



Northamptonshire Archaeology

An archaeological trial trench evaluation at
Swan Street car park
Northampton
July 2013



Northamptonshire Archaeology

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OASIS REPORT FORM

PROJECT DETAILS		OASIS No: 156673
Project name	An archaeological trial trench evaluation at Swan Street car park, Northampton, July 2013	
<p>An archaeological trial trench excavation at Swan Street car park, Northampton, identified a medieval pit below cultivation soils, similar to evidence previously identified at nearby sites within the Norman New Borough. The medieval soils had been heavily truncated by post-medieval terracing in the south of the proposed development, fronting St Johns Terrace. Below the main car park the medieval layers were thicker and more deeply buried, but had been subjected to heavy vertical truncation by basements, a well and service lines belonging to the former Lion Foundry. No structural remains were identified that predated the foundry works. Sufficient pottery was retrieved to provide a datable stratigraphic sequence, but the quantity of finds suggested a site with low intensity medieval activity and with minimal dumping.</p>		
Project type	Trial trench evaluation	
Site status	None	
Previous work	Desk-based assessment (Shepherd 2013)	
Current land use	Car park	
Future work	Unknown	
Monument type/period	Late medieval cultivation soils	
Significant finds	Pottery, clay tobacco-pipe and a jetton	
PROJECT LOCATION		
County	Northamptonshire	
Site address	Swan Street, Northampton	
Study area	0.21ha	
OS NGR	SP 75667 60275	
Height a OD	c65-68m above Ordnance Datum	
PROJECT CREATORS		
Organisation	Northamptonshire Archaeology	
Project Brief originator	Lesley-Ann Mather, Northamptonshire County Council	
Project Design originator	Jim Brown, Northamptonshire Archaeology	
Director/Supervisors	Jim Brown, Northamptonshire Archaeology	
Project Managers	Jim Brown, Northamptonshire Archaeology	
Sponsor or funding body	CgMs Consulting (Cheltenham)	
PROJECT DATE		
Start date	29th July 2013	
End date	1st August 2013	
ARCHIVES	Location (Accession no)	Content (eg pottery, animal bone etc)
Physical	Northamptonshire Archaeology store	Pottery, clay tobacco-pipe and a jetton
Paper		Trench record sheets, site registers, photographic archive, background documents
Digital		Client PDF report
BIBLIOGRAPHY		
Journal/monograph, published or forthcoming, or unpublished client report		
Title	An archaeological trial trench evaluation at Swan Street car park, Northampton, July 2013	
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**AN ARCHAEOLOGICAL TRIAL TRENCH EVALUATION AT
SWAN STREET CAR PARK, NORTHAMPTON
JULY 2013**

Abstract

An archaeological trial trench excavation at Swan Street car park, Northampton, identified a medieval pit below cultivation soils, similar to evidence previously identified at nearby sites within the Norman New Borough. The medieval soils had been heavily truncated by post-medieval terracing in the south of the proposed development, fronting St Johns Terrace. Below the main car park the medieval layers were thicker and more deeply buried, but had been subjected to heavy vertical truncation by basements, a well and service lines belonging to the former Lion Foundry. No structural remains were identified that predated the foundry works. Sufficient pottery was retrieved to provide a datable stratigraphic sequence, but the quantity of finds suggested a site with low intensity medieval activity and with minimal dumping.

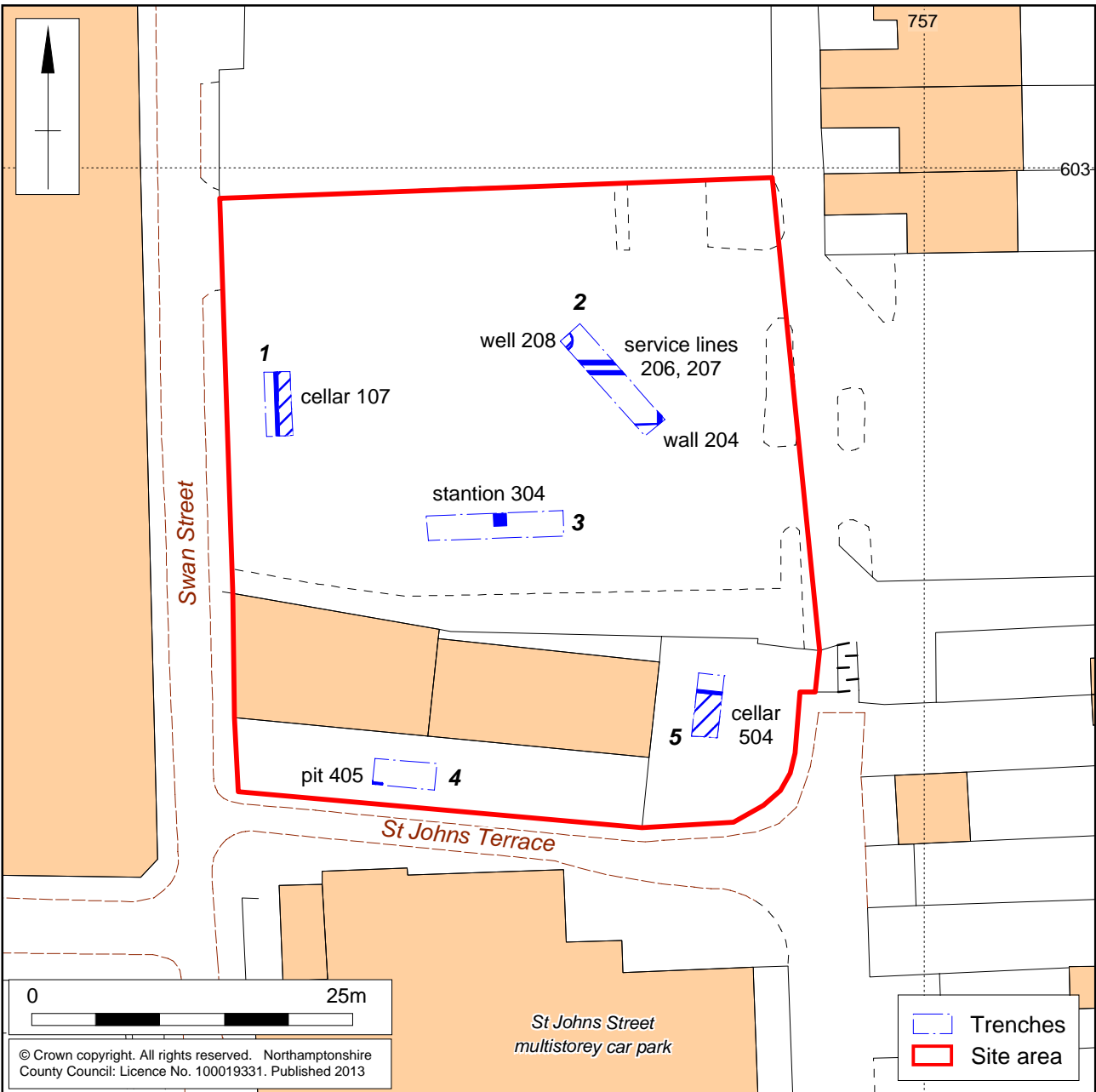
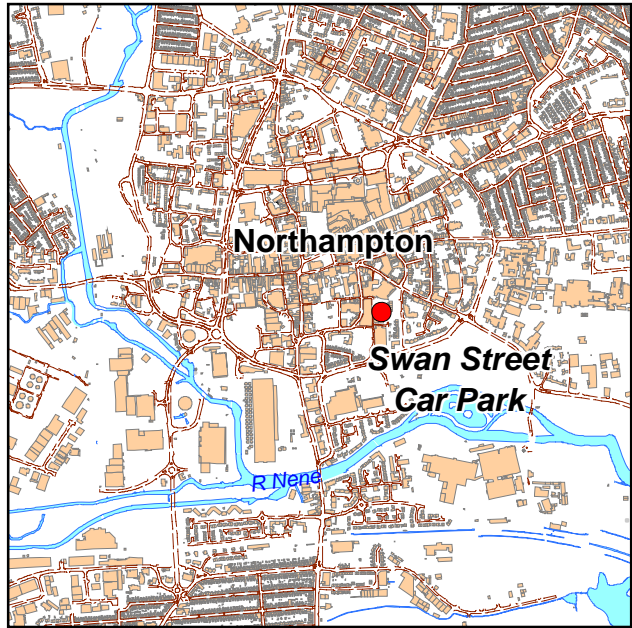
1 INTRODUCTION

Northamptonshire Archaeology (NA) undertook trial trench excavations at the Swan Street car park, Northampton at the end of July 2013, for CgMs Consulting on behalf of their clients. The proposed development site lies within the planned later medieval town of Northampton, known as the 'New Borough', and is on the east side of one of its medieval streets (Fig 1; NGR SP 75667 60275). An archaeological desk-based assessment was conducted by CgMs Consulting in preparation for a proposal for development (Shepherd 2013). The possibility of archaeological remains associated with the medieval urban development of Northampton was anticipated within the site and subsequently Northamptonshire County Council (NCC) planning required a programme of trial trench investigation in order to assess the presence or absence, date and preservation of any such remains. No formal brief was issued. A Written Scheme of Investigation (WSI) was prepared by NA in advance of the work to meet the requirements of NCC planning (Brown 2013). All work was undertaken in compliance with the expectations of NCC planning and was monitored by the County Archaeological Advisor and the client's representative from CgMs Consulting.

2 ARCHAEOLOGICAL BACKGROUND

2.1 Previous archaeological work nearby

The site lies within the southern portion of the Norman 'New Borough', established outside the postulated circuit of the earlier Saxon *burh*, which is thought to be situated to the west of Bridge Street and is 250m west of the site. Prior to this date the site is thought to have been an agricultural hinterland. The streets that formed the eastward extension of the town are thought to have been laid out during the 12th-century expansion (Foard 1995), of which Swan Street (*Cow Lane*) was amongst them, although opinion is divided upon this theory (Welsh 1996-7). Historic map evidence and Historic Environment Record (HER) data indicate that medieval tenement plots occupied parts of the street frontages after this date (Shaw 1985; 1993; Shaw and Steadman 1989; Brown 2008; 2010). Remains of the post-medieval settlement would also be expected.



Scale 1:500

Site location and trench layout Fig 1

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Other sites that have been excavated within the town have shown varied levels of preservation, largely the direct impact of the extensive cellars established from the 18th-century onwards. An archaeological desk-based assessment of Swan Street was conducted by CgMs Consulting and has demonstrated that it was formerly occupied by the Lion Foundry works, which may have had a significant impact upon the site (Shepherd 2013). The site has also been terraced on two levels, and it is uncertain how much of the medieval and post-medieval settlement remains will have been removed.

No substantial remains have been recovered from the town, predating the Saxon period, although there have been prehistoric finds from early cultivation soils, predating the New Borough at Derngate (Shaw 1984), St John Street & Fetter Street (Shaw 1993) and St Johns car park (Shaw and Steadman 1994).

The first documented appearance of *Cow Lane* is from a 1275 reference to Cougate (Shaw 1984). There are subsequent references of 1414 to four cottages with gardens, and thereafter stables and orchards. These properties are likely to be the four illustrated on Speed's map of 1610, at the north end of Cow Lane. A trench excavated adjacent to the northern part of Swan Lane revealed evidence for first timber and then stone buildings from the 12th to 14th centuries (Shaw 1984).

At the southern end of Swan Street, excavations on the former St Johns car park contained evidence of land use dating from the late 11th to 15th century, alternating between cultivation and low status, ephemeral settlement. This appears to indicate that an area of predominantly gardens or fields was from time to time used for temporary squatter settlement, in contrast to the permanent and more substantial buildings occupied to the north. Similar evidence for insubstantial episodic occupation was recorded to the west on the former Northampton High School for Girls site (Hiller *et al* 2002).

2.2 Topography and geology

The proposed development area is located within the planned later medieval town of Northampton (Fig 1; NGR SP 75667 60275) comprising an area of c2133sqm. The site has two levels; the upper level is currently occupied by a car park, the lower level has a redundant row of office buildings fronting onto a parking apron. The site is bounded by Swan Street to the west, further car parking to the north and east, and a narrow access road from St Johns Street to the south. The natural contour of the slope lies at between 68-65m above Ordnance Datum and faces south across the River Nene.

The geology of the site is Northampton Sand and Ironstone at the upper end of the site, with Upper Lias Clay closer to St Johns Street (BGS 2001). The soils are likely to be of the Wickham 2 association, comprising slowly permeable seasonally waterlogged fine loam over clayey soils, above clay and mudstone (LAT 1983).

3 EXCAVATION STRATEGY

3.1 Objectives

Prior to trial trench evaluation there was insufficient information to establish the extent of surviving archaeological remains or the possible impact of development and for the formation of an appropriate mitigation strategy.

The general purpose was to understand the nature, function and character of the site in its urban cultural and environmental setting, specifically:

- establish the date, nature and extent of activity or occupation on the development site;
- recover artefacts to assist in development of the type series within the region;
- and to recover palaeo-environmental remains where they are encountered

The excavation was carried out within the parameters suggested by the published research priorities set out for the East Midlands (EH 1997; Cooper 2006; Knight *et al* 2012).

3.2 Methodology

Five trial trenches, totalling 40m in length, were excavated in locations agreed in advance with NCC planning. The trenches were located so as to avoid principal constraints formed by obstructions and buried services, and were measured into mapped Ordnance Survey boundaries using hand tapes.

The surface tarmac and concrete was broken up with mechanical breaker and each trench was then graded under archaeological supervision using a 360° tracked mechanical excavator fitted with a toothless ditching bucket. Machine excavation continued to reveal archaeological remains or, where these were absent, undisturbed natural horizons. Machine excavation removed modern levelling layers and homogeneous cultivations soils. Deposits below this were cleaned and investigated by hand where present. Spoil and the surface of archaeological features were scanned by eye and with a metal detector to ensure maximum finds retrieval.

Each excavation area was cleaned sufficiently to enable the identification and definition of archaeological features. All archaeological deposits and artefacts encountered during the course of excavation were fully recorded. The recording followed the standard NA context recording system with context record sheets using unique numbers drawn from a central register for each feature or deposit, cross-referenced to scale plans, section drawings and photographs in digital, and on 35mm monochrome film (NA 2011). Deposits were described on *pro-forma* record sheets to include measured and descriptive details of the context, its relationships, interpretation and a checklist of associated finds. Archaeological sections of sampled features were drawn at scale 1:10 or 1:20, as appropriate, and all levels were related to Ordnance Survey datum. Spot heights were measured in for each trench and significant deposit.

Artefacts were collected by hand. Unstratified animal bones and modern material were not collected. All finds have been boxed by material type. The field data has been compiled into a site archive with appropriate cross-referencing in accordance with best practise (IfA 2008b; MGC 1992; AAF 2007) and the finds have been prepared for long term storage in a stable environment (Walker 1990; Watkinson and Neal 1998).

4 THE EXCAVATED EVIDENCE

The natural substrate was Northampton Sand with Ironstone, which occurred as light to mid orangey-brown sandy clay with frequent shattered sub-angular ironstone fragments throughout. In places there were patches of fine pinkish-orange sandy clay filling voids within the matrix. Drainage of surface water was good. The archaeological and surface deposits were distributed above this geological horizon, with a single pit cut into the substrate horizon within trench 4.

The surface of the main car park (trenches 1-3) comprised a patchwork of various episodes of tarmac and concrete that formed a solid horizon, 70-120mm thick. On the parking apron along St Johns Terrace (trench 4), the concrete surface was 100mm thick. The small private car park at the east end of St Johns Terrace (trench 5) had a surface comprising pinkish-grey Type 1 aggregate that was 170mm thick. Few finds were retrieved during machine excavation and it would seem that the finds which were retrieved represented a generally low level of activity in late medieval and early post-medieval periods, before the Lion foundry was built.

4.1 Summary of the site chronology

Table 1: Site chronology

Period	Nature of activity
medieval (12th-15th centuries AD)	possible presence of low density scattered quarry pits, overlain by a gradual build up of cultivation soils
early post-medieval (16th-18th centuries AD)	continued build up of cultivation soils
late post-medieval (19th-20th centuries AD)	St Johns Terrace built, cutting into the contour of the natural slope Beehive Foundry established in 1830, later renamed Lion Foundry; basements, wells, service lines, foundation walls and burnt deposits created

4.2 Medieval features and deposits

Features

A single pit, 405, was hand excavated in the south-west corner of trench 4. The full extent of the pit lay beyond the extent of the trench and its true dimensions are speculative. The sub-rectangular corner of the pit suggests that it was over 0.8m long by at least 0.5m wide (Fig 2), the angle of the side was fairly sharp and suggests the pit could easily be bigger. The fill material did not appear hugely different to the loamy soils which overlay it, and it is likely to have been created within an area of open ground, and filled in soon after its disuse. The pit contained a sherd of mid-13th-century Potterspury ware, although this continued in production to the late 16th century.

No other features were visible within the other trenches, mainly because their depth precluded more detailed examination. The variations in the depth of the substrate within trenches 2-3 indicate that further pits may exist, and the presence of a pylon of natural Northampton Sand with ironstone in the south-east end of trench 2 that stood 0.65m higher than the substrate across the rest of the trench suggest that this variation is probably due to medieval quarrying (Fig 3).



Pit 405, Trench 4, looking south Fig 2



Pylon of Northampton Sand with ironstone at base of Trench 2, looking west Fig 3



Trench 3, looking south-east Fig 4



Trench 4, looking west Fig 5

Cultivation soils

The lowest horizons within four of the trenches indicated the presence of gradual accumulations of loamy soil. The soils varied in thickness, partly due to the possible quarrying below the main car park (Figs 3-4), but principally due to the level of truncation along St Johns Terrace (Figs 5-6). The levels at which these soils were encountered was starkly different between the main car park and St Johns Terrace owing to the rapid fall in the natural slope (Fig 8). The soils produced pottery ranging in date between the mid-13th to 14th centuries and had been heavily truncated by deep cellars, wells, service lines and the row of buildings forming the terrace. A copper alloy jetton was recovered from the top of layer 402 in trench 4, which is of 16th to 17th-century date and indicates that cultivation soils accumulated well into the post-medieval period and that the archaeological thickness is not proportionate across the site.



Trench 5, looking north-west Fig 6

4.3 Post-medieval cultivation soils

The post-medieval deposits that predated the foundry were difficult to identify with clarity. Map evidence suggests that there was no discernible change in land use until the town expanded in the 19th century. The uppermost horizon of the buried cultivation soil, 308, was slightly darker and more bluish-grey in colour. This was c100mm thick and produced a single sherd of late 15th- to 16th-century Cistercian ware and an early 18th-century clay-tobacco pipe bowl. The whole of the post-medieval horizon is expected to be thicker than 100mm within the main car park (trenches 2-3), and the top 400mm of the archaeological deposit probably represents soils of the 16th-18th centuries. In trenches 4-5 the presence of the 16th to 17th-century jetton indicates that the post-medieval deposit survives as a surface interface only, and the lower 300mm of cultivation soil was of medieval date.

4.4 Remains of the 19th-century foundry

The foundry was established by John Brettell in 1830 following a dispute at the Eagle Foundry in Bridge Street, published in *The Mercury* on the 25th May 1830 and the 5th June 1830. The result of the dispute was that John Brettell left the company to open the Beehive Foundry in Cow Lane (Instone 1970, 4). Brettell later changed the name of the business to the Lion Foundry, which occupied the site well into the 20th century before it was closed down, demolished and the site was used as an auto centre and then latterly as a car park.

The difference between the dark soils that mark the deposits associated with the former foundry works and the much lighter brown cultivation soils is distinct and clear. A black silty loam layer is present, unevenly distributed beneath much of the main car park, and occasionally containing fragments of brick, slate, ironstone, burnt deposits such as coal and metalwork. Where structures such as cellars and basements have been filled, this deposit has become mixed with demolition material (Fig 7).

The structures which were encountered comprised cellars in trenches 1 and 5; a well, brick foundation and brick-lined service trenches in trench 2; and a brick/concrete stantion block in trench 3. These structures were in generally poor condition and were filled and overlain by demolition material, forming a base for the present car park.



Trench 1, looking north Fig 7

5 THE FINDS

5.1 The pottery by Paul Blinkhorn

The pottery assemblage comprised eighteen sherds with a total weight of 114g, all of which was medieval. The pottery was quantified using the chronology and coding system of the Northamptonshire County Ceramic Type-Series (CTS), as follows:

- F319: Lyveden/Stanion 'A' ware, AD1150-1400, 1 sherd, 4g
- F324: Brill/Boarstall ware, early 13th-16th centuries, 1 sherd, 3g
- F329: Potterspury ware, AD1250-1600, 10 sherds, 76g
- F330: Shelly coarseware, AD1100-1400, 5 sherds, 16g
- F404: Cistercian ware, AD1470-1600, 1 sherd, 15g

The pottery occurrence by number and weight of sherds per context by fabric type is shown in Table 2. Each date should be regarded as a *terminus post quem*.

Table 1: Pottery occurrence by number and weight (in g) of sherds per context by fabric type

Context	F330		F319		F324		F329		F404		Date
	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	
209	2	9					2	22			mid-13th century
308									1	15	late 15th century
309	3	7					5	45			mid-13th century
402			1	4	1	3	2	7			mid-13th century
404							1	2			mid-13th century
Totals	5	16	1	4	1	3	10	76	1	15	

The fabric types are typical finds on medieval sites in Northampton, and all were noted at previous excavations in Swan Street (Denham and Shaw 1993-4, 145). They suggest that there was activity at the site from the mid-13th to the late 15th-16th centuries. All the sherds are in good condition, and appear reliably stratified.

5.2 A jetton and clay tobacco-pipe by Tora Hylton

Jetton

A Nuremburg stock jetton was recovered from the cultivation soil in trench 4, layer 402. The obverse depicts three open crowns and three lys arranged alternately around a rose, within an inner circle of rope pattern. The reverse depicts the Reichsapfel within a double tressure of three curves and three angles set alternately. The legend is illegible on both sides. The diameter is 25mm and the jetton dates to the 16th-17th centuries (Barnard 1916, 222, 82).

Clay tobacco-pipe

A single clay tobacco-pipe bowl was recovered from Trench 3, layer 308. Typologically the bowl equates to an Oswald Type G19 (1975, 37 ff) which dates to c1690-1710. The exterior surface is burnished and there is a partial line of rouletting set just below the rim, a decorative motif used until c1710 (cf. Moore 1980, fig 6, 9). A vestige of the stem provides a bore measurement of 7/64's.

6 CONCLUSIONS

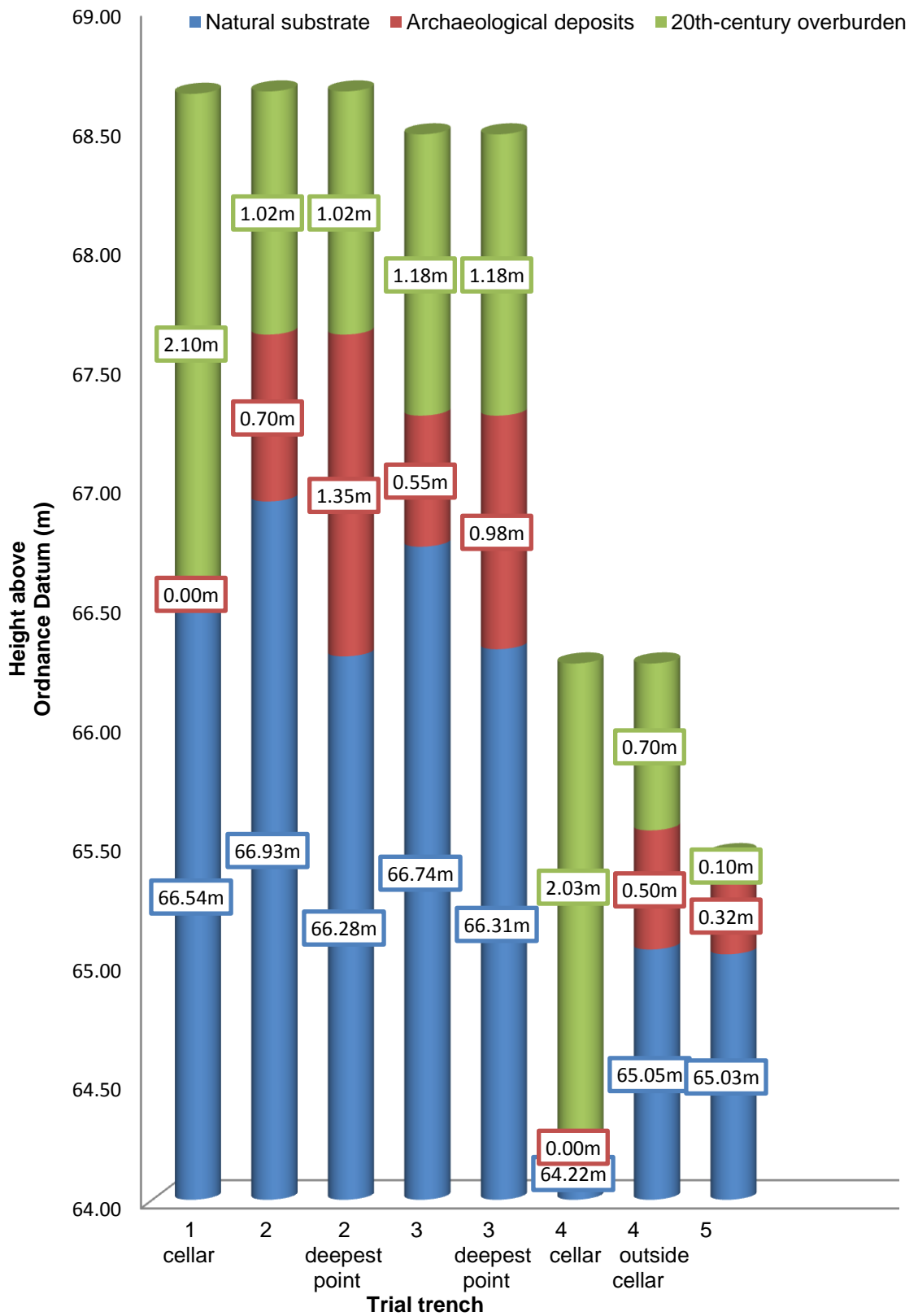
Archaeological deposits were identified during trial excavation of the site at a depth of over 1.0m below the existing main car park surface, at 0.7m below the surface of the aggregate in the private car park area (trench 5) and at 0.1m below the concrete parking apron in front of St Johns Terrace. The archaeological deposits were predominantly late medieval in date, broadly spanning a period between the mid-13th and 15th centuries, with post-medieval deposits of the 16th to 18th centuries overlying them.

The nature of the deposits was not complex prior to the establishment of the 19th-century foundry. A single pit was identified, 405, and this was on St Johns Terrace. Other pits probably survive cut into the natural and buried at the base of the archaeological sequence. The variation in thickness of the archaeological deposit across trenches 2 and 3 indicates that other sub-surface features may exist which were not visible in the trenches at depth (Fig 8). Any pits are likely to be few in number, probably the result of quarrying stone, and may be scattered. There was no evidence of medieval structures and the quantity and variety of finds was too low for there to have been any substantial domestic, industrial or waste disposal activities within the period prior to the 19th century. The thick build-up of silty clay loam material was largely of consistent firm light greyish-brown colour, a stark difference to the darker 19th-century horizons. Medieval soils are likely to have been a gradual accumulation of cultivation material, which is consistent with observations from nearby sites at Derngate (Shaw 1984), St John Street and Fetter Street (Shaw 1993; Brown 2010), St Johns car park (Shaw and Steadman 1994) and the former Northampton High School for Girls (Hiller *et al* 2002).

Overall it would seem that the east part of the medieval town maintained a largely rural character well into the post-medieval period, as shown on the map of 1746 by Jeffreys and the map of 1810 by Britten (Shepherd 2013, figs 3-4). The uppermost horizons of the cultivation soils would have been deposited in the 16th-18th centuries, prior to the construction of the foundry. This was confirmed by the recovery of Cisterian ware, a jetton and a clay tobacco pipe.

During the mid-19th century, St Johns Terrace was created, which cut a substantial step into the side of the natural contour of the slope. The gradient of the hillside had been fairly steep, dropping rapidly from 68m above Ordnance Datum in the north to 65m above Ordnance Datum in the south. This terracing truncated the archaeological deposits so that the larger part of the 16th to 18th-century deposit was removed and the soil that now lies directly beneath the 20th-century surface layers are predominantly of medieval origin. Given the thickness of this deposit in trench 4 compared to trenches 2-3, it also indicates that the medieval cultivation soils are distributed unevenly and lends weight to the hypothesis that quarry pits may be present beneath the main car park.

A foundry was built in 1830 and its impact has led to large scale vertical truncation of the medieval horizons. Basements, cellars, service lines and at least one well cut deep, reaching the natural geological substrate in places. Preservation within the site is therefore patchy and large areas of archaeology, particularly in the vicinity of basements and wells, are likely to have been obliterated (Fig 8).



Deposit model Fig 8

BIBLIOGRAPHY

- AAF 2007 *Archaeological Archives: a guide to best practice in creation, compilation, transfer and curation*, Archaeological Archives Forum
- Barnard, F P, 1916 *The casting counter and the counting board: A chapter in the history of numismatics and early arithmetic*, Oxford Clarendon Press
- Brown, J, 2008 Excavations at the corner of Kingswell Street and Woolmonger Street, Northampton, *Northamptonshire Archaeol*, **35**, 173-214
- Brown, J, 2010 *Medieval and post-medieval remains at Angel Street car park, Northampton*, Northamptonshire Archaeology report, **10/107**
- Brown, J, 2013 *Written Scheme of Investigation for an archaeological trial trench evaluation at Swan Street car park, Northampton*, Northamptonshire Archaeology
- Cooper, N J, (ed) 2006 *The Archaeology of the East Midlands: an archaeological resource assessment and research agenda*, University of Leicester/English Heritage, **13**
- Denham, V, and Shaw, M, 1993-4 The Pottery, in M Shaw and S Steadman 1989, 143-7
- EH 1991 *Exploring our past*, English Heritage
- EH 1997 *English Heritage Archaeology Division Research Agenda*, English Heritage
- EH 2006 *Management of Research Projects in the Historic Environment: The MoRPHE Project Managers Guide*, English Heritage
- EH 2008 *Management of Research Projects in the Historic Environment, PPN3: Archaeological excavation*, English Heritage
- EH 2011 *Environmental Archaeology: A Guide to Theory and Practice for Methods, from sampling to post-excavation*, 2nd edition, English Heritage
- Foard, G, 1995 The early topography of Northampton and its suburbs, *Northamptonshire Archaeol*, **26**, 109-122
- Hiller, J, Hardy, A, and Blinkhorn, P, 2002 Excavations at Derngate, Northampton, 1997-2000, *Northamptonshire Archaeol*, **30**, 31-62
- IfA 2008a *Standard and guidance for field evaluation*, Institute for Archaeologists
- IfA 2008b *Standard and guidance for the collection, documentation, conservation and research of archaeological materials*, Institute for Archaeologists
- IfA 2010 *Code of Conduct*, Institute for Archaeologists
- Instone, E, 1970 Northampton Iron Foundries, *Bulletin of Industrial Archaeology*, **8**, 2-8
- Knight, D, Vyner, B, and Allen, C, 2012 *East Midlands Heritage: An Updated Research Agenda and Strategy for the Historic Environment of the East Midlands*, University of Nottingham and York Archaeological Trust
- MGC 1992 *Standards in the Museum care of Archaeological Collections*, Museums and Galleries Commission
- Moore, W R G, 1980 *Northamptonshire clay tobacco-pipes and pipemakers*, Northampton Museums and Art Gallery
- NA 2011 *Archaeological fieldwork manual*, Northamptonshire Archaeology
- Oswald, A, 1975 *Clay pipes for the Archaeologist*, BAR British Series, **14**
- Shaw, M, 1984 Excavations on a medieval site at Derngate, Northampton, *Northamptonshire Archaeol*, **19**, 63-82
- Shaw, M, 1985 Excavations on a Saxon and medieval site at Black Lion Hill, Northampton, *Northamptonshire Archaeol*, **20**, 113-138
- Shaw, M, 1993 *Archaeological evaluation at St Johns Street, Northampton, 1990*, Northamptonshire Archaeology report, **861**
- Shaw, M, 1996 The excavation of a late 15th-17th-century tanning complex at The Green, Northampton, *Post-medieval Archaeol*, **30**, 63-128
- Shaw, M, and Steadman, S, 1993-4 Life on a medieval backstreet: archaeological excavations at Swan Street, Northampton, 1989, *Northamptonshire Archaeol*, **25**, 143-147

- Shepherd, N, 2013 *Archaeological desk-based assessment at Swan Street, Northampton*, CgMs Consulting, **NS/15308**
- Soden, I, 1998-9 A story of urban regeneration: Excavations off St Peters Walk, Northampton, 1994-7, *Northamptonshire Archaeol*, **28**, 61-127
- Walker, K, 1990 *Guidelines for the preparation of excavation archives for long term storage*, United Kingdom Institute for Conservation
- Watkinson, D, and Neal, V, 1998 *First Aid for Finds*, United Kingdom Institute of Conservation
- Welsh, T, 1996-7 Northampton alternatives: Conjecture and counter-conjecture, *Northamptonshire Archaeol*, **27**, 166-176
- Williams, J H, 1979 *St Peter's Street, Northampton: Excavations 1973-1976*, Northampton Development Corporation, Archaeol Monog, **2**

Maps

- BGS 2001 *Solid Geology: UK South sheet, Scale 1:625,000*, British Geological Survey
- LAT 1983 *Soil Survey of England and Wales: Soils of Southern England, Scale 1:250000*, **4**, Lawes Agricultural Trust

APPENDIX: CONTEXT INVENTORY

Trench 1				
Context	Type	Description	Dimensions	Artefacts/ Samples
101	layer	tarmac	100mm thick	-
102	layer	pinkish-grey aggregate	not known	-
103	wall	basement wall, N-S, red brick two courses thick, rendered with plaster on east side	not known	-
104	layer	loose yellowish-brown sandy rubble	160mm thick	-
105	layer	red crushed brick	100mm thick	-
106	layer	firm black silty loam soil mixed with brick, slate and rubble	800mm thick	-
107	wall	foundation wall within basement, N-S, three courses with cross bond and white mortar, reinforced with a steel girder, 3.0m by 120mm by 60mm	not known	-

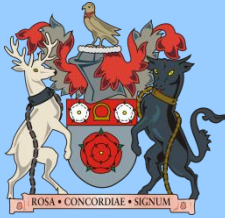
Trench 2				
Context	Type	Description	Dimensions	Artefacts/ Samples
201	layer	concrete and tarmac	120mm thick	-
202	layer	loose sand, crushed brick, and demolition rubble	100mm thick	-
203	layer	mixed firm dark silty loam soils with brick, slate and rubble, distributed unevenly within top 1.0m of the trench	up to 1.0m thick	-
204	wall	red brick, white mortar, English bond, N-S, three courses thick, probable building foundation	not known	-
205	service line	steel pipe, gas or water, E-W	150mm thick	-
206	service line	ceramic pipe, foul water, E-W, brick retaining wall, no mortar, stretcher bond, cuts almost to full depth of trench	0.6m wide by 1.6m deep	-
207	service line	same as 206, but also contained two steel pipes, 100mm thick	0.6m wide by 1.6m deep	-
208	well	Brick-lined well shaft, circular, one course thick and filled with modern demolition rubble	1.5m diameter depth untested	-
209	layer	firm light greyish-brown silty clay loam with occasional small pebbles, fairly clean and distinct from material above	0.7-1.35m thick	pottery
210	layer	similar to 209, lower horizon above the natural		-

NORTHAMPTON, SWAN STREET CAR PARK

Trench 3				
Context	Type	Description	Dimensions	Artefacts/ Samples
301	layer	tarmac	70mm thick	-
302	layer	soft mixed orange-brown and dark grey gritty sandy clay with brick and ironstone rubble	220mm thick	-
303	layer	pinkish-red crushed brick	80mm thick	-
304	foundation	brick and concrete stantion block in N side of trench around an iron girder setting	1.0m square by 1.2m deep	-
305	layer	loose soft black silty loam, contained a steel box frame at W end of trench with burned coal at its base, uneven distribution	up to 1.0m thick	-
306	layer	loose soft orange sandy clay with ironstone	120mm thick	-
307	layer	firm pale yellowish-white sandy mortar	50mm thick	-
308	layer	light bluish-grey clayey sand with black smears	100mm thick	pottery clay tobacco-pipe
309	layer	firm light greyish-brown silty clay loam with occasional small pebbles, fairly clean and distinct from material above	0.55-0.98m thick	pottery
310	layer	similar to 209, lower horizon above the natural		-

Trench 4				
Context	Type	Description	Dimensions	Artefacts/ Samples
401	layer	concrete	100mm thick	-
402	layer	soft mid-brownish-grey silty clay loam, same as 503 and similar to 309	320mm thick	pottery jetton
403	service line	steel pipe, gas, brick cover line	not known	-
404	fill of 405	firm light orange-brown silty clay loam	320mm deep	pottery
405	pit	edge of pit exposed, sub-rectangular corner, gently sloping side, base not exposed	over 0.8m long by 0.5m wide	-

Trench 5				
Context	Type	Description	Dimensions	Artefacts/ Samples
501	layer	pinkish-grey aggregate	170mm thick	-
502	layer	brick rubble and demolition build up deposit	370mm thick	-
503	layer	soft mid-brownish-grey silty clay loam, occasional ironstone fragments	not known but estimated at 0.5m thick	-
504	cellar	brick retaining wall, two courses thick, cross bond, with white mortar, cellar is aligned E-W below St Johns Terrace	not known	-
505	fill of 504	brick rubble, same as 502, but filling cellar	not known	-



Northamptonshire County Council

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