

# Electricity Sub-Station, Spring Garden Street, Lancaster



## Archaeological Watching Brief



**Oxford Archaeology North**

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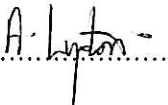
**National Grid Reference:** NGR SD 4762 6148

**Prepared by:** Chris Healey  
**Position:** Project Officer  
**Date:** April 2008

**Checked by:** Alison Plummer  
**Position:** Senior Project Manager  
**Date:** April 2008

Signed..... 

**Approved by:** Alan Lupton  
**Position:** Operations Manager  
**Date:** April 2008

Signed..... 

**Oxford Archaeology North**

Storey Institute  
Meeting House Lane  
Lancaster  
LA1 1TF  
t: (0044) 01524 848666  
f: (0044) 01524 848606

w: [www.oxfordarch.co.uk](http://www.oxfordarch.co.uk)  
e: [info@oxfordarch.co.uk](mailto:info@oxfordarch.co.uk)

**© Oxford Archaeological Unit Ltd 2008**

Janus House  
Osney Mead  
Oxford  
OX2 0EA  
t: (0044) 01865 263800  
f: (0044) 01865 793496

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## SUMMARY

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Following a proposal by United Utilities to undertake improvements to the electricity sub-station on Spring Garden Street, Lancaster (centred on SD 4762 6148), Lancashire County Archaeology Service (LCAS) recommended that a programme of rapid desk-based assessment and archaeological watching brief should be carried out. It was intended that this should ascertain the presence or absence of any archaeological remains within the area of the development works. The watching brief was undertaken in June and August 2006.

The development works required the expansion of the footprint of the existing sub-station into the area of the adjoining car parking facility. Archaeological evidence from the surrounding area had indicated a high potential for archaeological remains on the site, particularly of Roman date, although such remains were likely to have been truncated by the development of the sub-station itself.

Groundworks in advance of the development revealed the presence of four post-medieval cellars. The foundations for one cellar was seen to cut through a series of post-medieval and medieval layer deposits, the latter representing cultivation or garden soils, which had survived between the areas containing the cellars. The monitoring of groundworks to the south of Cellar 4 observed that this area had not been subject to any previous ground disturbance and the excavation of a sondage exposed a deposit (*118*), which was seen to contain fragments of probable cremated bone and Roman pottery.

Recommendations for further archaeological investigation were made comprising an excavation of the area within the development site to the south of the post-medieval cellars. The results of the excavation will be presented in a separate report.

## ACKNOWLEDGEMENTS

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Oxford Archaeology North (OA North) would like to thank United Utilities for commissioning the project. Thanks are also expressed to Peter Iles of Lancashire County Archaeology Service (LCAS) for his support throughout the project.

Andy Lane, Sean McPhillips, Peter Schofield and Neil Wearing undertook the watching brief, and Chris Healey compiled the report. Mark Tidmarsh produced the drawings. Alison Plummer managed the project, and also edited the report.

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## 1. INTRODUCTION

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### 1.1 CIRCUMSTANCES OF PROJECT

- 1.1.1 Following a proposal by United Utilities to improve the electricity sub-station on Spring Garden Street, Lancaster, a recommendation for a rapid desk-based assessment and an archaeological watching brief was made by Lancashire County Archaeology Service (LCAS). Oxford Archaeology North (OA North) was commissioned to carry out the work, the watching brief element of which was undertaken during June and August 2006.
- 1.1.2 This document represents the results of the rapid desk-based assessment and the watching brief undertaken during the groundworks in advance of the main construction phase. The results of the rapid desk-based assessment are included as part of the historical and archaeological background (*Section 3.2 below*).

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## 2. METHODOLOGY

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### 2.1 PROJECT DESIGN

- 2.1.1 OA North submitted a project design (*Appendix 1*) in response to a verbal brief issued by LCAS. The project design was adhered to in full, and the work was consistent with the relevant standards and procedures of the Institute of Field Archaeologists, and generally accepted best practice.

### 2.2 RAPID DESK-BASED ASSESSMENT

- 2.2.1 The rapid desk-based assessment comprised a search of both published and unpublished records in the archives and library held at OA North. All known archaeological sites have been included in order to assess the impact of the proposed development. OA North has an extensive archive of secondary sources relevant to the study area, as well as numerous unpublished client reports on work carried out both as OA North and in its former guise of Lancaster University Archaeological Unit (LUAU).

### 2.3 WATCHING BRIEF

- 2.3.1 The programme of field observation recorded accurately the location, extent, and character of any surviving archaeological features and/or deposits exposed during the course of the development works. The work comprised the systematic examination of any subsoil horizons exposed during the course of the groundworks, and the accurate recording of all archaeological features and horizons, and any artefacts, identified during observation.
- 2.3.2 Recording was by means of OA North's standard context recording system, with watching brief records and supporting registers and indices. A full photographic record in colour transparency and monochrome formats was made. Section drawings and plans were made of relevant archaeological features at appropriate scales. These were located using taped measurements from existing boundaries and landmarks.

### 2.4 ARCHIVE

- 2.4.1 A full professional archive has been compiled in accordance with the project design (*Appendix 1*), and in accordance with current IFA and English Heritage guidelines (English Heritage 1991). Arrangements for the paper and digital archive will be made with the Lancashire County Record Office (Preston) on completion of the project.

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## 3. BACKGROUND

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### 3.1 INTRODUCTION

- 3.1.1 The background history has been compiled from primary and secondary sources. It was intended that this should provide a suitable local archaeological context in which to view the results of the watching brief.

### 3.2 LOCATION, TOPOGRAPHY AND GEOLOGY

- 3.2.1 The electricity sub-station occupies the southern side of Spring Garden Street (centred on SD 4763 6149), at the approximate southern end of the historic medieval core of the town of Lancaster. The site forms an irregular wedge-shaped piece of land on the junction of Spring Garden Street and King Street, occupying a gently sloping plot of land measuring approximately 1250m<sup>2</sup> in area.
- 3.2.2 The solid geology of Lancaster consists predominantly of Silesian (Upper Carboniferous) grey-brown or reddened medium- to coarse-grained sandstones of the Pendle Grit Formation, which is part of the Millstone Grit Group (British Geological Survey 1992, 5). These sandstones are thickly bedded with thin siltstone partings, but with mixed sandstone/siltstone units near the top. The drift geology for the site has been mapped as glaciofluvial sheet deposits of clayey sands and gravels. Previous work in the area has demonstrated the survival of soil sequences above the natural drift geology (Soil Survey of England and Wales 1983; LUAU 2001), representing between 0.45-0.70m of ploughsoil above 0.2-0.5m of sandy loam.

### 3.3 HISTORICAL AND ARCHAEOLOGICAL BACKGROUND

- 3.3.1 ***Prehistoric Period (c 8000 BC - AD 43):*** although generally scarce around Lancaster and in the North West as a whole, three findspots comprising Bronze Age burials are recorded in the Lancashire Historic Environment Record (HER), lying to the immediate southwest of the site. This constitutes some of the best evidence for this period in the North West, but gives little indication of settlement or activities other than funerary deposition (LUAU 2001). A Neolithic Mortlake vessel was also recovered during excavations at 65 Church Street (White 1975, 207).
- 3.3.2 ***Romano-British Period (AD 43 - 410):*** the town of Lancaster developed from the Roman period onwards, with the site of Lancaster initially used as a strategic military location towards the end of the first century AD (Shotter 1995, 19-21). A sequence of forts was established on Castle Hill, which overlooked the navigable section of the River Lune (Shotter 1993, 22). The fourth century fort seems to have been realigned parallel to the Lune, and it has been suggested that its form was similar to the Saxon Shore forts occupying parts of southern Britain, and more specifically the west-coast system of undated forts at Cardiff, Caernarvon and Caer Gybi (Shotter 2004, 161). Lancaster may have served as a supply base, also ensuring the security



of the harbour (*ibid*). Excavations have shown that the main area of extramural development extended along Church Street (LUAU 2000) and extended as far as the later Market (Drury forthcoming), with some activity along Penny Street (LUAU 1996). While the evidence from the Church Street area shows significant settlement and small-scale industrial activity, the work at Penny Street suggested a Romano-British cremation cemetery, with a possible discrete family plot, in use from the second to the fourth century AD. Second century AD Roman cremations with urns have been recorded elsewhere, one between King Street and Penny Street (LUAU 1996; SD 4769 6144) and the other at St Thomas's Church (LUAU 1996; SD 4776 6142), and as many as 12 "un-urned" cremations were recorded during excavations on King Street in 2001 (LUAU 2001). At the junction of Aldcliffe Road and Henry Street, approximately 200m to the south of the present study area, the tombstone of a cavalryman, representing a late first- early second century cenotaph burial, was recovered during an archaeological excavation in 2005 (UMAU 2007).

- 3.3.4 **Early Medieval Period (AD 410 - 1066):** evidence for early medieval period activity is represented by a hoard of ninth century coins (Northumbrian *stycas*) found at Vicarage fields near St Mary's Priory (Newman 1996, 102; Penney 1981, 13). Other evidence for activity during this period survives in the form of sculpted cross fragments, some with inscriptions which are generally taken to imply the presence of a monastery, from the area of the existing Priory Church, indicating the presence of an earlier church which was probably the same as that listed in Domesday Book (Faull and Stinson 1986).
- 3.3.5 **Late Medieval Period (AD 1066 - 1540):** place names and written documents become the principal sources of evidence in the late medieval period although excavations have suggested the physical form of the settlement at Lancaster (Howard-Davis *et al* forthcoming; White 1988; Penney 1981). The Domesday reference to a church suggests that it formed the centre of a vill ('*Chercaloncastre*', or Church Lancaster; Newman 1996, 98) which was dependent on the manor of Halton (Penney 1981, 13-14). In addition, another vill (*Loncastre*) seems to have existed although its precise location is uncertain (White 1993, 11). The centre of Lordship was moved to Lancaster shortly after 1086, and Lancaster Castle, on the site of the earlier Roman forts, was founded by 1094 (*op cit*, 19). A borough was created in 1193, with Church Street, Market Street and Penny Street being the main thoroughfares (*op cit*, 11-14; 26-29). This implies a continuation of settlement pattern surviving from the Roman period when activity was concentrated in the same areas (LUAU 2001, 7).
- 3.3.6 **Post-Medieval Period (AD 1540 - 1900):** there is more extensive evidence from cartographic, documentary and excavation sources for the post-medieval period. The earliest map record is that produced by John Speed in 1610, which although rather stylistic in character, shows both King Street (then known as Chennel Lane) and Penny Street. The map does not allow the confident identification of the study area, although the eastern side of King Street is occupied by houses which seem to be detached and well spaced rather than terraced.

- 3.3.7 Lancaster is fortunate that a large-scale map of the town was located in the Towneley family papers, allowing a reconstruction of the town as it was in 1684, by Docton (Docton 1957). This map shows no settlement on the site but does illustrate a field boundary aligned east/west, dividing two fields of unspecified usage. From the time of this plan until the First Edition Ordnance Survey map of 1848, King Street has been known as Back Lane.
- 3.3.8 Mackreth's map of 1778 shows the site as having been extensively built over, with Spring Garden Street illustrated for the first time (Fig 2). Both the northern and southern sides of Spring Garden Street are shown occupied by terraced buildings, and part of King Street immediately south of the junction with Spring Garden Street also appears to be terraced. The parts of the study area which lie behind the terraced buildings seem to be occupied by gardens.
- 3.3.9 Clarke's map of 1807 shows a similar situation, with what appears to be an identical arrangement of the buildings which occupy the study area. The layout of the plot appears to correspond with the existing size, shape and position of the study area, although it is shown more clearly to comprise two long buildings on the King Street frontage, the more southerly possessing an outbuilding to its rear, and an irregularly-shaped building on the Spring Garden Street frontage. Access to the rear of the terraces on Penny Street runs along the southern edge of the study area and a small alleyway or ginnel enters the plot from the Spring Garden Street side. Binn's survey and map of 1821 indicates further building development within the study area away from the King Street side. The Baines map of 1824 shows the entire study area as having been built up with no garden or yard area.
- 3.3.10 The First Edition Ordnance Survey of 1848 shows a building plan closer to Clarke's 1807 map and Binns 1821 survey, although the King Street frontage appears to be almost entirely terraced as per the Baines illustration of 1824. The Ordnance Survey of 1891 shows completely terraced street frontages along both King Street and Spring Garden Street, and some unidentified yard or garden space behind both terraces. The larger scale 1893 Ordnance Survey map shows the building layout in greater detail with individual buildings and features clearly illustrated although not annotated (Fig 3). This arrangement does not appear to have changed in subsequent surveys until at least 1931. The sub-station appears to have been built in the 1950s.

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## 4. RESULTS

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### 4.1 INTRODUCTION

4.1.1 An archaeological watching brief was maintained during all of the sub-surface groundworks. These works comprised the excavation of building foundations and of service trenches associated with the buildings within the development area. Existing services were observed traversing the site, and archaeological structures and deposits were recorded across the majority of the excavated area. Natural geological deposits were not reached during the programme of archaeological observation.

### 4.2 RESULTS

4.2.1 A demolition layer (**113/116**) lay across the entire development area immediately beneath the surface previously forming the car parking facility. This context comprised up to 1.9m in depth of mixed sandstone and mortared brick rubble, containing some fragmented roof slates. The remains of four cellars were exposed following the removal of this material (Fig 4). These were located outside of the footprint of the current sub-station, within the car parking facility to its immediate west. The full extent of the cellars was not exposed due to the physical limitations of the development works.

4.2.2 **Cellar 1:** this was located in the north-eastern corner of the site, and comprised a north/south aligned rectangular space measuring approximately 6.5m<sup>2</sup> in area (Plate 1). It was located adjacent to the sub-station and was bounded by two walls. The northernmost of these, wall **100**, followed the line of Spring Garden Street and was observed in section only. The stratigraphic relationship between the western wall, **101**, and wall **100**, was unclear. Both walls were constructed of roughly-squared sandstone blocks, bonded with a lime and sand mortar. However, wall **101** appears to relate to the construction of Cellar 2 to the west rather than serving as the west wall to Cellar 1. The west wall of Cellar 1 would appear to be wall **102**, seen lying parallel to wall **101** and following its east face. The northern part of the wall is missing. The internal face of wall, **102** exhibited the remains of facework, **103**. Where seen, the floor of Cellar 1 comprised a cobbled surface (**106**) covered with a thin film of coal dust. These cobbles were set into a layer of clean red sand (**107**). The cobbles extended up to wall **101**, suggesting wall **102** is a later build.

4.2.3 **Cellar 2:** this cellar was located to the west of Cellar 1, with wall **100** to the north and wall **101** to the east. It comprised an area measuring approximately 12m<sup>2</sup>, aligned east/west (Plate 2). The southern wall of this room (**104**) was constructed of similar sandstone blocks to those comprising walls **100** and **101**. The western wall of this cellar, as exposed in the baulk, survived only as a 0.28m long section (not planned). A small area of flag stones were observed within the floor surface towards the northern end of the cellar. It was not possible to ascertain the function of these flags; repair of the cobble floor (**151**) is a possibility, but their almost circular arrangement may suggest some other function.

- 4.2.4 **Cellar 3:** located to the immediate south of Cellar 2, with which it shared wall **104**, this cellar measured approximately 10.5m<sup>2</sup> in area (Plate 3). It was bounded to the east by wall **101** and to the north by wall **104**. Wall **105** appeared to form the southern boundary to the cellar, although it had been heavily truncated and its relationship to the cellar could not be demonstrated conclusively. A cobbled surface (**152**) occupied the space between walls **104** and **105**, similar in composition to **106** and **151**.
- 4.2.5 **Cellar 4:** located along the western end of the site, Cellar 4 was bounded to the north by wall **115** (seen in the baulk), which comprised roughly squared sandstone blocks bonded by a lime and sand mortar and surviving to 1.58m high. A doorway or recess in this wall was evident towards the western limit of excavation (Plate 4). It was not possible to determine the stratigraphic relationship between walls **115** and **100** (see Section 4.2.2 above). The cellar was bounded to the south by wall **112**, which survived to a height of 1.06m and was constructed and bonded in the same manner as wall **115**. Wall **112** probably represented a continuation of damaged wall **105**. This cellar room may have been separated from Cellars 2 and 3 by a sandstone wall, and walls **105** and **114** both include the remains of truncated sandstone walls projecting towards their respective opposing structural wall. The line of a service trench crossed Cellar 4 and had removed any putative party wall. The western wall of Cellar 4 lay beyond the limits of excavation beneath the undisturbed car park.
- 4.2.6 **Archaeological Deposits:** excavation to the south of Cellar 4, on the immediate southern side of wall **112**, showed that this area had not been subject to the below-ground disturbance seen in the location of the adjacent cellars. A machine-excavated sondage aligned north/south in the approximate centre of the development site revealed a sequence of deposits below the demolition debris (**116**) (Plate 5). Layer **117** appeared to comprise a 0.30m thick deposit of probable post-medieval demolition or levelling activity, immediately beneath the later demolition activity comprising **116**. Beneath this a 0.30m thick layer of probable post-medieval garden-type cultivated soil (**122**) was recorded, with inclusions of sandstone fragments throughout. Beneath this layer a deposit (**121**) filling a narrow ditch (**120**) aligned north/south was identified, measuring approximately 4.6m long and 0.40m wide, extending eastwards beyond the sondage. On its western side, ditch **120** was seen to cut through a deposit of sandy-clay (**118**) which, although not excavated at this stage, was seen to contain fragments of probable cremated bone and Roman pottery.

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## 5. DISCUSSION

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### 5.1 SYNTHESIS

- 5.1.1 The cellars beneath the development area would appear to correspond to the properties shown as fronting Spring Garden Street, and also perhaps King Street, on Mackreth's map of 1778 and subsequent cartography. That the southern wall of Cellar 4 (*I12*) cuts through a sequence of buried soil deposits necessarily dates the latest of these deposits (*I17*) to the late eighteenth century. The thick deposit below this (*I22*) appears to represent cultivated soil of a garden or a ploughed field, probably of post-medieval date. The ditch (*I20*) and the fill deposit (*I21*) appear to represent activity prior to the post-medieval period but later than the Roman period, which was represented by the lowest of the layered deposits (*I18*), which contained roman pottery.

### 5.2 RECOMMENDATIONS

- 5.2.1 On the basis of the identification of deposits of potential Roman date (*I18*) containing what appeared to be cremation material, and the identification of the subsequent negative feature (ditch *I20*), it was recommended that the area to the south of Cellar 4 be preserved by record by means of excavation. This recommendation was agreed with the curator and the client and the results of this work, which took place in August 2006, are to follow in a separate report.

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## 6. BIBLIOGRAPHY

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1684 Map of Lancaster in Docton 1957

1778 A Plan of the Town of Lancaster by Stephen Mackreth (copy held at Lancaster City Museum)

1807 A Plan of the Town of Lancaster by C Clarke (copy held at Lancaster City Museum)

1821 Map of the County and Castle of Lancaster by Jonathan Binns (copy held at Lancaster City Museum)

1824 Baines' map of Lancaster

1848 Ordnance Survey 6" to 1 statute mile, Lancashire sheet 30

1891 Ordnance Survey 25" to 1 statute mile, Lancashire sheet 30

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1931 Ordnance Survey 25" to 1 statute mile, Lancashire sheet 30SE

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## 7. ILLUSTRATIONS

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### 7.1 LIST OF FIGURES

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- Figure 2: Site boundary superimposed upon extract from Mackreth's Map of 1778
- Figure 3: Site boundary superimposed upon extract from Ordnance Survey, 25" to 1 mile, 1893
- Figure 4: Plan of Cellars 1-4

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- Plate 2: Cellar 2, facing east
- Plate 3: Cellar 3, facing east
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- Plate 5: Sondage section showing layered deposits **116**, **117**, **122** and ditch fill **121**, facing east



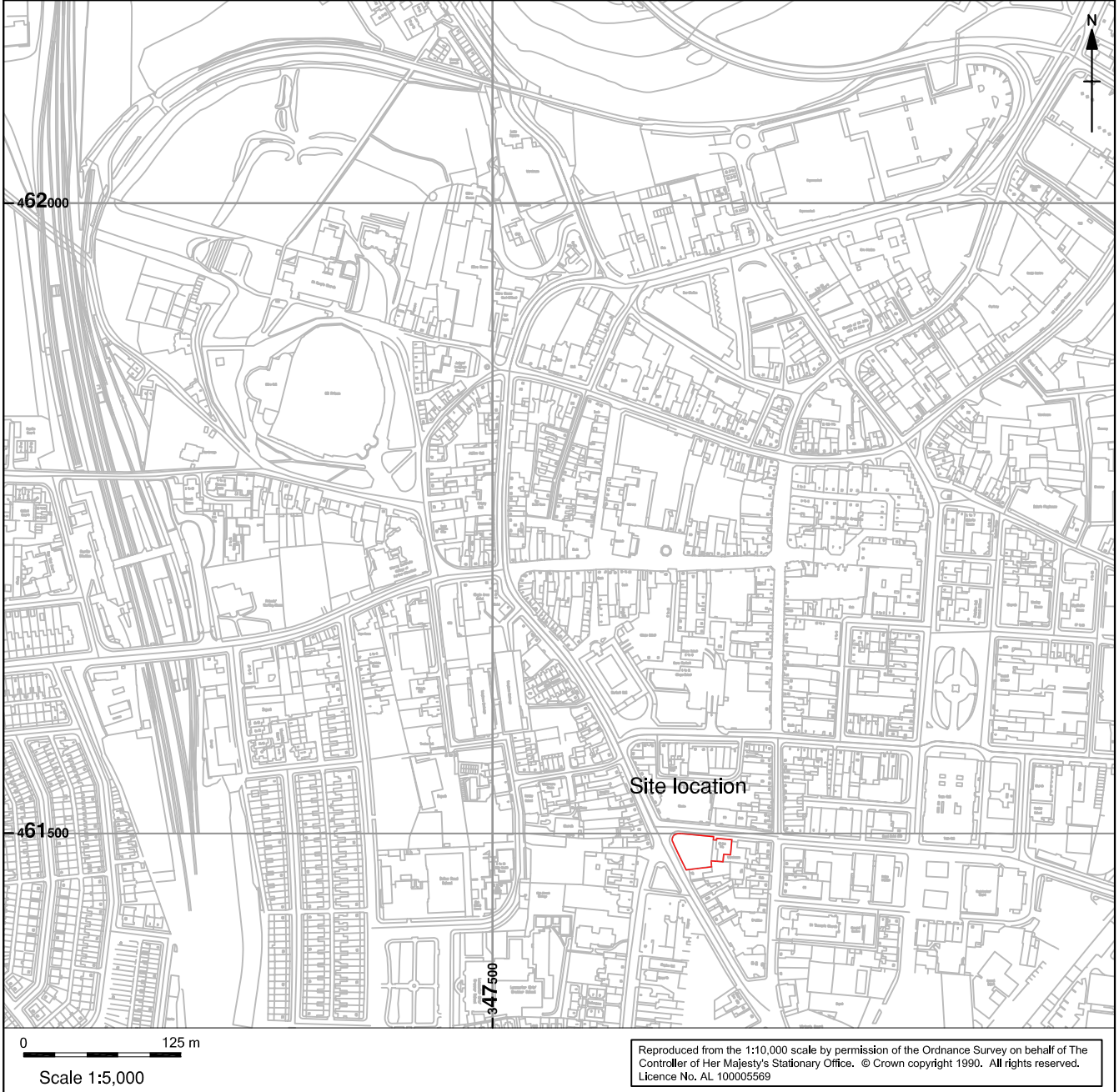


Figure 1: Site Location

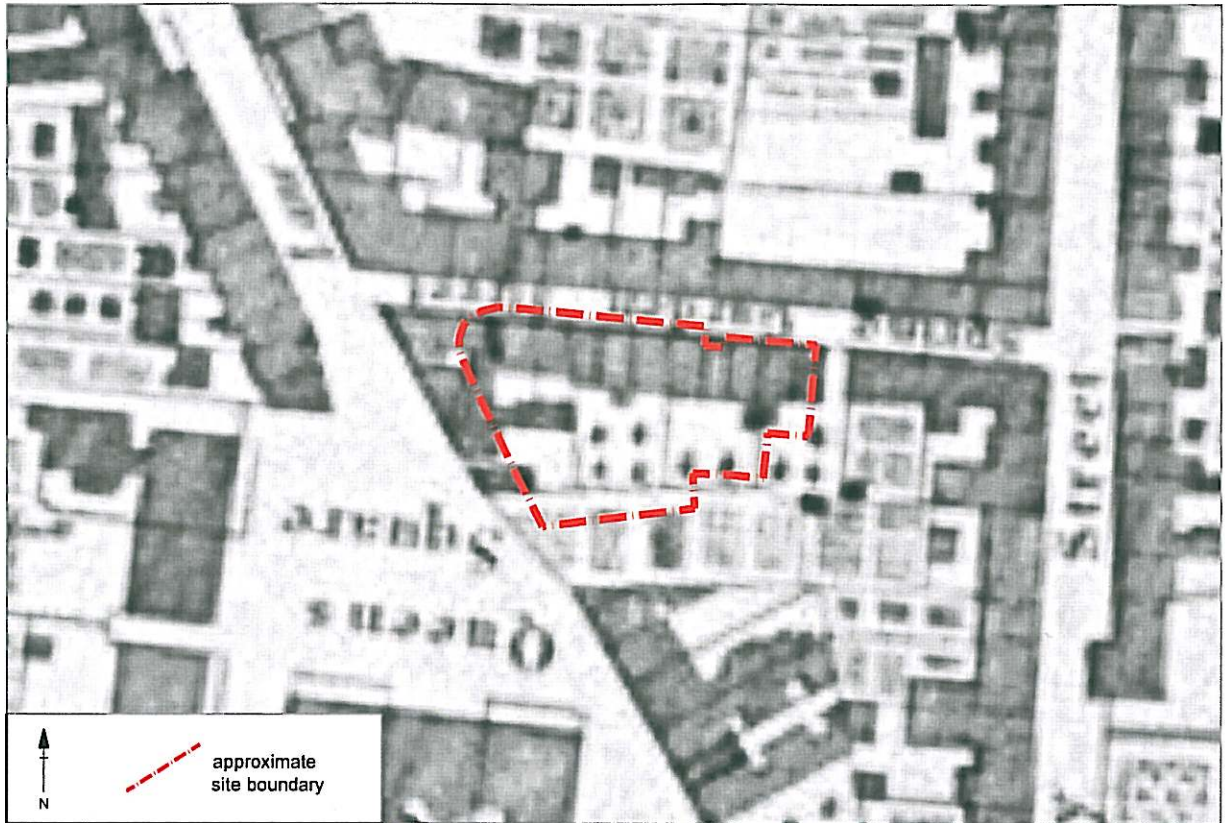


Figure 2: Site boundary superimposed upon extract from Mackreth's Map of 1778



Figure 3: Site boundary superimposed upon extract from Ordnance Survey 25" to one mile. 1893



Figure 4: Plan of cellars 1-4



Plate 1: Cellar 1, facing north-east



Plate 2: Cellar 2, facing east



Plate 3: Cellar 3, facing east



Plate 4: Cellar 4, facing north



Plate 5: Sondage section showing layered deposits *116*, *117*, *122* and ditch fill *121*, facing east

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## APPENDIX 1: PROJECT DESIGN

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# **ELECTRICITY SUB- STATION, SPRING GARDEN STREET, LANCASTER**

## **Archaeological Watching Brief Project Design**

**Oxford Archaeology North**

May 2006

**United Utilities**

Tender No: t2744

### **1. INTRODUCTION**



- 1.1 United Utilities (hereafter the client) are proposing to undertake improvements to the electricity sub-station on Spring Garden Street, Lancaster. The development works will necessitate the expansion of the footprint of the existing sub-station into the area of the adjoining car parking facility. The Lancashire County Archaeology Service (LCAS) has recommended that a programme of archaeological works be undertaken during the development works.
- 1.2 Archaeological evidence from the surrounding area would indicate that there is high potential for archaeological remains on the development site, particularly of Roman date, although such remains are likely to have been truncated by the development of the sub-station itself. The Roman settlement, dating from the late first century, is thought to have extended eastwards from the site of the fort (beneath the medieval castle) and southwards as far as the northern end of Penny Street, but seems unlikely to have stretched as far as the proposed development area. Locally, the most significant remains are those of Roman cremation and inhumation burials from Penny Street, George Street, St Thomas' Church and King Street. Together, the distribution of these sites forms an arc of extramural burials to the south-west of the Roman settlement and, it is within this arc that the proposed development site lies. The number of burials around the southern end of Penny Street may pertain to a cemetery flanking a major thoroughfare, a common feature of Roman towns. Of particular interest, is the fact that several of the cremations are prehistoric rather than of Roman date, and it is possible that the Roman cemetery coincides with an area of Bronze Age funerary activity.
- 1.3 OA North has considerable experience of the assessment, evaluation and excavation of sites of all periods, having undertaken a great number of small and large-scale projects during the past 20 years. Watching briefs, evaluations and excavations have taken place within the planning process, to fulfil the requirements of clients and planning authorities, to very rigorous timetables.
- 1.4 OA North has the professional expertise and resources to undertake the project detailed below to a high level of quality and efficiency. OA North is an Institute of Field Archaeologists (IFA) registered organisation, registration number 17, and all its members of staff operate subject to the IFA Code of Conduct.

## 2 OBJECTIVES

- 2.1 The following programme has been designed to evaluate the archaeological resource of the proposed development area. The required stages to achieve this are as follows:
- 2.2 **Rapid Desk-Based Assessment:** this will precede a programme of fieldwork to place any findings that are made in to the context of known archaeological sites and/or artefact discovery sites in the immediate vicinity;
- 2.3 **Permanent Presence Watching Brief:** this will be undertaken during all ground disturbance associated with the proposed development;
- 2.4 **Report and Archive:** production of a report following the collation of data during *Sections 2.2 and 2.3* above.

- 2.5 A written report will assess the significance of the data generated by the rapid desk-based assessment and subsequent fieldwork, within a local and regional context.

### 3 METHOD STATEMENT

#### 3.1 RAPID DESK-BASED ASSESSMENT

- 3.1.1 The following rapid assessment will be undertaken as appropriate, depending on the availability of source material. The level of such work will be dictated by the time scale of the project.

3.1.2 **Documentary and Cartographic Material:** this work will comprise a rapid review of the published and unpublished information relevant to the site and its immediate surroundings. It will include an appraisal of the data in the Lancashire Sites and Monuments Record. It will investigate the past use of the site through an examination of the historic mapping of the area. Other sources to be consulted should include aerial photographs and other illustrative evidence, place and field name evidence, and published and unpublished documentary sources.

3.1.3 **Physical Environment:** a rapid desk-based compilation of geological (both solid and drift), pedological, topographical and palaeoenvironmental information will be undertaken in order to set the archaeological features in context. Any engineering and/or borehole data relating to the site will also be examined.

#### 3.2 WATCHING BRIEF

3.2.1 A programme of field observation will record accurately the location, extent, and character of any surviving archaeological features and/or deposits within the area of the development works. This work will comprise observation during the excavation for these works, the systematic examination of any subsoil horizons exposed during the course of the groundworks, and the accurate recording of all archaeological features and horizons, and any artefacts, identified during observation.

3.2.2 Putative archaeological features and/or deposits identified by the machining process, together with the immediate vicinity of any such features, will be cleaned by hand, using either hoes, shovel scraping, and/or trowels depending on the subsoil conditions, and where appropriate sections will be studied and drawn. Any such features will be sample excavated (ie selected pits and postholes will normally only be half-sectioned, linear features will be subject to no more than a 10% sample, and extensive layers will, where possible, be sampled by partial rather than complete removal).

3.2.3 It is assumed that OA North will have the authority to stop the works for a sufficient time period to enable the recording of important deposits. It may also be necessary to call in additional archaeological support if a find of particular importance is identified or a high density of archaeology is discovered. This

would only be called into effect in agreement with the Client and the County Archaeology Service and will require a variation to costing.

- 3.2.4 **Written Record:** during this phase of work, recording will comprise a full description and preliminary classification of features or materials revealed. All information identified in the course of the site works will be recorded stratigraphically utilising OA North pro-forma. Areas of excavation will be assigned trench numbers and context numbers will be applied to archaeological features.
- 3.2.5 **Site Drawings:** a large-scale plan (provided by the client) will be produced of the area of the groundworks showing the location and extent of the ground disturbance, appropriately labelled to correspond with the written record. Archaeological features will be recorded accurately (either on plan (1:20) and/or section (1:10), and as grid co-ordinates where appropriate).
- 3.2.6 The site drawings will be manipulated in an industry standard CAD package (AutoCAD release 2000) for the production of final drawings.
- 3.2.7 A photographic record will be undertaken simultaneously. This will utilise a 35mm camera for the production of both colour slides and monochrome contact prints. A photographic scale will appear in all images captured. The photographic index will describe and locate each area/feature photographed.
- 3.2.8 **Human Remains:** any human remains uncovered will be left *in situ*, covered and protected. No further investigation will continue beyond that required to establish the date and character of the burial. The LCAS and the local Coroner will be informed immediately. If removal is essential the exhumation of any funerary remains will require the provision of a Department of Constitutional Affairs license, under section 25 of the Burial Act of 1857. An application will be made by OA North for the study area on discovery of any such remains and the removal will be carried out with due care and sensitivity under the environmental health regulations, and if appropriate, in compliance with the 'Disused Burial Grounds (Amendment) Act, 1981.
- 3.2.9 **Treatment of finds:** no sampling of finds will take place during fieldwork. All finds will be exposed, lifted, cleaned, conserved, marked, bagged and boxed in accordance with the United Kingdom Institute for Conservation (UKIC) *First Aid For Finds*, 1998 (new edition) and the recipient museum's guidelines.
- 3.2.10 All identified finds and artefacts will be retained, although certain classes of building material can sometimes be discarded after recording if an appropriate sample is retained on advice from the recipient museum's archive curator.
- 3.2.11 **Treasure:** any gold and silver artefacts recovered during the course of the excavations will be removed to a safe place and reported to the local Coroner according to the procedures relating to the Treasure Act, 1996. Where removal cannot take place on the same working day as discovery, suitable security will be employed to protect the finds from theft.
- 3.2.12 **Environmental Samples:** samples will also be collected for technological, pedological and chronological analysis as appropriate. If necessary, access to

conservation advice and facilities can be made available. OA North maintains close relationships with Ancient Monuments Laboratory staff at the Universities of Durham and York and, in addition, employs artefact and palaeozoological specialists with considerable expertise in the investigation, excavation and finds management of sites of all periods and types, who are readily available for consultation.

### 3.4 REPORT AND ARCHIVE

3.4.1 **Interim Statement:** in the event that further work is recommended an interim statement will be issued. In this instance or in the event that the client specifically requests an interim statement it should be noted that all illustrations will be copies of field drawings and not finished CAD drawings.

3.4.2 **Final Report:** two copies of the final report will be submitted to the client and a further copy to the LCAS. Both paper and digital copies will be provided on CD-ROM in pdf format. The report will present the following information:

- (i) **Summary:** a summary statement of the findings;
- (ii) **Introduction:** the background to the project including location details;
- (iii) **Methodology:** an outline of the methodology of all elements of the programme of work;
- (iv) **Historical Background:** a brief historical background to the site;
- (v) **Results:** an account of the past and present land use of the study area;  
An account of archaeological features identified during the course of the watching brief;
- (vi) **Discussion:** a description of the significance of the study area in its local and regional context;
- (vii) **Illustrations:** maps, plans, sections and copies of the site photographic archive;
- (viii) **Appendices:** a copy of the brief and this project design;

3.4.3 Provision will be made for a summary report to be submitted to a suitable regional or national archaeological journal within one year of completion of fieldwork, if relevant results are obtained.

3.4.4 **Confidentiality:** all internal reports to the client are designed as documents for the specific use of the Client, for the particular purpose as defined in the project brief and project design, and should be treated as such. They are not suitable for publication as academic documents or otherwise without amendment or revision.

3.4.5 **Archive:** the results of all archaeological work carried out will form the basis for a full archive to professional standards, in accordance with current English

Heritage guidelines (*Management of Archaeological Projects*, 2nd edition, 1991). This archive, including a copy of the report, will be provided in the English Heritage Centre for Archaeology format. In this instance the archive will be submitted to the County Record Office (Preston).

- 3.4.6 The Arts and Humanities Data Service (AHDS) online database *Online Access to index of Archaeological Investigations* (OASIS) will be completed as part of the archiving phase of the project.

## **4 PROJECT MONITORING**

- 4.1 Monitoring of this project will be undertaken through the auspices of the LCAS Archaeologist, who will be informed of the start and end dates of the work.

## **5 WORK TIMETABLE**

- 5.1 The rapid desk-based assessment is expected to take in the region of one day to complete.
- 5.2 The duration of the watching brief will be dependent upon the progress of the contractor.
- 5.3 The client report will be completed within three weeks following completion of the fieldwork.

## **6 STAFFING**

- 6.1 The project will be under the direct management of **Alison Plummer BSc (Hons)** (OA North Senior Project Manager) to whom all correspondence should be addressed.
- 6.2 The rapid desk-based assessment will be undertaken by **Tony Lee** (OA North Project Supervisor). Tony has a great deal of experience in documentary research, and in particular for the county of Lancashire.
- 6.3 Present timetabling constraints preclude detailing at this stage exactly who will be undertaking the rapid walkover survey and evaluation trenching, but both of these elements of the project are likely to be supervised by an OA North project supervisor experienced in these types of project. All OA North project officers and supervisors are experienced field archaeologists capable of carrying out projects of all sizes.

## **7 INSURANCE**

- 7.1 OA North has a professional indemnity cover to a value of £2,000,000; proof of which can be supplied as required.