

# 99-101PENNY STREET,

# **LANCASTER**

Lancashire

# **Evaluation Report**



**Oxford Archaeology North** 

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# **Northern Developments**

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The watching brief was undertaken by David Tonks and the evaluation was undertaken by Hannah Marriott, who also wrote this report; she was assisted on site by Nicola Gaskell and Josh Slator.

The drawings were produced by Emma Carter. The report was edited by Jamie Quartermaine and Emily Mercer. The project was managed by Jamie Quartermaine.

## **SUMMARY**

Oxford Archaeology North were commissioned by Northern Developments Ltd to undertake an evaluation of land at Gardeners Tiles, Penny Street, Lancaster (SD 4773 6044), prior to a proposed residential development.

Penny Street is on the line of a Roman road extending south from the Roman settlement in Lancaster. Cemeteries were laid along this road during the this period, and substantial cremation cemeteries and mortuary enclosure have been identified at the nearby former Streamline Garage. In addition cremations have been found along Penny Street, including the site of 77-79 Penny Street to the north of this development.

A programme of archaeological trial trenching was carried out in August 2003, which entailed the excavation of five 2m by 5m trial trenches, positioned across the site.

A nineteenth century cobbled surface, and a heavily truncated feature of undetermined date were uncovered during the course of the evaluation, but otherwise no archaeological features were identified. The majority of the site had either been leveled to natural soil, or had been disturbed by modern wall footings and drains. Although no significant archaeological deposits were identified, there remains the possibility that the bases of negative features cut into natural, such as cremation pits, could survive despite the truncation of the site. It is therefore recommended that a watching brief be undertaken during the ground works for the laying of the new build foundations and any services.

# 1. INTRODUCTION

#### 1.1 CIRCUMSTANCES OF THE PROJECT

- 1.1.1 Northern Developments Ltd requested that Oxford Archaeology North (OA North) submit proposals to undertake an evaluation and watching brief on land formerly occupied by Gardener's Tiles, 99-101 Penny Street, Lancaster (SD 4773 6044 (Fig 1)), in advance of a proposed residential development.
- 1.1.2 The development site, 99-101 Penny Street, lies to the south of Lancaster city centre, at the southern end of the historic medieval and Roman core of the town. Within this part of the town there have been identified significant numbers of Roman cremations (*Section 3.2*), and as a result there was a requirement by Lancashire County Archaeological Service (LCAS) to investigate the site in advance of the development. OA North prepared a project design (*Appendix 1*) in accordance with a verbal brief by LCAS. Following acceptance of this project design by the client, OA North were commissioned to undertake the work in August 2003.
- 1.1.3 Subsequent to the removal of the former superstructure on the site, an archaeological watching brief was maintained in the week commencing 19<sup>th</sup> August 2003 while the overburden was removed down to the level of the highest archaeological deposit. A programme of trial trenching was then undertaken across the cleared site to examine the potential for sub-surface remains. At the time of the investigation the area had been cleared on two levels, with the northern half of the site approximately 0.5m lower than the southern end of the site. At this stage concrete footings from the building were still in place, as was a concrete capped drain shaft.

#### 2. METHODOLOGY

#### 2.1 PROJECT DESIGN

2.1.1 Northern Developments Ltd requested that OA North submit proposals for an evaluation prior to development within the site. This project design (*Appendix 1*) was prepared in accordance with a verbal brief from 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 (IFA), and generally accepted best practice.

#### 2.2 WATCHING BRIEF

2.2.1 The programme of work included the removal of concrete and overburden within the defined area, which was undertaken with a mechanical excavator, using a toothless ditching bucket, under constant archaeological supervision. The overburden was taken off in spits down to the highest archaeologically significant deposit. The ground surface, following mechanical excavation, was relatively clean, sufficient to reveal most features, but in some areas localised cleaning was undertaken to clarify the archaeological. The purpose of the watching brief was to prepare the ground for the evaluation and as the supervised excavation did not intrude into archaeological deposits no recording was undertaken as part of this phase.

#### 2.3 EVALUATION

- 2.3.1 The programme of trial trenching aimed to establish the presence or absence of archaeological deposits and, if established, test their date, nature and quality of preservation through excavation. The evaluation assessed the character of all archaeological deposits and remains to the depth of the natural subsoil. The project brief required 5% of the proposed development area to be evaluated, equating to five 2m by 2m test pits located uniformly across the site
- 2.3.2 The trial trenches were excavated with a JCB using a toothless ditching bucket, under the supervision of an OA North archaeologist. These trenches were excavated in a strictly stratigraphical manner, with minimal disturbance to archaeological features, and the spoil heaps were scanned for artefacts. Where the depth of the trench exceeded 1.2m, it was backfilled immediately after excavation.
- 2.3.3 The recording comprised a full description and preliminary classification of the features and materials revealed on OA North pro-forma sheets. A section was excavated through all features encountered. A plan was produced showing the location of the trenches, with representative sections being drawn at a scale of 1:10 (Fig 2). The site drawing was digitised into a CAD system and tied to the National Grid. A photographic record, using black and white, colour slide and digital formats, was maintained.

2.3.4 No finds were retained in the course of the evaluation.

# 2.4 ARCHIVE

2.4.1 A full archive of the work has been produced to a professional standard in accordance with current English Heritage guidelines (1991) and the *Guidelines for the Preparation of Excavation Archives for Long Term Storage* (UKIC 1990). OA North practice is to deposit the original record archive of projects (paper, magnetic, and plastic media) with the Lancashire Record Office.

# 3. BACKGROUND

# 3.1 LOCATION, TOPOGRAPHY AND GEOLOGY

- 3.1.1 The site is situated at the southern end of the historic core of Lancaster, at the top of a north facing slope. The development site is roughly square in shape, with Penny Street located immediately to the west and running along the entire western boundary of the site. The site is bounded on the north, south and east sides by the walls of commercial buildings.
- 3.1.2 *Geology:* 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). 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.
- 3.1.3 The Soil Survey (1983) does not classify soils within urban areas but the results of the trench excavated in a nearby site in Aldcliffe Road (LUAU 1995), provides a guide to the soil and drift geology present in the vicinity. Aldcliffe Road showed a sequence of soils, including plough soils and the former ground surface, which overlay a red-brown sandy gravel, which in turn overlay a yellow-brown sandy clay; both of these deposits were interpreted as natural drift geology. These results broadly coincided with the sequence identified at the nearby Streamline excavation (LUAU 2000).

## 3.2 HISTORICAL BACKGROUND

- 3.2.1 *Introduction:* the historical and archaeological background was principally compiled through secondary sources and previous phases of archaeological investigation within the area of the site, and is intended to put the results of the assessment into a wider context.
- 3.2.2 *Prehistoric:* there is little evidence of prehistoric activity in and around Lancaster, but there are three entries in the Sites and Monuments Record (SMR) recording findspots of Bronze Age burials in the vicinity of the site. Although this suggests a funerary aspect to the area, it provides little evidence of settlement or other activities. The three sites were all found pre 1900, and insufficient information was gathered to rule out the possibility of these being Romano-British burials rather than prehistoric.
- 3.2.3 *Roman:* the major Roman site in Lancaster is the fort located on Castle Hill. This was founded in the AD 70's as part of the conquest and pacification of northern Britain, and was later used by Agricola as he pushed his troops northwards into Scotland. This fort was rebuilt and added to several times on the same site, and the latest of these, in the fourth century, was realigned to lie parallel with the River Lune (Shotter 1993).

- 3.2.4 The main road linking the fort to the overall road system is thought to have been Church Street. Excavations carried out around the area of this road suggest that small scale settlement along this route began to emerge around the time the first fort was built. During the second century, probably during the reign of Hadrian, the settlement grew much larger, into a thriving community. The full extent of this settlement is unknown, but evidence suggests that it extended eastwards to Cheapside, and south along the line of Penny Street, with the fort and the river Lune as boundaries. It is almost certain that this settlement continued through the fourth century until the realignment of the fort heralded a new era in the town's history, when it shrank dramatically. Reasons for this are unknown, as there is very little evidence from the fifth century (Howard-Davies *et al* forthcoming).
- 3.2.5 Cremation burials have been found during excavations at Penny Street (LUAU 1996), individual burials between King Street and Penny Street (LUAU 1997), at Streamline Garage to the west of Kings Street (LUAU 2000), and another at St Thomas's Church (LUAU 1997). These imply a pattern of funerary activity extending around the southern side of the settlement and dating from the second to the fourth centuries AD.
- 3.2.6 *Medieval:* the early medieval period is represented mainly by a hoard of ninth century coins (Northumbrian stycas) found at Vicarage Fields near to the church (Newman 1996, 102; Penney 1981, 13). Further evidence from this period comprises fragments of stone crosses from the area of the Priory Church, indicating the presence of an earlier church.
- 3.2.7 By the later medieval period, place names and documentary sources provide the majority of evidence for the area. The Domesday reference to a church suggests that this formed the centre of a vill ('Cherloncastre', Church Lancaster; Newman 1996, 98), which was, at that time, dependent on the manor of Halton (Penney 1981, 13-14). In addition, another vill existed (Loncastre) 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 fort, was established by 1094 along with a priory on the church site (op cit, 19). A borough was created in 1193 with Church Street, Market Street and Penny Street being the main thoroughfares. This may imply a continuation of settlement patterns, surviving from the Roman period, when activity was concentrated in these same areas.
- 3.2.8 **Post-medieval:** the earliest map on record is that produced by John Speed in 1610. This shows Penny Street as a road with continuous building along its eastern side, where the site is located, indicating that it had been occupied prior to this date. A 1684 map by Docton, and Mackreth's map of 1778 shows the site as fairly unchanged during this period, still with a continuous settlement along the east side. Binns' survey and map of 1821 indicates further building development around the area, which was the trend throughout the nineteenth century.

#### 3.3 Previous Excavations within the Vicinity

3.3.1 *Penny Street 77-79 and 81:* (SD 4773 6158) excavation uncovered the remains of a nineteenth century cellar, two layers of cobbled surfaces and a Roman burial

- urn located approximately 0.4m below the cobbles. Further features from the Romano-British period were identified at this depth, although most had been disturbed by the later buildings. A small quantity of burnt bone was retrieved from two pits, one of which contained Roman pottery. Another two features, also of Romano-British date, were interpreted as possible boundaries to a burial plot (OA North 2003).
- 3.3.2 *Penny Street 1:* (SD 4772 6170) beneath No 1 Penny Street an exposed section of archaeological deposits was examined briefly prior to underpinning and rebuilding works; the recording work was carried out by the Lancaster City Museum staff in 1975 (White 1975). Although a cellar was encountered, deposits were found to survive in the uncellared area. The Roman deposits consisted of a road, with several phases of re-surfacing, and traces of burnt wattle and daub structures which appeared to date to the later expansion of the vicus. No evidence of the expected Roman cemetery was recovered during the work (OA North 2003).
- 3.3.3 Streamline Garage, King Street: (SD 4765 6135) the majority of the archaeology uncovered during these excavations was of a secure Romano-British date. The earliest identified feature was a large sub-square enclosure ditch, the corners of the enclosure being defined by sharp right-angles. The enclosure was orientated on alignment with Penny Street. The ditches to the enclosure were kept clean during use, and probably backfilled during the second century. During backfilling, the ditches became a focal point for cremation burials, with urned and un-urned cremations. Several of the bone assemblages contained animal as well as human bone, suggesting charcoal material swept in from a fire. Some of the assemblages were found along with iron nails, suggesting that they may have been placed in a box (LUAU 2001).

## 4. EVALUATION RESULTS

#### 4.1 Introduction

- 4.1.1 Five trial trenches were excavated across the extent of the site in locations informed by the watching brief. This first phase had overseen the removal of the overburden, which comprised modern building rubble and a general overburden, but no topsoil. The overburden was taken down across the site to just above the highest archaeologically significant deposit or natural on two levels, with the north end of site *c*0.5m lower than the south end of site. The top 0.10m of each trench was excavated through residual deposits of the modern overburden.
- 4.1.2 The natural soil on site comprised greyish-brown sandy gravels and yellowish-brown sandy gravel to the west and north-east of site, with the south and east becoming more of a reddish-brown and greyish-brown clay.
- 4.1.3 General trench descriptions are presented below and a detailed description of the individual contexts is in *Appendix 2*.

#### 4.2 TRENCH DESCRIPTIONS

- 4.2.1 **Trench 1:** Trench 1 was located to the south-west of the site (Fig 1); it measured 2m by 2m and was excavated to a depth of 1m. A cobbled surface, **102**, was revealed at a depth of 0.3m from the surface. This surface truncated the natural and undated feature, **109**, which was, in turn, cut into the natural (Fig 3). The shape and size of feature **109** could not be defined due to its partial truncation by modern wall footings, but it could not be seen in Trench 3 to the north, and was evidently of limited extent. Further exploratory trial trenches to the south beyond the wall footings revealed only natural sub-soil.
- 4.2.2 **Trench 2**: Trench 2 was located approximately in the centre of the site; it measured 2.5m by 2.5m and was excavated to a depth of 2m (Fig 4). No archaeology was revealed, but a north/south aligned pipe trench was situated 0.25m below the surface on the western side of the trench, which was overlain by a redeposited natural soil. This overburden could not be distinguished within the eastern half of the trial trench.
- 4.2.3 **Trench 3:** Trench 3 was located to the north-west of the site; it measured 2.3m by 1.7m and was excavated to a depth of 2m. The trial trench contained a single deposit of natural soil, with the top 0.1m being contaminated by the modern overburden (Fig 4).
- 4.2.4 **Trench 4:** Trench 4 was located in the south-west corner of the site and measured 2.8m by 2m. It was excavated to a depth of 1.3m. This trial trench contained a redeposited layer of natural soil overlying the natural soil itself, with a very sharply defined horizon between the two deposits (Fig 5). No archaeological features were revealed within this trial trench, and one small piece of tarmac was recovered from feature **401**.
- 4.2.5 **Trench 5:** Trench 5 was located in the south-east corner of the site. It measured 2.5m by 2m and was excavated to a depth of 1.13m. The trial trench contained a single deposit of natural soil, with the top 0.1m being contaminated by the

modern overburden (Fig 5). The natural was excessively compact, suggesting that some contamination of the soil had occurred.

## 5. DISCUSSION

#### 5.1 ARCHAEOLOGICAL POTENTIAL

- 5.1.1 The development site is located on Penny Street, the line of the main road leading south out from the Roman road and is within the medieval historic core of Lancaster. The number of Roman cremation sites within the vicinity of the development site demonstrate that there was a cemetery to the south of the Roman town. There was also potential for *in situ* remains of the buildings shown on the 1604 map. As a consequence the site has considerable archaeological potential, subject to the survival of any remains.
- 5.1.2 Trenches 2, 3 and 5 all contain a single deposit of natural soil overlain by the modern overburden, indicating that the topsoil, and any subsoil/ploughsoils remaining have been lost to the archaeological record. Excavations at the former Streamline Garage, King Street, showed that where Roman deposits survived they were overlain by a medieval ploughsoil, but much of that site had also been truncated, and on the northern and southern parts of the site, post-medieval overburden also directly overlay natural subsoils. Given the absence of any archaeological features, or medieval subsoil at the present site there is an implication that the archaeological deposits have been truncated probably as a result of an earlier development on the site.
- 5.1.3 Trench 1 contained a nineteenth century cobbled surface, **102**, dated by two fragments of clay pipe, and this was also identified on the west side of the site. As the cobbles truncated the natural to a depth of *c*0.3m, it is unlikely that any cremation features will have survived in this trench, as the average depth of similar features at the former Streamline Garage, and a 77-79 Penny Street was 0.2m (LUAU 2001).
- 5.1.4 Trench 1 also contained feature, **109**, which appeared initially to be linear in shape; however, there was no sign of it to the north in Trench 3, negating the possibility that this may have been a roadside ditch adjacent to Penny Street. As this feature was also truncated to the south by wall footings, it is likely that the majority of the extant remains of this feature had been uncovered by the evaluation. The sterility of **109**, and the lack of any humic remains suggest that this feature had been rapidly backfilled. It had no artefactual material within it, but had been truncated by the cobbled surface and was therefore earlier. The feature is undatable, albeit earlier than the nineteenth century, and the possibility that this was a Roman feature cannot be excluded.
- 5.1.5 Trench 4 contained a layer of redeposited natural, **401**, which was 0.8m thick. The horizon between the natural soil and the redeposited natural was very sharply defined, and also completely level. This supposes backfilling over a level surface, suggesting that the natural had already been levelled, and therefore truncated, prior to the redeposition of **401**. Considering that the height of the natural in this trench is also *c*0.5m lower than the other levels of natural on site, it would appear that any archaeology cut into the natural would have been lost.

# 5.2 IMPACT AND RECOMMENDATIONS

- 5.2.1 *Impact:* it is evident that the site has been extensively truncated as a result of earlier developments on the site which have apparently removed all medieval and Roman archaeological deposits and upstanding features. It is fair to conclude that the proposed development will not impact any identified significant archaeological deposits or features. However, it is not known the extent to which this truncation has extended into the natural subsoils and there is a low possibility that the base of any deep features that have been cut into the natural will survive.
- 5.2.2 **Recommendations:** it is recommended that no mitigative excavation be undertaken at the site in advance of the development. However, given that there is a low possibility that the base of some deep cut features may survive and that so far only a small proportion of the site has been investigated, it is recommended that a watching brief be undertaken during the ground works for the laying of the foundations and any services.

## 6. BIBLIOGRAPHY

#### 6.1 CARTOGRAPHIC SOURCES

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# APPENDIX 1 PROJECT DESIGN

Oxford Archaeology North

**July 2003** 

# GARDENERS TILES, PENNY STREET

# LANCASTER ARCHAEOLOGICAL EVALUATION AND EXCAVATION

# **Proposals**

The following project design is offered in response to a request from Northern Developments Associates for a proposal for an evaluation and excavation in advance of a development at Gardeners Tiles, Penny Street, Lancaster.

#### 1. INTRODUCTION

#### 1.1 BACKGROUND

- 1.1.1 The present project proposal for an evaluation and mitigative archaeological excavation at Gardeners Tiles, Penny Street, Lancaster (SD 4773 6044), immediately to the south of Lancaster city centre, is submitted by Oxford Archaeology North (OA North) at the request of Northern Developments. It is in accordance with a verbal brief by the Lancashire County Archaeological Service (LCAS).
- 1.1.2 *History of Investigation:* Penny Street was on the line of a Roman road extending south from the Lancaster extra mural settlement, and along this road cemeteries were laid during the Roman period. Substantial cremation cemeteries have been identified at the nearby former Streamline Garage (adjacent to King Street) along with a substantial putative mortuary enclosure. In addition cremations have been found extensively along Penny Street, including the site of 77-79 Penny Street, just to the north of the development. Consequently it is safe to conclude that there were cremations within the area of the present development, though it is not known if any survive more recent development activity. It is therefore required by LCAS that a programme of archaeological investigation be undertaken over the site.

#### 1.2 OXFORD ARCHAEOLOGY NORTH

- 1.2.1 Oxford Archaeology North (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 projects during the past 20 years. Evaluations have taken place within the planning process, to fulfil the requirements of clients and planning authorities, to very rigorous timetables. OA North has considerable knowledge of the archaeology of Lancaster, having undertaken many excavations and evaluations over the years in areas such as Church Street, Penny Street, Damside Street, Pye's Warehouse, Market Hall, Brock Street, King Street and also within and around Lancaster Castle. In particular OA North undertook the archaeological excavation at 77-79 Penny Street, which is adjacent to the present development site.
- 1.2.2 OA North has the professional expertise and resource to undertake the project detailed below to a high level of quality and efficiency. OA North and all its members of staff operate subject to the Institute of Field Archaeology (IFA) Code of Conduct and OA North is a registered organisation (No 17) with the IFA.

#### 2. METHODOLOGY

#### 2.1 Introduction

2.1.1 The following mitigation recording programme has been designed, in accordance with a verbal brief by Lancashire County Archaeological Service. The principal aim is to provide an evaluation of the site closely followed by the creation of a mitigative record of the archaeological features and stratigraphy that will be disturbed in the course of the proposed development. It will record any identified archaeological remains or deposits within the excavation areas and recover finds and environmental material where present.

# 2.2 EXCAVATION / EVALUATION

2.2.1 The requirement of the present programme is to investigate the extent of the proposed development, to establish if archaeological stratigraphy survives and if so undertake the mitigative recording of these deposits and any burials to enable the development to proceed. Although there is a high likelihood that burials were within the study area it is not known if the archaeological deposits have been truncated. It is therefore proposed to undertake a combined evaluation / excavation strategy. Initially the developer will remove the standing buildings and make the site safe. This will be followed by the lifting of the concrete slab, and under archaeological supervision the overburden will be mechanically removed. Then a series of small evaluation trenches will be subject to excavated in order to test for the survival of archaeological deposits and to establish the depth of stratigraphy. Subject to the recovery of

- archaeological deposits a fixed price cost for the mitigation of the site will be submitted, and the archaeological excavation will proceed seamlessly until the site is mitigated.
- 2.2.2 **Mechanical Excavation:** while it is not necessary for the removal of the slab under archaeological supervision as soon as this has been lifted it is essential that any further excavation be under close archaeological supervision. The mechanical excavation will be down to the level of natural subsoils or the depth of significant archaeological deposits; there after the site will be excavated by manual techniques to record the exposed archaeological features. The topsoil will be stored in appropriate spoil heaps at the edge of the excavation area.
- 2.2.3 **Evaluation:** a series of five small 2m x 2m trenches will be excavated over the site by manual techniques, and will test for the survival or depth of archaeological deposits. Given the small scale of the evaluation it is recognised that there is only a low chance of recovery of burials, instead the evaluation phase is intended to establish if the site has been subject to truncation, and if archaeological deposits are identified to establish their depth and extent for the purposes of the final costings for the mitigative phase.
- 2.2.4 **Excavation:** assuming that archaeological deposits are identified and that there is an agreement with the county archaeologist to proceed then the whole of the site will be subject to manual cleaning and the establishment of a plan of the features present. Detailed excavation will be undertaken in areas where features have been identified. The programme will investigate all identified features and although it is anticipated that some of the deposits will be truncated, any surviving deposits will be excavated and appropriately recorded. An attempt will be made to establish an overall chronology for activity within the excavation area.
- 2.2.5 The excavation will use a variety of techniques, from rapid cleaning to delicate excavation, to suit differing conditions. Following removal of the overburden, the excavation area will be subject to manual cleaning over the whole excavation area, since extant deposits may be fragile and machinery in their vicinity could disturb relatively delicate layers and relationships. The aim of this work will be to explore all features stratigraphically and to produce a clear plan of the complex. Detailed excavation will be targeted in areas of identified archaeological features and deposits encountered during the excavations will be sampled according to the appropriate professional standards to enable palaeoenvironmental analysis. A minimum sample of 20% of each major feature will be excavated, including all key relationships (a minimum sample of 50% will be made of discrete features such as postholes). Identified Cremations will be subject to 100% excavation and recording. Layers and features will be cleaned and excavated by an appropriate technique.

#### 2.3 RECORDING METHODOLOGY

- 2.3.1 All elements of the work will, as a matter of course, be recorded in accordance with current English Heritage guidelines (*MAP2*) and the best practices formulated by English Heritage's Central for Archaeology (CFA).
- 2.3.2 **Survey Control:** a series of survey control points will be established by controlled traverse using a total station across the extent of the site. The control will be tied into the OS national grid and Ordnance Datum. The survey stations will be established as clearly marked nails into concrete surfaces. Station descriptions will be established for each principal control station.
- 2.3.3 Planning: archaeological planning will be undertaken using a data-logging total station and the data will be digitally incorporated into a CAD system during the excavation. There will not, therefore, be a requirement to establish a grid of pegs across the excavation areas. This process will generate scaled plans which will also be subject to manual survey enhancement. The drawings will be generated at an accuracy appropriate for 1:20 scale but can be output at any scale required. This digital process will go hand in hand with single context planning, whereby each entity is ascribed a unique layer but yet all or selective features can be viewed as required. It will therefore be possible to get a general overview of the excavation site without prejudicing the phasing or the post-excavation process. Three-dimensional recording of selected finds' classes will be undertaken using a total station, should the site warrant this treatment. Section drawings will for the most part be generated manually, although a total station has proved to be a cost effective tool for drawing very long sections.

- 2.3.4 **Context Recording:** the features will be recorded using *pro-forma* sheets which are in accordance with those used by CFA. Similar object record and photographic record *pro-formas* will be used. All written recording of survey data, contexts, artefacts and ecofacts will be cross referencable from pro-forma record sheets using sequential numbering.
- 2.3.5 A full and detailed photographic record of individual contexts will be maintained and similarly general views from standard view points of the overall site at all stages of the excavation will be generated. Photography will be undertaken using 35mm cameras on archivable black and white print film as well as colour transparency. Photographs records will be maintained on special photographic *pro-forma* sheets.

#### 2.4 HUMAN REMAINS

- 2.4.1 The results of the excavations at Penny Street and Streamline Garage suggest that human remains may be present, in the form of cremations. The recovery and exhumation of any funerary remains will require the provision of a Home Office license, under section 25 of the Burial Act of 1857. An application will be made by OA North for the study area. All cremations and contents will be recorded in plan at 1:20. Significant details of any grave goods, should they be discovered, will be planned at 1:10. Photography will be used to provide a further detailed record of the skeletal evidence. The removal of such remains will be carried out with due care and sensitivity.
- 2.4.2 Any gold and silver artefacts recovered during the course of the excavation will be removed to a safe place and reported to the local Coroner according to the procedures relating to the Treasure Act, 1996

#### 2.5. FINDS

- 2.5.1 Finds recovery and sampling programmes will be in accordance with best practice (current IFA guidelines) and subject to expert advice. All material will be collected and identified by stratigraphic unit. Hand collection by stratigraphic unit will be the principal method of collection, but targeted on-site sieving will serve as a check on recovery levels. The location of findspots for objects deemed to be of potential significance to the understanding, interpretation and dating of individual features, or of the site as a whole, will be recorded in 3-D. All finds will be treated in accordance with OA North standard practice, which is cognisant of IFA and UKIC Guidelines. In general this will mean that (where appropriate or safe to do so) finds are washed, dried, marked, bagged and packed in stable conditions; no attempt at conservation will be made unless special circumstances require prompt action. In such case guidance will be sought from Ancient Monuments Laboratory (AML) conservator Jennifer Jones at Durham University. Finds storage during fieldwork and any site archive preparation will follow professional guidelines (UKIC).
- 2.5.2 The Unit employs artefact and palaeoecology specialists with considerable expertise in the investigation, excavation, and finds management of sites of all periods and types, who are readily available for consultation.
- 2.5.3 *Cremated Bone Analysis:* the assessment of the cremated bone assemblage will be by Angie Boyle of Oxford Archaeology. All bone recovered from stratified deposits will be subject to assessment and analysis will provide metrical, ageing or sex information (where possible). The bone assemblage will be scanned for selective species representation, to identify if there is non-human material within the cremations.

#### 2.6 ARCHIVE

- 2.6.1 An archive for the project to the specification provided in *Appendices 3 and 6* of English Heritage's *Management of Archaeological Projects, 2nd edition* (MAP2), prepared during the excavation programme, and supplemented as necessary during any phase of analysis, will be prepared to professional standards for deposition in an appropriate repository.
- 2.6.2 The results of the excavation will form the basis of a full archive to professional standards, in accordance with current English Heritage guidelines (*Management of Archaeological Projects*,

2nd edition, 1991). The project archive represents the collation and indexing of all the data and material gathered during the course of the project. The deposition of a properly quantified, ordered, and indexed project archive in an appropriate repository is considered an essential and integral element of all archaeological projects by the Institute of Field Archaeologists in that organisation's Code of Conduct. The expense of preparing such an archive is part of the project's cost, but only represents a very small proportion of the total. The project archive would be deposited, as appropriate, with Lancaster Museum and Lancashire Record Office, in agreement with the Client and the relevant bodies.

- 2.6.3 The textual archive will be provided both as a printed document and on computer disks as ASCii files. Any drawings will be provided as originals; copies of drawings from other sources will be provided as photocopies.
- Analysis: OA North accords with best practice for the analysis of the excavation results in 2.6.4 accordance with the guidelines of MAP2. This would involve a brief assessment of the dataset generated by the excavation, followed by a review of the excavation archive to establish the potential for further analysis and to examine the resource requirements for the completion of the post-excavation phase. This assessment will take place in close consultation with the client and LCAS, and the report format will also be agreed at this stage of the work. An appropriate programme of analysis should then be undertaken to prepare a research archive, as detailed in Appendix 6 of Management of Archaeological Projects. A Harris Matrix, largely produced during the excavation programme will be completed and checked as part of the assessment. The assessment will involve the compilation of a brief archive report, detailing the stratigraphic history of the site, and the outlining the significance of the structural, artefactual and environmental evidence. A provisional programme of post-excavation analysis is proposed, on the basis of the anticipated recovery of material from the excavation; however, the extent of the programme can only be reliably assessed on completion of the fieldwork. The proposed programme anticipates analysis of the artefactual evidence and of the site stratigraphy leading to the production of a final report.

#### 2.7 REPORTING

2.7.1 *Final Report:* the cost implication of this element of the programme will be subject to the assessment and review although a ball-park figure is presented for guidance purposes within the present costs. Following the analysis of the excavation results, a report will be written which will present, summarise, and interpret the results of the programme and will incorporate specialist reports on artefact assemblages and environmental reports. It will include an index of archaeological features identified in the course of the project, with an assessment of the site's development. It will incorporate appropriate illustrations, including copies of the site plans and section drawings all reduced to an appropriate scale. The report will consist of a statement of acknowledgements, lists of contents, executive summary, introduction summarising the brief and project design and any agreed departures from them, methodology, interpretative account of the site and associated structures, gazetteer of features, a complete bibliography of sources from which data has been derived, and a list of further sources identified during the programme of work.

#### 2.8 OTHER MATTERS

2.8.1 **Health and Safety:** full regard will, of course, be given to all constraints (services) during the excavation, as well as to all Health and Safety considerations. The Unit Health and Safety Statement conforms to all the provisions of the SCAUM (Standing Conference of Unit Managers) Health and Safety manual, as well as the Lancaster University Health and Safety Statement. A full risk assessment will be undertaken and the Universities Safety Policy Statement will be provided to the client. OA North has a set of service maps for the study area and as a matter of course, a U-Scan device will be undertaken prior to the commencement of excavation. The excavation will not extend any closer than 2m from any standing buildings subject to advice from a structural engineer. If the excavation extends to a depth of 1m, there will be a need to step in order to ensure the integrity of the foundations of 83 Penny Street.

- 2.8.2 *Fencing:* the area will need to be fenced for the top-soil stripping by the clients contractor. Under provisions of the *Burial Act 1857*, all work upon human remains must be undertaken out of sight of the public; therefore fencing will have to be erected around the site which will block the site works from public view. At present a hoarding is in place.
- 2.8.3 *Insurance:* insurance in respect of claims for personal injury to or the death of any person under a contract of service with the Unit and arising out of an in the course of such person's employment shall comply with the employers' liability (Compulsory Insurance) Act 1969 and any statutory orders made there under. For all other claims to cover the liability of OA North in respect of personal injury or damage to property by negligence of OA North or any of its employees, there applies insurance cover of £ 3m for any one occurrence or series of occurrences arising out of one event.
- 2.8.4 **Access:** it is assumed that the client will provide unrestricted access to the excavation for the duration of the archaeological programme.
- 2.8.5 **Project Monitoring:** any proposed changes to this project design will be agreed with the Client and the Lancaster County Archaeologist. OA North will arrange a preliminary meeting if required, and will inform the Lancaster County Archaeological Service (LCAS) of the commencement of the project, by telephone, during the preceding week.
- 2.8.6 **Presentation:** in the interests of health and safety, it is recommended that there should be no public access, although it is possible that limited access could be made available if the client is willing and is pre-arranged.
- 2.8.7 *Working Hours:* excavation will be undertaken on the basis of a five day week, within daylight hours only.
- 2.8.8 **Reinstatement:** the excavated spoil will be left on site for disposal by the client. Deep features will be backfilled to make them safe, but otherwise it is understood that the archaeological contractor will have no liability for the backfilling or reinstatement of the excavation.
- 2.8.9 *Equipment:* following the removal of the concrete the overburden will be excavated by a JCB wheeled excavator, which will be fitted with a 1.6m toothless ditching bucket; the plant will be provided by OA North.
- 2.8.10 Confidentiality: the report is designed as a document for the specific use of the Client, for the particular purpose as defined in this project design, and should be treated as such; it is not suitable for publication as an academic report, or otherwise without amendment or revision. Any requirement to revise or reorder the material for submission or presentation to third parties or for any other explicit purpose can be fulfilled, but will require separate discussion and funding.

#### 3. OUTLINE RESOURCES

- 3.1 The following resource base will be necessary to achieve the proposals detailed above.
- 3.2 *Mechanical Excavation of Overburden (Archaeological Supervision)*Subject to developers timetable
- 3.3 Evaluation Trenching
  3 man-days Project Officer
  3 man-days Project Assistant
- 3.4 *Archaeological Excavation* Subject to the evaluation
- 3.5 **Assessment** Subject to the excavation
- 3.6 *Final Report*Subject to assessment

- 3.7 The total cost quoted on the accompanying sheet is a fixed price, inclusive of all management, overheads, and other disbursement costs (travel and expenses), to undertake the evaluation stage. The subsequent excavation stage, if there is a need for one, will be subject to an enhanced project design that will be submitted immediately following the evaluation. It is intended that subject to verbal agreement the excavation will proceed immediately and that the renewed project design will ratify the on site agreement.
- 3.8 Any other variations from this programme of work at the Clients' direction will require recosting.

#### 4. STAFFING

4.1 The project will be under the management of **Jamie Quartermaine**, **BA**, **Surv Dip MIFA** (OA North Project Manager), to whom all correspondence should be addressed.

# APPENDIX 2 CONTEXT DESCRIPTION

Context	Trench	Description	Depth
101	1	Modern overburden	0 -0.05m
102	O2 1 A cobbled surface, nineteenth century. It has large s rounded smooth cobbles bonded with 103.		0.05 - 0.30m
103	A dark-grey organic material bonding some of the cobbles together. It has small sub-rounded pebbles and modern tarmac pieces on the surface of the deposit.		
104	1	An isolated patch of pale-yellow sandy deposit, with no inclusions.	0.05 - 0.1m
105	1 A mid-brown sandy gravel, base layer to lay cobbles on.		0.05 - 0.3m
106	1	A light-brownish-yellow silty clay. It is moderately compacted with 10% small sub-rounded stone; it is the fill of <i>109</i>	0.3 - 0.45m
107	1	A mid-brown silty clay. It is moderately compacted with 10% small sub-rounded stone, it is the fill of 109	0.3 - 0.9m
108	1	Natural: a mid-greyish-brown fairly loose silty sandy gravels.	0.4m -
109	1	The cut of a feature with undefined shape. It is 0.6m deep, and is truncated at 0.3m from the surface of the trench.	0.3 - 0.9m
201	2	A dark-orangey-brown silty clay overburden with a ceramic pipe drain running north/south within the western end of the trench.	0 - 0.5m
202	2	Natural: dark orangey-brown sandy gravels with a large patch of orangey-brown clay situated in the south end of the trial trench. It is fairly compact.	0.5m -
301	3	A light-yellowish-brown sandy clay, with occasional small sub-rounded gravel, becoming more frequent lower down the deposit. It is very compact with occasional lenses of greyish-brown clay.	0 -
401		A mid-greyish-brown sandy silt and gravel. It is very compact and contains large sub-rounded boulders and root action at horizon between 401 and 402	0 - 0.8m
402		Natural: a mid-greyish-brown sandy gravel, which is fairly loose	0.8m
501		A dark-greyish-brown silty clay with poorly sorted subrounded gravel.	0 -

# **ILLUSTRATIONS**

Figure	1:	Location	Map

Figure 2: Location of Trenches

Figure 3: East facing section of Trench 1, showing feature **109** 

Figure 4: East facing section of Trench 2 and north-west facing section of

Trench 4

Figure 5: North-west facing section of Trench 3 and south facing section of Trench

5

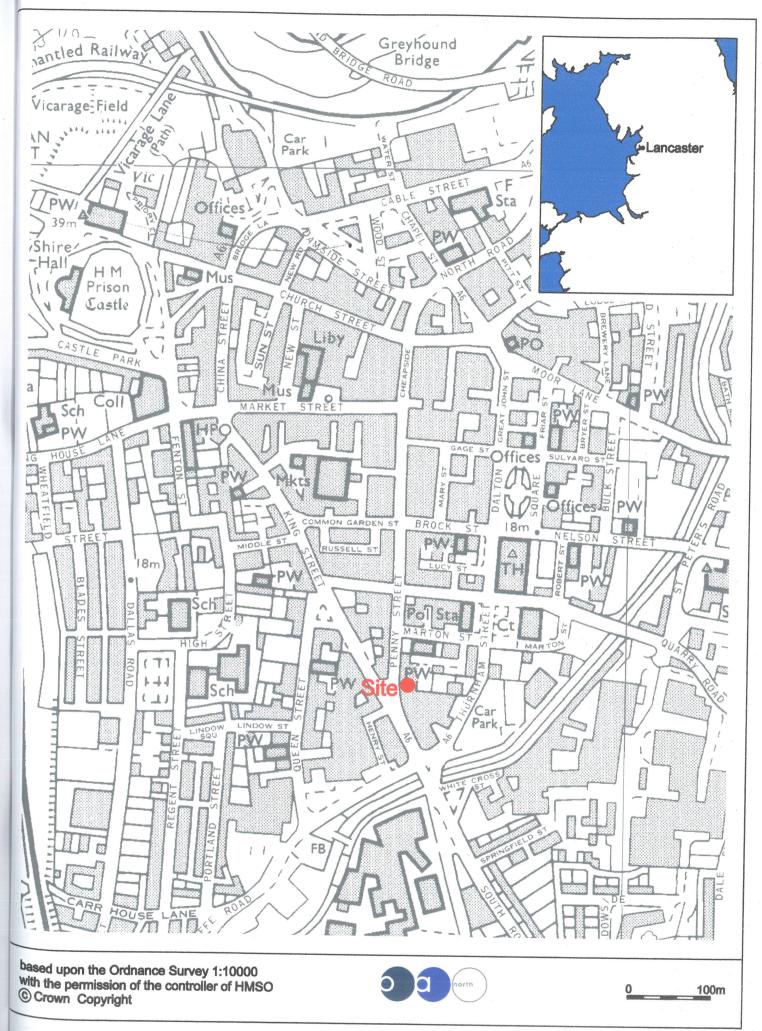


Figure 1: Location map



Figure 2: Location of Trenches

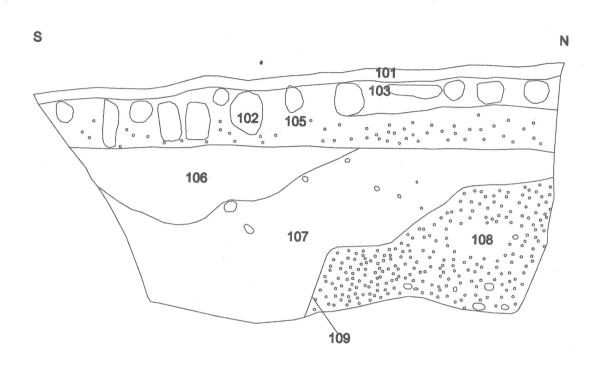
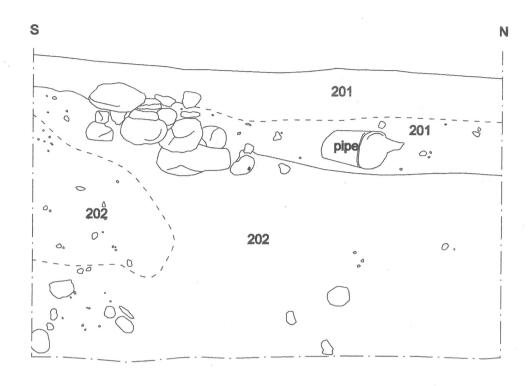






Figure 3: East facing section of Test Pit 1, showing feature 109



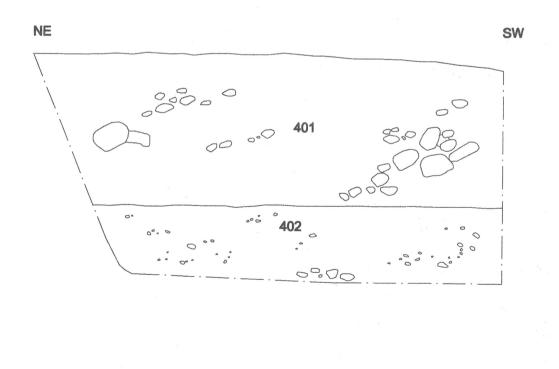
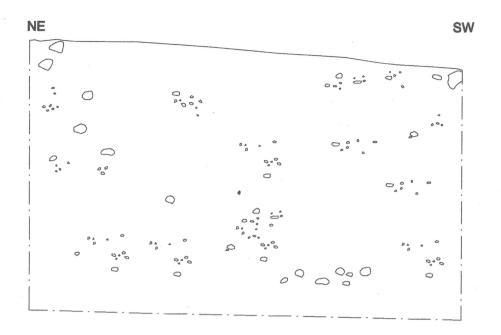
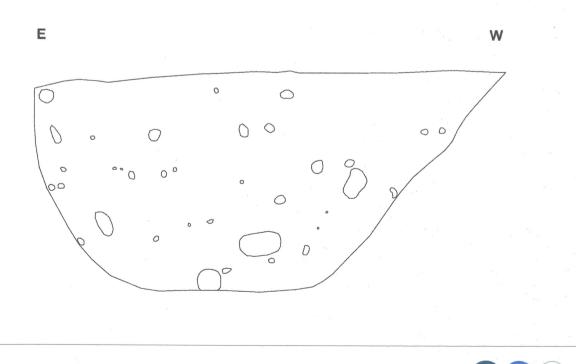




Figure 4: East facing section of Test Pit 2 (above) and north-west facing section of Test Pit 4 (below)





Scale 1:20

Figure 5: North-west facing section of Test Pit 3 (above) and south facing section of Test Pit 5 (below)