Medieval date.

Layers 6001, 6002, 6003, 6005, 6006 and 6007 represent more modern dark loamy levelling deposits. The large quantity of 19th century demolition rubble from these contexts is

indicative of heavy landscaping. A sherd of late 18th-mid 19th century pottery from 6002 would suggest this event occurred in the past 200 years.

Drainage Trench

A 13m long drainage trench aligned east-west was machine excavated approximately 3m south of the area excavated for the northern retaining wall (Figure 3c, Plate 8). The depositional sequence exposed during this stage of work is summarised below.

Depth below ground surface	Context No.	Description	Interpretation	Height of deposit above Ordnance Datum	Lincoln deposit model surface	Date
0-.62m	7000	Dark greyish brown silty clay	Made-ground	37.75m		Medieval or later
0-0.64m	7001	Limestone rubble and mortar	Made-ground	37.75m		Medieval or later
0-0.62m	7002	Dark greyish brown silty clay	Made-ground	37.75m		Modern

All deposits recorded during this stage of the watching brief have been interpreted as made-ground. Deposit 7000 was the earliest recorded in the sequence, and contained both medieval and Roman pottery. This was overlain by layer 7001, which also produced sherds of Roman pottery, although its rubble nature and stratigraphic relationship would suggest this material has been redeposited later. The last deposit in the sequence, 7002, contained modern pottery; this is believed to represent clearing and re-working of the site, probably in the 19th or 20th century.

The lack of well-stratified remains recorded in this drainage trench has left dating of the deposits tentative, and they could all potentially relate to modern clearance on the site.

Service Trench

A single deposit was recorded within this trench situated below tarmac and hardcore. Deposit 8000 comprised of dark brown silt clay with occasional rubble fragments up to 0.15m deep, probably representing a modern levelling deposit.

3 CONCLUSIONS

The archaeology encountered on the development site was generally of low density and significance, with the exception of work carried out in the northern terrace. The unstratified recording of finds recovered from piling is of little significance taking into account the repetitive sequence of demolition and terrace levelling that is evident.

The watching brief undertaken on the northern terrace revealed large amounts of overburden sealing well-stratified Roman walls and surfaces. The pottery recovered from these contexts is considered to have been used in association with a domestic setting, judging by the large quantity of kitchen/storage type vessels. This data would suggest that the wall 5010 exposed in the northern terrace was related to housing in the lower walled city, possibly enclosing a surface to the east, although the constant re-working of the site at a later date limits our interpretation.

This wall 5010 was cut through earlier layers and levelling deposits dated to the Roman Colonia Era. The early surface 5014 indicates the preparation of land within the lower city prior to housing development, although the range of pottery would place this activity in the 3rd century, with little evidence to indicate an earlier presence.

The other observation of note is that of cut feature **5006** located just south of the exposed standing wall 5004. Previous evaluation of the site revealed a possible limestone filled pit immediately adjacent to the rubble deposit recorded at the base of this feature (NAL 2005)(Figure 2). The height at which these deposits lie strongly indicates the presence of sealed layers below those reached during the watching brief.

Earlier evaluation also corroborates evidence for a feature, possibly a robber trench, filled with Late Saxon pottery, suggesting pre-Norman activity in the upper reaches of the lower city. Occupation is known from the waterfront during this period, and it may be that stone from more peripheral sites, such as Michaelgate, facilitated development in more key areas.

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5 STATEMENT OF INDEMNITY

Every effort has been taken in the preparation and submission of this report in order to provide as complete an assessment as possible within the terms of the brief and all statements and opinions are offered in good faith. Network Archaeology Ltd cannot accept responsibility for errors of fact or opinion resulting from data supplied by any third party, or for any loss or other consequences arising from decisions or actions made upon the basis of facts or opinions expressed in this report and any supplementary papers, howsoever such facts and opinions may have been derived, or as a result of unforeseen and undiscovered sites or artefacts.

6 BIBLIOGRAPHY

British Geological Survey, 1973. *Sheet 114: Lincoln.*

English Heritage, 1991, *The Management of Archaeological Projects, 2nd edition*, London.

I*f*A, 2000, *Code of Conduct*, Institute for Archaeologists (revised October 2008).

Jones, M, Stocker, D & Vince, A, 2003, *The City by the Pool*, Assessing the Archaeology of the City of Lincoln, Lincoln Archaeological Studies 10, Oxbow Books, Oxford.

MGC, 1992, *Standards in the Museum Care of Archaeological Collections*, Museums and Galleries Commission London.

Network Archaeology Limited, 2004, *Proposed housing development: 'Strelizia' Michaelgate, Lincoln: Written Scheme of Investigation* Unpublished NAL document

Network Archaeology Limited, 2005, *Proposed housing development: 'Strelizia' Michaelgate, Lincoln: Archaeological Evaluation* Unpublished NAL Report No. 509

UKIC, 1990, *Guidelines for the preparation of excavation archives for long-term storage.*

APPENDICES

APPENDIX A

ASSESSMENT OF THE ANIMAL BONE FROM STRELIZIA, MICHAELGATE, LINCOLN (SMLI07)

Jennifer Wood

INTRODUCTION

A total of 35 refitted fragments of animal bone (weighing 844g) was recovered by hand during a watching brief undertaken by Network Archaeology Ltd.

The remains were recovered from features and deposits provisionally dated to the Romano-British periods. The majority of the remains were recovered from occupation and levelling layers, demolition deposits, and robbed-out walls.

RESULTS

The remains were generally of a good overall condition, averaging between grades 2 and 3 on the Lyman criteria (1996).

A total of 7 fragments of bone recovered from occupation layers (5002), (5005), (7000), and levelling layer (5003), and from demolition deposits (1300) and (5012), had butchery marks. All of these butchery marks are consistent with jointing of the carcass.

Two fragment of bone recovered from deposits (5002) and (5006) displayed evidence of partial burning, which may be a result of incidental burning rather than cooking or method of disposal.

A single fragment of cattle femur recovered from a robbed-out wall cut [5006] displayed evidence of carnivore gnawing. The lack of gnawing on the rest of the assemblage may suggest the remains were rapidly buried, limiting access to the remains by scavengers.

Table 1, Summary of Identified Bone

	Roman	Undated	Total
Taxon			
Horse *(Equid)*	1		1
Cattle	7	2	9
Sheep/Goat	3		3
Pig	5		5
Domestic Fowl *(Gallus sp.)*	3		3
Bird	2		2
Large Mammal	8		8
Medium Mammal	4		4
N=	33	2	35

As can be seen from Table 1, the most abundantly identified species were cattle, followed by pig, sheep/goat, domestic fowl and horse remains. As the remains were recovered from occupation and demolition deposits, it is possible that some were not found in their original depositional contexts.

CONCLUSIONS

The skeletal elements represented suggests the remains were probably from butchery waste.

The assemblage is too small to provide meaningful information on animal husbandry and utilisation on site, save the presence of the animals on the site.

The numbers of pig remains identified within the assemblage are slightly elevated beyond what would be normally expected. Pigs frequently became prominent as a food source in the later Roman period, usually at villa sites. However, due to the small size of the assemblage, the species abundances identified may just be a bias of collection, rather than a true representation of animal utilisation.

REFERENCES

Lyman, R L, 1996 *Vertebrate Taphonomy*, Cambridge Manuals in Archaeology, Cambridge University Press, Cambridge

APPENDIX B

ASSESSMENT OF THE CERAMIC BUILDING MATERIAL FROM STRELIZIA, MICHAELGATE, LINCOLN (SMLI07)

Jane Young

INTRODUCTION

A total of fifty-five fragments of ceramic building material, weighing 13.597kg and ranging in date from the Roman to the modern periods, was recovered from the site. The material was examined visually and then recorded using locally and nationally agreed codenames. The resulting archive was then recorded using Lincolnshire codenames in an Access database. The archive complies with the guidelines laid out in Slowikowski, et al. (2001) and the Lincolnshire County Council's Archaeological Handbook (section 13.4.2). The CLAU tile type series was consulted for comparative material (Kemp et al. ND).

CONDITION

The material is in variable condition with most tile fragments showing a little abrasion. A number of contexts in the Northern retaining wall trench contained large fragments of tile, often in a fairly fresh condition. Few of the tiles or bricks have mortar adhering, although in one case this extends over the broken edges suggesting reuse in rubble infill. Several of the fragments have evidence for manufacturing techniques in the form of finger marks, moulding marks and strike marks.

THE CERAMIC BUILDING MATERIAL

A range of ceramic building material including roof tile, brick, daub and fired clay was found on the site. The types are shown in Table 1. With the exception of a small number of fabric variants, all of the fragments found on the site are typical of those recovered from previous excavations within the city.

Table 1: Ceramic building material codenames and total quantities by fragment count and weight

codename	full name	total fragments	Total weight in grams
DAUB	Daub	1	52
FIRED CLAY	Fired clay	4	27
GRID	Glazed medieval ridge tile	1	49
IMB	Imbrex	24	6875
MODTIL	Modern tile	1	5
PANT	Pantile	1	92
PNR	Peg, nib or ridge tile	5	926
RBRK	Roman brick	1	242
RID	Unidentified ridge tile	1	43
RTIL	Roman tile	2	42
TEG	Tegula	14	5244

Roman

Forty-one identifiable Roman tile fragments were recovered from the site. The collection includes examples of brick, Tegula, and Imbrex. A wide range of fabrics is present suggesting that the material does not all come from a single source. Several Tegula flange types are present including Betts' Types 13 (2 examples), 18 (four examples), 31 (one example) and 33 (one example). It is worth noting that none of the most common type (Type 1) flanges are present in the assemblage. Six upper cut-outs occur, five of which are Bett's Type B and one is a more unusual Type C.

Medieval

Little of the ceramic building material recovered from the site is of medieval date. Two of the tiles are medieval flat roofers (PNR), both of which were probably made in the city. One of these tiles (found in context 5005) is in Fabric 1, which is the most common fabric to be found in the city. This fabric has a long currency from the mid 12th to 16th centuries, although the manufacture of the tile from this site suggests that it pre-dates the 16th century. The second tile is in the second most common fabric (Fabric 7) which is the earliest to be used in the city and seems to have fallen out of use by the mid 13th century. A single fragment of glazed medieval ridge tile (GRID) is present amongst the material recovered. The tile has a thick reduced iron-rich glaze and is of 13th to 14th century date.

Post-medieval to modern

Six of the tile fragments found on the site are of late medieval to early modern date. These include three flat roof tiles (PNR), an unglazed ridge tile (RID), a pantile (PANT) and a glazed wall tile (MODTIL). Most of these are likely to be of 19th to mid 20th century date.

Fired Clay

Five fragments of fired clay, one of which can be identified as a piece of daub, were recovered from the site. The four formless fired clay fragments recovered from context 5019 are in oxidised sandy fabrics, whereas the daub fragment found in context 5008 is in a shell-tempered fabric. The daub fragment has flat lath impressions suggesting that it is from a building rather than an oven or similar feature.

SUMMARY AND RECOMMENDATIONS

The ceramic building material recovered dates between the Roman and the early modern periods and is mainly typical of types found on sites elsewhere in the City. A wide range of fabrics is found within the Roman building material class suggesting a variety of sources for each type. Much of the ceramic building material recovered from the site is likely to represent residual material, probably brought on to the site at a date later than its manufacture. Most of the undiagnostic tile has been discarded in accordance with guidelines set down by the City and County Museum; all of the remaining material should be retained.

REFERENCES

Betts, I. 1986. Identifying Ceramic Building Material. Unpublished: Museum of London Department of Urban Archaeology.

Kemp, R., Vince, A. and Young, J. no date The Medieval and Post Medieval Ceramic Building Material from Lincoln. Unpublished.

Lincolnshire Archaeological Handbook 2003 edition [internet]. Available from <http://www.lincolnshire.gov.uk/section.asp?catId=3155>

Slowikowski, A. Nenk, B. and Pearce, J. 2001. Minimum Standards for the Processing, Recording, Analysis and Publication of Post-Roman Ceramics. Medieval Pottery Research Group, Occasional Paper 2.

APPENDIX C

ASSESSMENT OF THE GLASS FROM STRELIZIA, MICHAELGATE, LINCOLN (SMLI07)

Jenny Mann

Context	Find No.	Material	Object	Comments
5003		Glass	Vessel	Late post-med/modern? Colourless fragment with moulded rib. Opalescent weathering. Th: 1.5mm (max)

This fragment perhaps could be from the neck of a vessel with an internal diameter of approximately 35mm, and is what appears to be a single vertical moulded rib. If this is from a Roman vessel such as a narrow-necked jug or flask, it might be expected to have more than one rib. However, the fragment seems to straighten out rather than continuing in a regular curve and, unless this is due to distortion, it may be from a thin-walled bottle with an ovoid- rather than circular-sectioned body. A more likely date for the piece would in that case be late post-medieval/modern, perhaps 19th-century.

APPENDIX D

ASSESSMENT OF THE RECORDED FINDS FROM STRELIZIA, MICHAELGATE, LINCOLN (SMLI07)

Dr Kevin Leahy, FSA, MIfA

INTRODUCTION

Finds were examined at x10 magnification, and sketched and described in detail. Some items were further examined at x35 using a binocular microscope. Materials were identified visually and dimensions were recorded using vernier callipers. Masses were obtained on an electronic balance to an accuracy of 0.1g.

The finds were received in an 'as found condition' and radiographs were not available. These might have been helpful in the case of the iron strip (5012). The two iron objects were found to be badly preserved, detail being hidden by, or lost to, corrosion on one object, the other being exfoliated. The lead is stable but with a powdery surface (care must be exercised in handling this material).

SUMMARY

This is a small group of objects of the sort which might be expected during excavations in any town. None could be dated other than by context and their historical significance is limited. While lead and lead working debris was found, it was not present in large enough quantities to suggest systematic working and could have been the result of lead falling into a hearth.

RECOMMENDATIONS

It is unlikely that further work on any of this material would result in any contribution to our knowledge.

CATALOGUE

Context: (0200) Plot Find

Material	Iron, probably wrought iron
Condition:	Corroded and exfoliating
Description:	Nail or spike, head shape cannot be defined due to encrustations. It was developed from the shaft. The shaft has a square section 10.7 x 10.2mm tapering in two planes.
Dimensions:	Length 129.0mm
Mass:	68.9g
Provisional identification:	Spike
Provisional dating of find:	Not datable
Find context and dating:	Natural?
Historical significance:	Limited
Recommended action:	None

Context: (5012) Plot Find

Material	Iron
Condition:	Corroded, much of detail hidden

Description:	Strip of bar, flat section and slightly curved along its length. Through the bar are one (perhaps two) holes.
Dimensions:	Length 125.5mm, Width 17.7mm, Thickness 4.6mm
Mass:	61.6g
Provisional identification:	Reinforcing strip
Provisional dating of find:	Not datable
Find context and dating:	Demolition deposit, Roman
Historical significance:	Limited
Recommended action:	Suggest an Xray.

Context: (5019) Plot Find <1>

Material	Lead
Condition:	Corroded, good, stable
Description:	Six pieces of lead or lead related material: A Run of lead spillage, irregular shape, plano-convex section showing that it had been poured onto a generally flat surface, 88.7 x 25.0 x 9.9mm, Mass 76.8. B Amorphous piece of lead spillage which appears to have flowed into a cracked surface, 27.6 x 20.2 x 13.4mm, Mass 15.0g, C ditto, 30.6 x 18.1 x 6.3mm, Mass 5.2g D Three pieces of what appear to be lead working dross: 14.7 x 14.6 x 9.3mm, Mass 3.7g 12.4 x 10.2 x 8.2mm, Mass 2.2g 8.7 x 7.3 x 4.9mm, Mass 0.5g.
Provisional identification:	Lead melt
Provisional dating of find:	Not datable
Find context and dating:	Occupation layer, Roman
Historical significance:	Limited
Recommended action:	None

APPENDIX E

ASSESSMENT OF THE POST-ROMAN POTTERY FROM STRELIZIA, MICHAELGATE, LINCOLN (SMLI07)

Jane Young

INTRODUCTION

A small assemblage of thirty-seven sherds of post-Roman pottery (representing thirty-four vessels) was submitted for examination. The pottery was recovered from: seven different piling trenches, the Northern retaining wall, the Southern bank reinforcement, and drainage trenches on the site. It ranges in date from the Late Saxon to the early modern periods (Table 1).

The assemblage was quantified by three measures: number of sherds, weight, and vessel count within each context. Fabric identification of some sherds was undertaken by x20 binocular microscope. The ceramic data was entered onto an Access database using fabric codenames agreed locally and nationally. Recording of the assemblage was in accordance with the guidelines laid out in Slowikowski, et al. (2001) and complies with the Lincolnshire County Council's Archaeological Handbook (section 13.4.2).

CONDITION

The pottery is in a fairly fresh to slightly abraded condition with sherds entirely falling into the small to medium size range (below 50 grams). Only two vessels are represented by more than one sherd and there are no cross-context joining vessels.

OVERALL CHRONOLOGY AND SOURCE OF THE POTTERY

A range of twenty-four different pottery ware types, ranging in date from the Late Saxon to the early modern periods, were identified. The type and general date range for these fabrics are shown in Table 1. Local, regional and continental productions are represented amongst the material. A narrow range of vessel types was recovered, mainly various types of jugs, jars and bowls or dishes, but also including examples of bottle, plate, garden pot and a range of drinking vessels.

Table 1: Pottery codenames and date ranges with total quantities by sherd and vessel count

codename	full name	earliest date	latest date	total sherds	total vessels
BL	Black-glazed wares	1550	1750	1	1
CIST	Cistercian-type ware	1480	1650	2	2
CREA	Creamware	1770	1830	2	2
DST	Developed Stamford ware	1150	1230	1	1
EMX	Non-local Early Medieval fabrics	1150	1230	1	1
GRE	Glazed Red Earthenware	1500	1650	2	2
LERTH	Late earthenwares	1750	1900	1	1
LFS	Lincolnshire Fine-shelled ware	970	1200	4	3
LKT	Lincoln kiln-type shelly ware	850	1000	5	5
LSH	Lincoln shelly ware	850	1000	1	1
MY	Midlands Yellow ware	1550	1650	1	1
NCBW	19th-century Buff ware	1800	1900	1	1

NOTS	Nottingham stoneware	1690	1900	1	1
NSP	Nottingham Splashed ware	1100	1250	1	1
PEARL	Pearlware	1770	1900	4	2
POTT	Potterhanworth-type Ware	1250	1500	1	1
RAER	Raeren stoneware	1450	1600	1	1
SNLS	Saxo-Norman Lincoln Sandy Ware	970	1080	1	1
ST	Stamford Ware	970	1200	1	1
STSL	Staffordshire/Bristol slipware	1680	1800	1	1
TORK	Torksey ware	850	1100	1	1
TOYII	Toynton Late Medieval ware	1450	1550	1	1
TPW	Transfer printed ware	1770	1900	1	1
WHITE	Modern whiteware	1850	1900	1	1

Late Saxon to Saxo-Norman

Thirteen vessels of Late Saxon and Saxo-Norman type were recovered from the site. The earliest five vessels are in shell-tempered fabrics (LKT and LSH) that were produced in Lincoln between the mid/late 9th and late 10th centuries (Young et al. 2005). With the exception of an LKT jar from context 5008 all of the vessels occurred residually in the piling trenches. All identifiable vessel forms are small to medium sized jars, none of which are closely dateable. A grey quartz-tempered jar sherd (SNLS) is the product of kilns operating in Lincoln between the late 10th and mid 11th centuries. The rim sherd is decorated along the edge with widely spaced finger impressions and probably dates to between the late 10th and early 11th centuries. The undiagnostic jar sherd in Torksey ware (TORK) recovered from Pile 15 can only be dated to between the late 9th and mid/late 11th centuries.

Three Lincolnshire Fine-shelled ware vessels include two small jars and two sherds from the base of a large jar or bowl. This ware type is in production from the late 10th to late 12th centuries and is difficult to date closely, although it is likely that the small jar sherd from context 7000 is of 12th century date. A small glazed sherd in Stamford ware (ST) Fabric B is from a jar or pitcher and probably dates to between the late 11th and mid/late 12th centuries. The sherd was recovered residually from Pile 7.

Early Medieval to Medieval

Only four vessels may be considered to be of medieval type (dating to between the mid 12th and late 15th centuries). Three of the vessels are of early medieval type and belong to the period between the mid 12th and early/mid 13th centuries. All three of the vessels are jugs from known (DST and NSP) or unknown (EMX) regional sources. The small jug sherd from the Southern bank reinforcement (context 6002) is in a sandy Nottingham Splashed ware fabric (NSP) and dates to between the mid/late 12th and early/mid 13th centuries. This ware type is the most common jug fabric to be found in Lincoln during the early medieval period. The Developed Stamford ware sherd (DST), also from a small jug, is a less common regional import from the same period. This sherd was recovered from drainage context 7000. A jug sherd in a coarse sandy fabric with an amber glaze is from an unknown regional production centre, probably within Lincolnshire. The sherd which can only be generally dated to between the mid 12th and mid 13th centuries was recovered from Pile 6.

A single sherd of high medieval date was recovered from the site. The sherd, which was found in an occupation layer (context 5002) in the Northern retaining wall trench is from a jar in a coarse shell-tempered fabric known as Potterhanworth ware. This ware type was produced from the early 13th century through until at least the late 15th century.

Late Medieval to Early Post-medieval

Four of the pottery vessels submitted for examination are of late medieval to post-medieval type and can be dated to the period between the mid 15th and 16th centuries. One of the vessels is in late medieval Toynton-type ware (TOYII) which was manufactured at several sites in the county including Toynton-All-Saints and Bolingbroke from the mid 15th to mid 16th centuries. The body sherd which came from Pile 4 (context 400) is from a jug. Two small Cistercian ware cups (CIST) were recovered from Piles 13 and 13a on the site. The cup from context 1300a has traces of applied white decoration and is likely to pre-date the mid 16th century. These cups were produced at a number of sites in the East Midlands and Yorkshire between the mid 15th and 16th centuries.

A single imported vessel was found on the site in Pile 13a. The sherd is from the shoulder of an imported German Stoneware (RAER) drinking jug of late 15th to mid 16th century date.

Post-medieval to Modern

Eleven of the vessels recovered from the site date to between the mid 16th and 20th centuries. This material includes local and regional coarsewares (BL, GRE and LERTH), regional fineware (MY), slipware (STSL), regional stoneware (NOTS) and industrial finewares (CREA, NCBW, PEARL, TPW and WHITE). A single sherd from a large bowl in a black-glazed earthenware (BL) and a garden pot (LERTH) may have been produced in Lincolnshire, Derbyshire or Staffordshire between the 18th and 20th centuries. Two vessels in Glazed Red Earthenware (GRE) are probably of late 16th to 17th century date. One of the vessels is a pipkin with a copper-bichrome glaze. Similar vessels were produced in Boston, Grimsby and East Anglia from the last quarter of the 16th to the mid 17th centuries.
A single unusual regional fineware sherd came from Pile 4. The body sherd is from a small costrel or bottle in Midlands Yellow ware and probably dates to between the mid 16th and mid 17th centuries.

Only one slipware vessel was recovered from the site (STSL). The sherd is from a large press-moulded dish in a cream fabric with brown trailed decoration on a yellow background. These Staffordshire-type slipwares (STSL) may have been produced either in Staffordshire or in Ticknall in Derbyshire between the mid/late 17th and mid 18th centuries.

A single post-medieval stoneware vessel was recovered from the site (NOTS). Nottingham Stoneware (NOTS) was first produced in the late 17th century and continued in production until the beginning of the 19th century. The sherd from this site is probably from a jar with machine decoration and is of 18th century date.

Several industrial finewares were found on the site. These wares were first developed in the mid 1760s (Creamware - CREA) and continued to be refined into the 19th century when they became recognisable as the Transfer-printed 'blue and white' (TPW) and plain white (WHITE) wares we know today. The earliest vessel is likely to be the small late 18th to mid 19th century Creamware plate from context 6002 and the latest the Whiteware mug from context 7002, which dates to the late 20th century.

SUMMARY AND RECOMMENDATIONS

This is only a small group of pottery and therefore difficult to assess. Overall the post-Roman ceramic material fits within the pattern found on other sites in the area (Young forthcoming), although the amount of material recovered was somewhat limited.

The pre-modern assemblage should be kept for future study, especially as part of any further characterisation of the Lincoln ware fabrics.

REFERENCES

Lincolnshire Archaeological Handbook 2003 edition [internet]. Available from <http://www.lincolnshire.gov.uk/section.asp?catId=3155>

Slowikowski, A. Nenk, B. and Pearce, J. 2001. Minimum Standards for the Processing, Recording, Analysis and Publication of Post-Roman Ceramics. Medieval Pottery Research Group, Occasional Paper 2.

Young, J, Vince A G and Nailor V 2005 A Corpus of Anglo-Saxon and Medieval Pottery from Lincoln, Lincoln Archaeology Studies 7, Oxbow, Oxford

Young, J, forthcoming. The Post-Roman Pottery in Steane, K The Archaeology of the Lower City and Adjacent Suburbs, Lincoln Archaeology Studies 4, Oxbow, Oxford

APPENDIX F

ASSESSMENT OF THE PRODUCTION RESIDUES FROM STRELIZIA, MICHAELGATE, LINCOLN (SMLI07)

Dr Roderick Mackenzie

INTRODUCTION

The following report is an assessment of production residues recovered from archaeological fieldwork at 'Strelizia', Michaelgate, Lincoln. A basic identification of the residues has been carried out and pieces have been assessed for their archaeological potential; as part of this process, the archaeological context of the pieces has been considered. The results of the assessment are summarised below.

RESULTS

Table 1: Results of assessment of production residues recovered from 'Strelizia', Michaelgate, Lincoln. (Network Archaeology site SMLI 07).

Context No.	No. of pieces	Description	Approx Weight
5002	1	Small fragment of undiagnostic conglomerate. Probable fuel ash residue	5g
5002	2	Fragments of compacted sand and gravel conglomerate with corroded ferrous metal inclusion. Probable pieces of mortar with an iron nail or fixing embedded within them	165g

DISCUSSION

The assemblage contains one small fragment of what appears to be fuel ash residue. Given the visual appearance and archaeological context of the piece, it seems most likely that it relates to domestic coal use.

The two fragments of possible mortar appear to have originally been one piece. The fabric of the mortar is coarse in nature and has inclusions of gravel and small fragments of broken brick. Both fragments have what appears to be an iron nail or fixing embedded within them. The mortar could potentially date from the Roman to early 20th century. However, the nature of the brick inclusion and condition of the embedded metal suggests that it is likely to be at the more recent end of that date range. The pieces probably originate from the demolition of brick built structures that previously occupied the area.

RECOMMENDATIONS

The material in the assemblage is of low archaeological potential and no further analytical work is recommended. The residues can be disposed of in the usual manner.

APPENDIX G

ASSESSMENT OF THE ROMAN POTTERY FROM STRELIZIA, MICHAELGATE, LINCOLN (SMLI07)

I.M. Rowlandson

The pottery has been archived using count and weight as measures according to the guidelines laid down for the minimum archive by The Study Group for Roman Pottery (Darling 2004) using the codes developed by the City of Lincoln Archaeological Unit - CLAU (see Darling and Precious forthcoming). Rim equivalents (RE) have been recorded and an attempt at a 'maximum' vessel estimate has been made following Orton (1975, 31). The pottery has been bagged by fabric, and vessels selected as suitable for illustration have been bagged separately for ease of future reference. The archive record (Appendix 1) is an integral part of this report and will be curated in an Access database, available from the author in a digital format. The report was produced on the basis of a context list and matrix provided by Network Archaeology. The pottery was initially spot-dated by B. Precious, and archived and reported on by I.M. Rowlandson.

CONDITION

The ceramics presented for assessment totalled 138 sherds, weighing 3.896 kg, RE 2.34, from 13 contexts from a scheme of archaeological monitoring. The majority of the pottery is fresh with only 12 sherds showing signs of abrasion. Sherds from five vessels show signs of internal 'kettle fur' type deposits and two shell-tempered vessels showing signs of sooting from use on the fire. A basal sherd from a local mortarium shows heavy signs of use wear. The average sherd weight at 28.23g is within the range to be expected from an urban group from Lincoln. The pottery is in a stable condition.

The groups are almost exclusively small and it is possible that the majority of the Roman pottery is residual. The process of constructing and maintaining terraces on the hillside has resulted in much of the re-deposited Roman pottery remaining fairly fresh despite re-working into later contexts. The small area of investigation on a heavily terraced site has not produced any significant groups to aid our understanding of Roman activity in this area of the Lower City. The date of the pottery is mostly late Roman.

The most notable feature of this group is a large storage jar rim from context 5005 which appears to have a fabric more typical of vessels from the south of Lincoln and which may therefore have been imported.

DATING

The detailed archive is presented as Appendix 1. Table 1 provides a quantified spot-dating summary by context. The pottery has been presented in the groups discussed below.

Table 1- Dating summary						
Context	**Feature Type**	**Spot date**	**Comments**	**Sherd**	**Weight (g)**	**Rim eve %**
0400	Wall	L3-4	Small group- Pile hole 4	6	91	15
0800	Layer	M3+	Single bowl retrieved from Pile hole 8	1	49	9
1700	Wall	M2+	Small group- Pile hole 17	2	26	6
5001	Layer	E2-M3	Small group	1	6	0
5002	Layer	E4-M4	Medium sized group, mostly later 3rd century+ forms	65	2047	76
5005	Layer	3C+	Small group with an unusual large storage jar rim	7	240	5
5007	Robber trench	L3	Small group	18	190	43
5008	Robber trench	L2+?	Small group	1	21	0
5010	Wall	E2+	Small group	4	223	11
5012	Layer	4C	Small mixed group	15	254	36
5019	Layer	L3-4	Small group	1	46	12
7000	Layer	M3-4C	Small group	9	462	10
7001	Layer	M3+	Small group	2	40	0

Most of the groups are small and many have been retrieved from monitoring pile holes. It is possible that many of the groups contain residual Roman pottery re-deposited in later levels. It is notable that the groups of Roman pottery present are mostly of late Roman date with little residual early Roman pottery present. This suggests the pottery derives from levelling or construction during the late Roman period. None of the forms typically associated with the latest Roman activity in the very late 4th century were present.

OVERVIEW OF FABRICS & FORMS

Fabrics and forms are discussed in greater detail below. Tables 2 and 3 provide a statistical summary of the range of forms and fabrics present in the group and a percentage relative to the rest of the group. The 'Total Rim eve %' column provides a sum of the rim equivalents recorded with '100' representing a complete rim circuit.

Table 2- Fabric overview						
Fabric	**Fabric details**	**Sherd**	**Sherd (%)**	**Weight (g)**	**Weight %**	**Total Rim eve %**
BB1	Black burnished 1, unspecified	21	15.22%	333	8.55%	33
BB1?	Black burnished 1, unspecified	1	0.72%	15	0.39%	0
BBT	Black Burnished type copies	3	2.17%	32	0.82%	6
BBT?	Black Burnished type copies	11	7.97%	257	6.60%	15
CGBL	Rheinish; from Central Gaul	1	0.72%	14	0.36%	0
CR	Roman cream wares (various)	1	0.72%	10	0.26%	0
DR20	Dr 20 amphorae	2	1.45%	1371	35.19%	0
DWSH	Dales ware; lid-seated jars	8	5.80%	159	4.08%	47
DWSH?	Dales ware; lid-seated jars	1	0.72%	27	0.69%	0
GREY	Miscellaneous grey wares	64	46.38%	1105	28.36%	84
GREY?	Miscellaneous grey wares	1	0.72%	21	0.54%	0
MOLO	Local mortaria	3	2.17%	201	5.16%	0
NVCC	Nene Valley colour-coated ware	1	0.72%	7	0.18%	0
NVCC?	Nene Valley colour-coated ware	2	1.45%	10	0.26%	17
NVCC1	Nene Valley Colour-coat- light firing fabric	3	2.17%	20	0.51%	22
NVCC2	Nene Valley Colour-coat- late red fabric	3	2.17%	9	0.23%	0
OX	Misc. oxidised wares	1	0.72%	4	0.10%	0
OX	Miscellaneous oxidized wares	1	0.72%	4	0.10%	0

Table 2- Fabric overview						
Fabric	**Fabric details**	**Sherd**	**Sherd (%)**	**Weight (g)**	**Weight %**	**Total Rim eve %**
SAMSG	South Gaulish	1	0.72%	14	0.36%	5
SHEL	Miscellaneous undifferentiated shell-tempered	8	5.80%	252	6.47%	5
SPCC	Swanpool colour-coated	1	0.72%	23	0.59%	0
SPOX	Swanpool oxidized wares	1	0.72%	12	0.31%	0

QRY- Form percent 3							
Form	**Form Type**	**Form Description**	**Sherd**	**Sherd (%)**	**Weight (g)**	**Weight %**	**Total Rim eve %**
A	Amphora	Unclassified form	2	1.45%	1371	35.19%	0
BK	Beaker	Unclassified form	4	2.90%	32	0.82%	0
BK?	Beaker	Unclassified form	1	0.72%	14	0.36%	0
BKCOR	Beaker	Cornice rim	2	1.45%	16	0.41%	21
BKEV	Beaker	Everted rim	1	0.72%	3	0.08%	11
BKFN	Beaker	Funnel necked; form unknown	1	0.72%	6	0.15%	7
BKFO	Beaker	Folded; indeterminate type	1	0.72%	5	0.13%	0
BFB	Bowl	Bead and flange bowl	7	5.07%	243	6.24%	32
BFL	Bowl	Flange rimmed	1	0.72%	49	1.26%	9
BL	Bowl	Large	7	5.07%	225	5.78%	0
BWM2	Bowl	Wide-mouthed; D&P No. 1228	3	2.17%	4	0.10%	12
BWM3?	Bowl	Wide-mouthed; D&P No. 1229-30	1	0.72%	58	1.49%	0
CLSD?	Closed	Form	7	5.07%	28	0.72%	0
CLSD	Closed	Form	24	17.39%	338	8.68%	0
CP	Cook pot	BB type	5	3.62%	81	2.08%	5
27	Cup	Samian form- see Webster 1996	1	0.72%	14	0.36%	5
D?	Dish	Unclassified form	3	2.17%	49	1.26%	0
DPR	Dish	Plain rim	13	9.42%	295	7.57%	29
F	Flagon	Unclassified form	1	0.72%	10	0.26%	0
JDW	Jar	Dales ware	7	5.07%	110	2.82%	38
JS	Jar	Storage	1	0.72%	134	3.44%	5
JL	Jar	Large	3	2.17%	222	5.70%	18
JEV	Jar	Everted rim	3	2.17%	42	1.08%	23
J	Jar	Unclassified form	2	1.45%	33	0.85%	0
JB	Jar/Bowl	Unclassified form	1	0.72%	36	0.92%	11
JBCAR	Jar/Bowl	Carinated	1	0.72%	8	0.21%	0
L	Lid	Unclassifed form	1	0.72%	19	0.49%	8
M	Mortaria	Unclassified Form	3	2.17%	201	5.16%	0
OPEN?	Open	Open form	9	6.52%	56	1.44%	0
OPEN	Open	Form	5	3.62%	72	1.85%	0
-	Unknown	Form uncertain	17	12.32%	122	3.13%	0

The group contains a low level of early Roman pottery with few sherds which could be taken to represent the legionary period. There is little evidence for early Roman finewares with only a single sherd of Samian from the group, probably as a result of the late Roman bias of the pottery present. Colour-coated sherds from cornice-rimmed beakers and a 'bag-shaped' vessel represent second century finewares and the mortaria present are also from this period.

The majority of pottery present fits broadly into a 3rd to mid 4th century range. A single basal sherd of Central Gaulish Black Ware was the only imported late Roman fineware present. The other drinking vessels included colour-coated beakers produced by the Nene Valley potters, including a sherd with a painted lattice probably dating to the 4th century. Also present were sherds of the local SPCC and SPOX fine ware fabrics.

There is a relatively strong presence of Black Burnished Ware 1 (BB1) vessels including open forms, mostly flanged bowls (D2 and D4) and plain rimmed dishes. The quantity of BB1 is probably due to the late Roman bias of the groups present. The most common fabric is GREY which mostly consists of local reduced coarsewares of a late Roman date including the typical wide-mouthed bowls, some with developed necks (D5), jars, and storage jars. In addition to this, a small quantity of Black Burnished Type ware (BBT) was present which occurs in many groups in Lincoln and was probably made locally at sites including the Racecourse kiln (Corder 1950). Included in this class is a full profile of a large plain rimmed dish (D3).

There is a small quantity of late Roman shell-tempered vessels present, categorised by the DWSH and SHEL codes. The majority of these vessels are cooking jars with many falling into the 'Dalesware jare' category. Sooting is present on a number of these vessels, probably from use on the fire. Also notable is the rarer 'Dalesware' bowl form (D1) and an oxidised shell tempered storage jar rim (D6) which contain Punctate Brachiopod shells more typical of Jurrasic clays to the south of Lincoln, perhaps suggesting it had been transported into the city as a container for other goods or as part of a consignment of other bulky goods.

CONCLUSIONS

The majority of pottery appears to date to the 3rd century with some pottery from the earlier part of the 4th century. The pottery appears to be mostly composed of kitchen/storage types. It is unlikely that much of the Roman pottery from this site was retrieved from primary contexts.

It is unfortunate that the groups from the Lindsey Archaeological Services excavations at Hungate (HUN03) and, more importantly, the St Cuthbert's Nursery, Michaelgate (LSCN03) site immediately to the south of this development, have not been completed yet, as this would allow comparison with these groups. The publication of the 'Lincoln Lower City' volume, which is also still forthcoming, will facilitate greater comparisons with the other nearby sites excavated by the City of Lincoln Archaeological Unit, notably the Spring Hill site (Snell 1984) and the Chestnut House, Michaelgate site (MCH84).

RECOMMENDATIONS

All of the pottery should be retained and deposited in the relevant museum to enable future study.

Six vessels have been considered suitable for illustration and are highlighted as such in the archive (Appendix 1). However there are few useful groups of pottery and little stratigraphic evidence and no further work is necessary at this stage.

The shell-tempered storage jar (highlighted in Appendix 1) might be suitable for inclusion in the event of any future study of such jars from the city as it is likely that it has been brought to the city from south-western Lincolnshire.

BIBLIOGRAPHY

Corder, P, 1950 A Romano-British pottery kiln on the Lincoln Racecourse, University of Nottingham.

Darling, M.J., 2004, Guidelines for the archiving of Roman Pottery. Journal of Roman Pottery Studies 11, 67-74.

Darling, M.J. and Precious, B.J., forthcoming, Corpus of Roman Pottery from Lincoln, Lincoln Archaeological Studies No. 6, Oxbow Books, Oxford

Gillam, J. P., 1970, Types of Coarse Roman Pottery Vessels Found in Northern Britain, 3rd ed, University of Newcastle upon Tyne, Newcastle upon Tyne

Holbrook, N., and Bidwell, P.T., 1991, Roman Finds from Exeter, Exeter Archaeol. Rep. Vol. 4. Exeter City Council and The University of Exeter

Orton, C. R., 1975, Quantitative pottery studies, some progress, problems and prospects. Science and Archaeology 17, 30-5.

Snell, A., 1984, Spring Hill, in Jones, M.J. and Nurser, E. Archaeology in Lincoln 1983-1984, Lincoln Archaeological Trust, Lincoln, 9-15

Webster, P., 1996, Roman Samian Pottery in Britain, Practical Handbook in Archaeology 13, Council for British Archaeology, York

Appendix 1- SMLI07 Roman pottery archive

Context	Fabric	Form	Decoration	Vessels	Alt	Drawing	Comments	Join	Sherd	Weight	Rim diam	Rim eve
400	BB1	BFB	BIA EXT	1			RIM; VARIABLE SURFACE COLOUR GREY/BLACK; SHALE		1	26	0	0
400	NVCC2	BK	ROUZ	1			BS; LATE FAB		1	2	0	0
5008	GREY?	CLSD		1	OVERFIRED		BS LOWER WALL; LOC SAND; HIGH FIRE ALMOST VITRIFID SURFACES- REDUCED		1	21	0	0
5001	BB1	CP	BA;	1			BS		1	6	0	0
7000	DR20	A	SALT WASH	1	ENCRUST MORTAR		BS; EX SALT WASH; LATE FAB		1	314	0	0
7000	GREY	CLSD		1	ABR		BS; LOC		1	16	0	0
7000	GREY	CLSD		1	ENCRUST MORTAR		BS; LOC		1	48	0	0
7000	SHEL	-		1			BS; SCRAP		1	2	0	0
7000	GREY	CLSD		1			BS; LOC PALE CORE		1	3	0	0
7000	BB1	CLSD		1			BS		1	3	0	0
7000	GREY	CLSD?		1			BS; LOC; HIGH FIRED		1	22	0	0
7000	DWSH	JDW		1			RIM; AS GILLAM 157		1	16	16	10
7000	GREY	CLSD		1			BASE; FTM; LOC; NEAT AS ROOKERY/SWPOOL		1	38	0	0
7001	BBT	OPEN	B INT	1			BS; LOC?		1	13	0	0
7001	DWSH?	-	HM	1			BS; HM AS DWSH		1	27	0	0
5002	CGBL	BK?		1			BASE; NARROW PEDISTAL BASE- FTM		1	14	0	0
5002	SPCC	BK	ROUZ	1			BS; BRWN CC		1	23	0	0
5002	NVCC?	BKEV		1	ABR		BS; BRWN CC BUFF FAB; RESIDUAL; BAG SHAPED SMALL EXAMPLE NVCC?		1	3	6	11
5002	NVCC2	BK	PA LATTICE	1			BS; RED CC PAINTED BEAKER		1	3	0	0
5002	DR20	A		1	MORTAR INT		BS 2C SMOOTH BUFF TYPE FABRIC		1	1057	0	0
5002	BB1	CP	B EXT	1			BS NEAR RIM SHLDR; 2C+ EVERTED TYPE WITH LEDGED SHLDR		1	49	0	0
5002	BB1	CP	B EXT	1	CONRETION		RIM; CONCRETION- FERROUS? ON RIM		1	11	14	5
5002	BB1	CLSD?		1			BS SCRAPS		6	6	0	0
5002	BB1	CP		1	CALC FUR INT		BS; CALCERIOUS FUR INTERNAL		2	15	0	0
5002	BB1	BFB	BIA	1		*	RIM BS; AS HOLDBROOK & BIDWELL 54.1; M2+		3	91	28	12
5002	BBT?	DPR	BIA EXT; BSP BASE EXT	1		*	RIM- BASE; SHALE- SUB RND SAND MORE SPARSE; LARGE EXAMPLE PERHAPS AS H&B 59.4; LARGE L3+		11	257	23	15
5002	BB1	D?		1			BASE; PROB DISH		1	14	0	0
5002	BB1	DPR		1			RIM- BASE		1	25	17	8
5002	BB1	BFB	BIAF	1		*	RIM; AS HOLDBROOK & BIDWELL BB1 SE TYPE 45.1A- L3-E4		2	80	30	8
5002	GREY	BWM2		1		*	RIM; PARALLELED AT RIM TYPE D&P 1226		3	4	28	12
5002	GREY	JS		1	ABR		RIM; ?WF; LOC COARSE GRITTED RIM AS D&P 1071		1	134	32	5
5002	GREY	JBCAR	B EXT	1			BS; LOC; AS FORMS LIKE D&P 1174		1	8	0	0
800	DWSH	BFL	WF?; B EXT & INT	1		*	RIM- BASE; FORM AS D&P NO 676 -668; STRAIGHT SIDED		1	49	24	9
1700	BBT	DPR	B INT	1			RIM; LOC SAND		1	13	20	6
1700	GREY	CLSD		1	CALC FUR INT		BS; LOC SAND; KETTLE FUR TYPE DEPOSIT INTERNAL		1	13	0	0
5002	BB1	CLSD	B EXT	1	CALC FUR		BS; CALC KETTLE FUR		1	7	0	0

Appendix 1- SMLI07 Roman pottery archive

Context	Fabric	Form	Decoration	Vessels	Alt	Drawing	Comments	Join	Sherd	Weight	Rim diam	Rim eve
					INT		INTERNAL					
400	GREY	JEV		1			RIM; LOC SAND		1	14	17	10
400	SAMSG	27		1			RIM; HIGH GLOSS		1	14	11	5
400	GREY	D?		1			BASE; LOC SAND		1	8	0	0
400	GREY	D?		1			BASE; LOC SAND; DPR TYPE?		1	27	0	0
5002	GREY	J	BA	1			BS; LOC		1	10	0	0
5002	GREY	OPEN?		1			BS; LOC		6	27	0	0
5002	GREY	-		9			BS; LOC		9	71	0	0
5002	GREY	CLSD		4	CALC FUR INT		BS; LOC; INTERNAL DEPOSITS		4	46	0	0
5002	GREY	CLSD	BHL; BWL	1			BS; LOC		2	52	0	0
5002	GREY	BL	BHL; BWL	1			BS		3	16	0	0
5002	SHEL	CLSD	WM/WF	1	SOOT EXT		BS ?SHLDR SOOT; SPARSE SHELL		1	24	0	0
5012	SPOX	CLSD		1			BS; BEARKER BASE?		1	12	0	0
5012	NVCC1	BKCOR	BAD	1			RIM;		1	9	7	15
5012	NVCC?	BKCOR		1			RIM		1	7	9	6
5012	GREY	L		1	ABR		RIM; LOC PALE CORE		1	19	22	8
5012	NVCC1	BKFN		1			RIM;?PEAR SHAPEDOR LONG NECKED FORM		1	6	7	7
5012	NVCC1	BKFO		1			BS		1	5	0	0
5012	GREY	-		4	ABR		BS; LOC		4	12	0	0
5012	GREY	BL		1	ABR		BS LOWER WALL; LOC		1	73	0	0
5012	GREY	CLSD	BWL	1			BS; LOC		1	12	0	0
5012	GREY	OPEN	WF; B INT; BWL EXT	1			BS; LOC		1	28	0	0
5012	GREY	CLSD		1	ABR		BS; LOC		1	13	0	0
5012	GREY	BWM3?	BHL	1			BS SHLDR NECK; LATE EXAMPLE		1	58	0	0
5019	GREY	BFB		1			RIM GIRTH; LATE STRAIGHT SIDED EXAMPLE AS D&P 1278		1	46	19	12
5019	GREY	JB		1	VABR		RIM; EVERTED??		1	36	19	11
5019	GREY	BL		1			BS LOWER WALL; LOC; BWM?		1	95	0	0
5019	GREY	BL	BIA	1	VABR		BS LOWER WALL; LOC; BWM?		2	41	0	0
5019	BBT	CLSD	B EXT	1	ABR		BS; LOC		1	6	0	0
5019	SHEL	J	WM	1	SOOT EXT		BS SHLDR; SOOT		1	23	0	0
5005	SHEL	JL	HM	1	?MORTAR EXT; WIPE MARKS	*	RIM; LARGE OXIDISED INCLUDING LIMESTONE AND PUNCTATE BRAC SHELL- SOUTHERN LINCS; AS D&P 753 FROM COT PLACE CP56 DATED ML3; ALMOST A SHELLY TILE FABRIC		1	183	46	5
5005	GREY	OPEN?	BIA?	1			BS; LOC PALE CORE		2	20	0	0
5005	GREY	OPEN	BWL	1			BASE; LOC		1	9	0	0
5005	BB1?	OPEN	BWL	1			BASE		1	15	0	0
5005	GREY	CLSD	BA	1			BS; LOC		1	3	0	0
5005	SHEL	CLSD	WF?	1	SOOT EXT		BS SHLDR		1	10	0	0
5010	MOLO	M		1	WORN INT		BASE; VERY WORN INTERNAL SINGLE TRIT SURVIVES! QUARTZ- MOSC OR PROB TECH PRODUCT		3	201	0	0
5010	GREY	JEV		1			RIM; LOC PALE CORE; EARLY GREY		1	22	18	11
5007	NVCC2	BK		1	ABR		BS; LATE FAB		1	4	0	0
5007	NVCC	OPEN		1	ABR		BS		1	7	0	0
5007	CR	F		1			BS; NECK SMALL EXAMPLE		1	10	0	0
5007	OX	CLSD		1			BS		1	4	0	0
5007	GREY	JL		1			RIM; LOC; THICK EVERTED RIM; JL OR JLH TYPE		2	39	18	13
5007	GREY	JEV		1			RIM; LOC PALE CORE		1	6	14	2

Appendix 1- SMLI07 Roman pottery archive												
Context	**Fabric**	**Form**	**Decoration**	**Vessels**	**Alt**	**Drawing**	**Comments**	**Join**	**Sherd**	**Weight**	**Rim diam**	**Rim eve**
5007	GREY	-		1			RIM; LOC PALE CORE		1	7	0	0
5007	GREY	OPEN?		1	CALC KETTLE FUR INT		BS; LOC; INTERNAL CALC DEPOSIT		1	9	0	0
5007	DWSH	JDW		1	SOOT OVER RIM		RIM SHLDR; AS GILLAM 157		5	94	18	21
5007	DWSH	JDW		1			RIM; AS GILLAM 157		1	0	19	7
5007	SHEL	-		1			BASE SCRAP		1	3	0	0
5007	SHEL	CLSD		2			BS SCRAPS		2	7	0	0

APPENDIX H

ASSESSMENT OF THE SHELL FROM STRELIZIA, MICHAELGATE, LINCOLN (SMLI07)

Janey Brant

INTRODUCTION

An archaeological watching brief was carried out by Network Archaeology at Strelizia, Michaelgate, Lincoln in 2007. A small amount of hand-collected shell was recovered from the deposits revealed. The shell assemblage is shown in Table 1.

Table 1: Summary of shell recovered from fieldwork at Strelizia, Michaelgate, Lincoln (Network Archaeology SMLI 07).

Context	No of fragments	Weight (g)	Comments
400	2	59	Oyster shell (ostrea edulis). Lids of two different oysters. Approximately 3-4 years old
1301	1	24	Oyster shell (ostrea edulis). Lid of one oyster. Approximately 5 years old.
5001	2	59	Oyster shell (ostrea edulis). Lid and base which make one whole oyster. Approximately 5 years old
5001	3	7	Snail shell of the helix aspersa species.
5002	26	722	Oyster shell (ostrea edulis). 11 lids, 15 base shells. None make a whole oyster. One of the lids has barnacles stuck to it, and several of the bases have much smaller shells adhering to them.
5002	1	4	Snail shell of the helicid species
5005	2	43	Oyster shell (ostrea edulis). Lid of one oyster. Approximately 3 years old.
5007	5	105	Oyster shell (ostrea edulis). Three lids and two base shells. None make a whole oyster. Approximately 2-3 years old.
5007	1	3	Snail shell of the helix aspersa species.
5008	2	54	Oyster shell (ostrea edulis). Lid and base which make one whole oyster. Approximately 3 years old
5012	6	227	Oyster shell (ostrea edulis). Two lids and four base shells. None make a whole oyster. Approximately 5 years old.
5012	4	8	Snail shell of the helix aspersa species.
5012	2	28	Whelk shell
5019	1	44	Oyster shell (ostrea edulis). One base shell. Approximately 5 years old.
5019	1	13	Whelk shell
7000	6	164	Oyster shell (ostrea edulis). One lid and five base shells. None make a whole oyster. Approximately 3-6 years old.
7000	1	5	Snail shell of the helicid species

7001	5	8	Snail shell. 3 shells of the helicid species, 2 shells of the helix aspersa species
Total	**71**	**1577**	

METHODOLOGY

Brief notes were made on the condition of the shell and the remains identified to species where possible.

DISCUSSION

The oyster and whelk shell found on the site would have been imported into Lincoln from the coast where they would have been farmed. Although all the fragments were found in possible Roman contexts, there is evidence that these deposits were worked and re-worked in the medieval and post medieval periods. Given that oysters were eaten in both the Roman and medieval periods it is difficult to assign a date to when they would have been consumed. The snail shells can be disregarded as they are a common garden species and would have probably found their way on to the site naturally.

CONCLUSION

The assemblage does not contain archaeologically significant material.

RECOMMENDATIONS

No further analysis is recommended on the assemblage covered by this assessment. Once recorded for archive purposes, these fragments can be discarded.

APPENDIX I

ASSESSMENT OF THE WORKED STONE FROM STRELIZIA, MICHAELGATE, LINCOLN (SMLI07)

Ruth Shaffrey

SUMMARY AND QUANTIFICATION

Five pieces of stone were retained, none of which are worked.

METHODOLOGY

The stone was examined with the aid of a x10 magnification hand lens.

DESCRIPTION

Of the five pieces of stone retained, none have been humanly modified and all the stone could have been obtained relatively locally. One fragment (1300) has some scratches but these appear to be recent and do not indicate evidence that the piece was used as a hone.

CATALOGUE

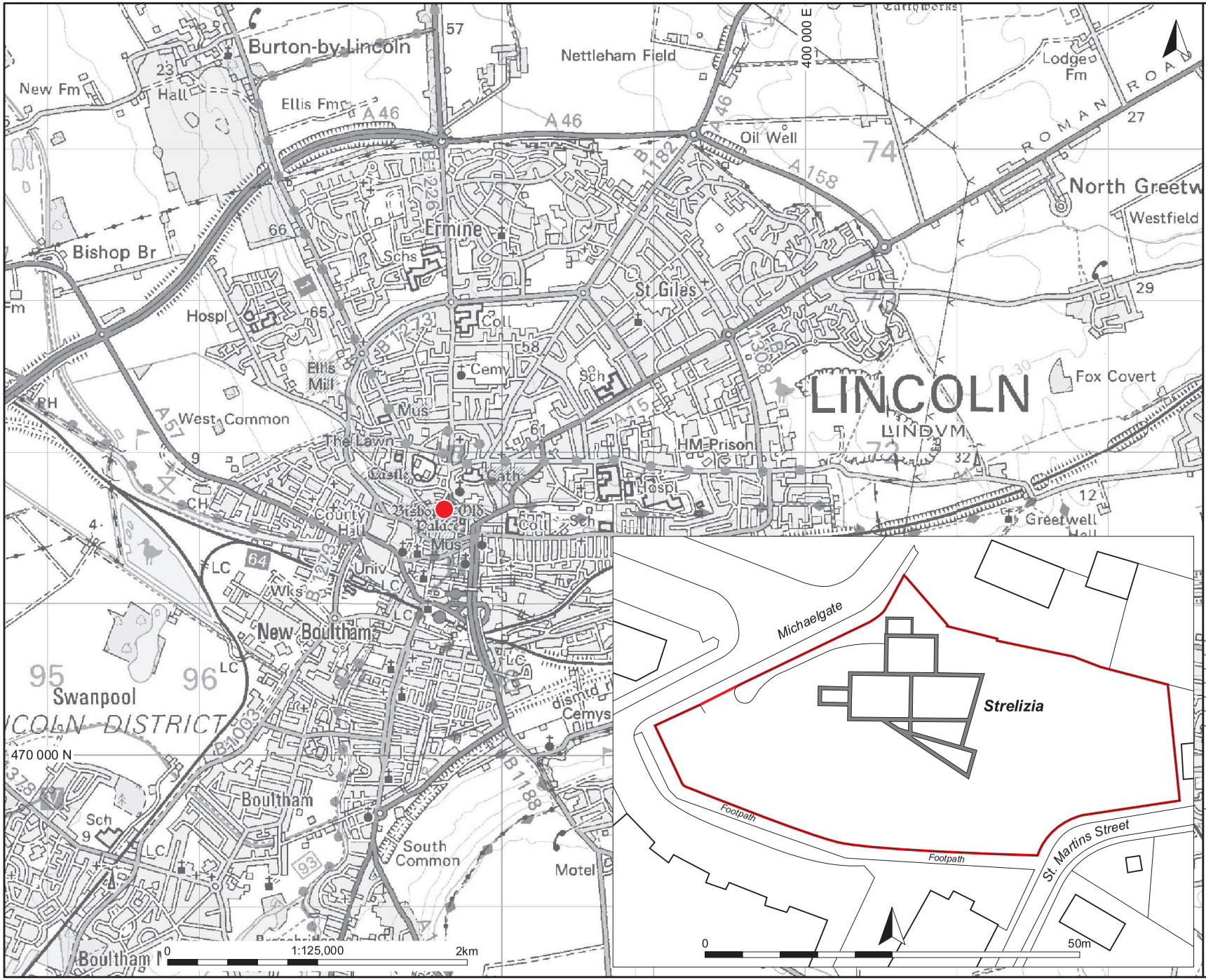
Ctx	Description
1301	Unworked chunk of oolitic limestone
5002	Thin slab of unworked sandstone
1300	Slab of micaceous sandstone - has some small scratch marks that are apparently recent
1500	Small slab micaceous sandstone, unworked
5012	Small slab micaceous sandstone, unworked

STATEMENT OF POTENTIAL

This assemblage has no potential to contribute to our understanding of the site and the stone can be discarded.

RECOMMENDATIONS FOR FUTURE WORK

No further work is recommended.



Site location

Ver	Date	Description	DM	Chk	App
1.00	24/2/10	Edits	JLH	CC	MW
0.02	17/12/09	Edits	JLH	CC	MW
0.01	8/12/09	Site location	JLH	CC	MW

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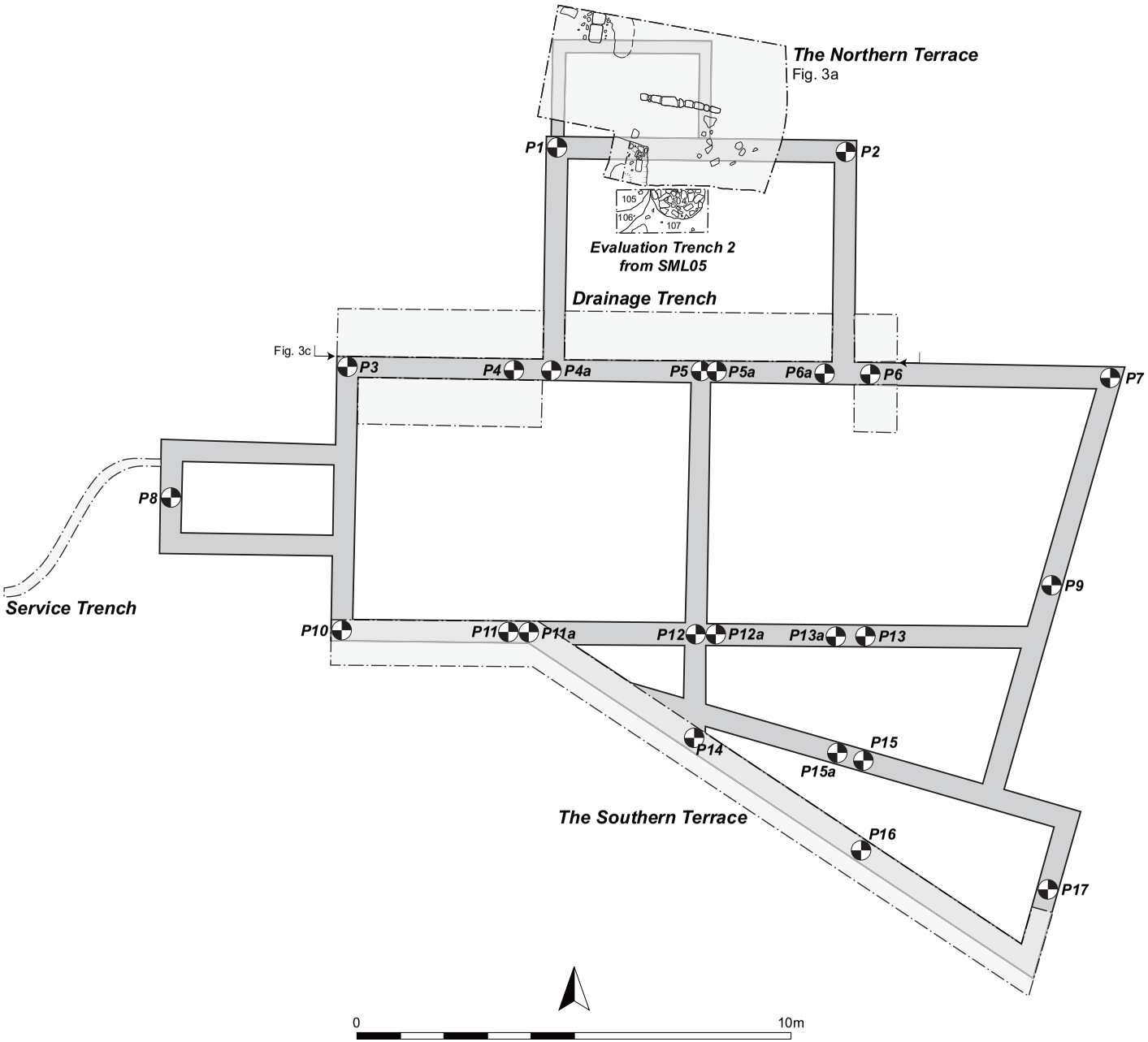
Strelizia, Michaelgate, Lincoln

Figure 1: General location of site

Scale 1:125,000 and 1:500



P1	Pile number
	Watching brief areas
	Concrete ground beam
	Augered piles (450mm diam)

Ver	Date	Description	DM	Chk	App
1.00	24/2/10	Edits	JLH	CC	MW
0.02	17/12/09	Edits	JLH	CC	MW
0.01	8/12/09	Plan and sections	JLH	CC	MW

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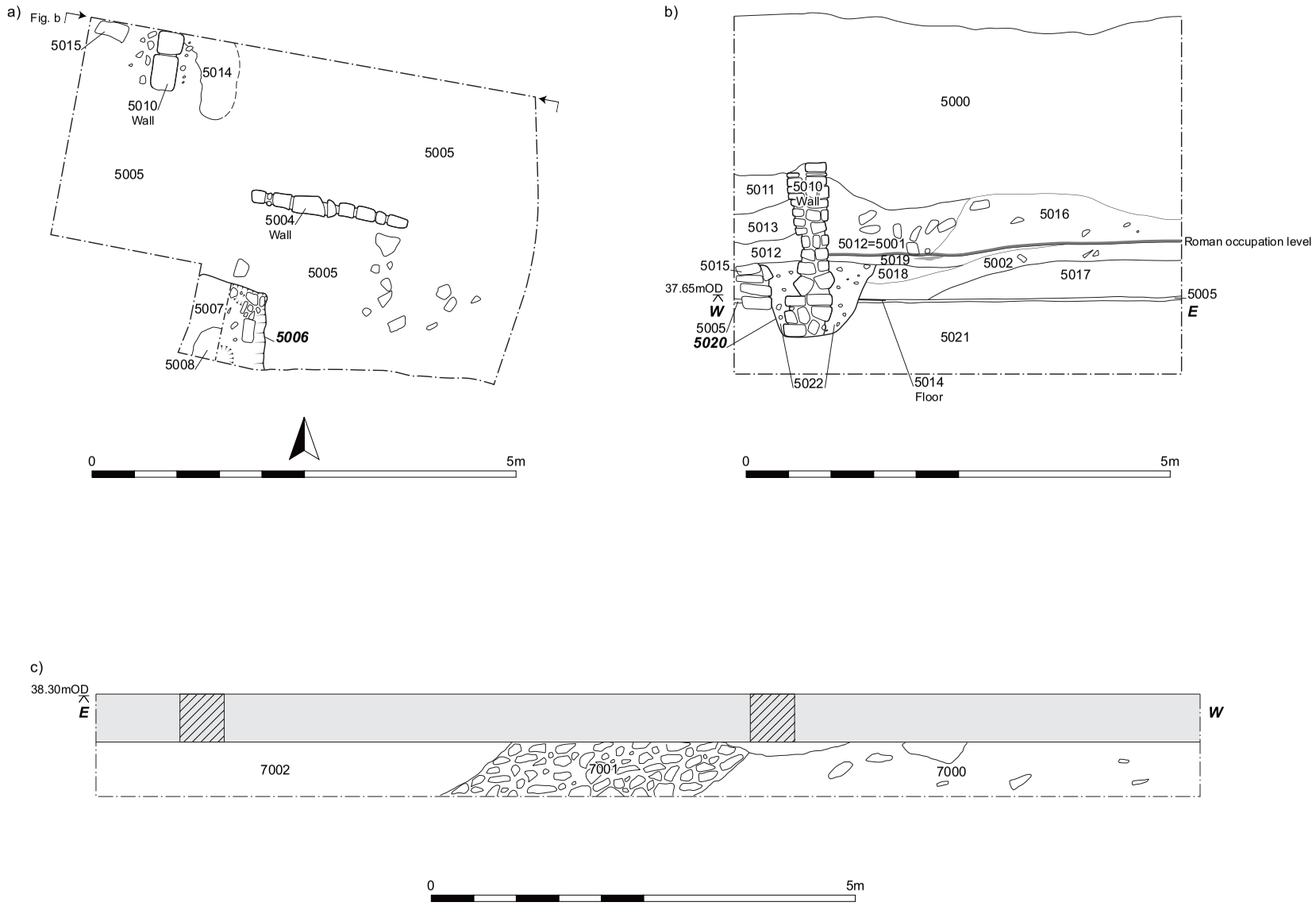
Strelizia, Michaelgate, Lincoln

Figure 2: Plan of Ground Beam and Watching brief areas

Scale: 1:100



Limit of excavation

Cut line

Layer line

1234 Cut number

1233 Layer/fill number

Lens of ash

Concrete ground beam

Ground beam (end profile)

Ver	Date	Description	DM	Chk	App
1.00	24/2/10	Edits	JLH	CC	MW
0.02	17/12/09	Edits	JLH	CC	MW
0.01	8/12/09	Plan and sections	JLH	CC	MW

network archaeology

Strelizia, Michaelgate, Lincoln

Figure 3:

a) Plan of The Northern Terrace
b) Section of The Northern Terrace
c) Section of Drainage Trench

Scale: 1:50

PLATES

Plate 1 Site location

Plate 2 South facing section showing the Roman wall in the northern retaining wall excavation

Plate 3 South facing section showing the Roman made-ground in the northern retaining wall excavation

Plate 4 Underlying Upper Lias clay geology

Plate 5 Extent of occupation layer 5005

Plate 6 Single coursed east-west limestone wall

Plate 7 Drilling for piled foundations

Plate 8 Excavation of the southern terrace bank reinforcement