

**LONG ACRE COTTAGE,
LOW EIGHTON,
GATESHEAD,
TYNE AND WEAR**



WATCHING BRIEF REPORT

CP. No: 10151/12

05/04/2012



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Quality Assurance

This report covers works as outlined in the brief for the above-named project as issued by the relevant authority, and as outlined in the agreed programme of works. Any deviation to the programme of works has been agreed by all parties. The works have been carried out according to the guidelines set out in the Institute for Archaeologists (IfA) Standards, Policy Statements and Codes of Conduct. The report has been prepared in keeping with the guidance set out by Wardell Armstrong Archaeology Ltd on the preparation of reports.

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SUMMARY

Wardell Armstrong Archaeology Ltd were commissioned by Cajamo, on behalf of their clients Mr and Mrs Tait, to undertake an archaeological watching brief on groundworks relating to the conversion of the former workshop at Long Acre Cottage, Low Eighton, Gateshead, Tyne and Wear (NGR NZ 2675 5767). The site lies within the former extent of Eighton Medieval village, and buried evidence for historic mining could also exist. As a result, Gateshead Council granted planning consent for the development (Planning App No: DC/11/00796/FUL), on the condition that an Archaeological Watching Brief be undertaken during ground disturbing works.

The Archaeological Watching Brief was undertaken over two days between the 27/02/12 and 28/02/12. The watching brief monitored removal of concrete slab within the workshop and trenching along the internal length of the building. No archaeological remains were noted.

As this archaeological watching brief was conducted as part of a recommendation to observe groundworks in association with the redevelopment and conversion of an existing building, no further work is deemed necessary. However, given the high archaeological potential of the area, it is recommended that any future work be subject to a programme of archaeological investigation.

ACKNOWLEDGEMENTS

WA Archaeology Ltd would like to thank Darren Small for Cajamo, for commissioning the project, and for all assistance throughout the work. WAA Ltd would also like to thank Mr David Tait of Long Acre Cottage for his helpful knowledge of the site, and Jennifer Morrison, Tyne and Wear Archaeology Officer, Newcastle City Council, for all their assistance throughout the project.

WA Archaeology Ltd would also like to extend their thanks to Kevin Meldum, and all staff at the site, for their help during this project.

The archaeological watching brief was undertaken by Susan Thompson. The report was written by Susan Thompson and the drawings were produced by Adrian Bailey. The project was managed by Matthew Town, Project Manager for WAA Ltd. The report was edited by Martin Railton, Project Manager for WAA Ltd.

1 INTRODUCTION

- 1.1 In January 2012, WA Archaeology were invited by Darren Small, on behalf of their clients, Mr. and Mrs. Tait, to maintain an archaeological watching brief at Long Acre Cottage, Low Eighton, Gateshead (NGR NZ 2675 5767; Figures 1 and 2), during groundworks associated with the conversion of a former workshop. The proposed works lie within the immediate vicinity of the former extent of Eighton medieval village. Buried evidence for historic mining may also exist on the site. Due to the possibility that the groundworks may disturb medieval or post medieval remains, Jennifer Morrison of the Tyne and Wear Specialist Conservation Team requested that all ground reduction be subject to a programme of archaeological observation and investigation. This is in line with government advice as set out in the DCLG Planning Policy Statement 5 (PPS5).
- 1.2 All groundworks associated with the development of the workshop within the grounds of Long Acre Cottage had to be excavated under full archaeological supervision and all stages of the archaeological work were undertaken following approved statutory guidelines (IfA 2002), and were consistent with the specification provided by Jennifer Morrison (13/01/2012) and generally accepted best practice (see Appendix 2).
- 1.3 This report outlines the monitoring works undertaken on-site, the subsequent programme of post-fieldwork analysis, and the results of this scheme of archaeological works.

2 METHODOLOGY

2.1 SPECIFICATION

2.1.1 A specification was prepared by Jennifer Morrison, Tyne and Wear Specialist Conservation Team, for an archaeological watching brief of the study area (Appendix 2). WA Archaeology Ltd was commissioned by the client to undertake the work, and the specification was adhered to in full. The work was consistent with the relevant standards and procedures of the Institute for Archaeologists (IfA), and generally accepted best practice.

2.2 THE WATCHING BRIEF

2.2.1 The works involved a structured watching brief to observe, record and excavate any archaeological deposits from the development site. A watching brief is a formal programme of observation and investigation conducted during any operation carried out for non-archaeological reasons, on a specified area or site on land, inter-tidal zone or underwater, where there is a possibility that archaeological deposits may be disturbed or destroyed (IfA 2002).

2.2.2 The aims and principal methodology of the watching brief can be summarised as follows:

- to establish the presence/absence, nature, extent and state of preservation of archaeological remains and to record them;
- to carry out further excavation and recording work in adequate time, if intact archaeological remains are uncovered during the project;
- to accurately tie the area watched by the archaeologist into the National Grid at an appropriate scale, with any archaeological deposits and features adequately levelled;
- to sample environmental deposits encountered as required, in line with English Heritage (2002) guidelines;
- to produce a photographic record of all contexts using colour digital, as applicable, each photograph including a graduated metric scale;
- to recover artefactual material, especially that useful of dating purposes;
- to produce a site archive in accordance with MAP2 (English Heritage 1991) and MoRPHE standards (English Heritage 2006).

2.2.3 An area of approximately 6m by 10m was stripped of concrete slab, which had previously formed the floor of the workshop. The trenches formed a linear cut approximated to 10m in length x 1m deep, with the foundation cuts measuring approximately 0.70m in width. Archaeological monitoring and supervision of groundworks associated with the stripping and trenching commenced on 27 February 2011. A summary of the findings of the watching brief is included within this report.

2.3 THE ARCHIVE

2.3.1 A full professional archive has been compiled in accordance with the specification, and in line with current UKIC (1990) and English Heritage Guidelines (1991) and according to the Archaeological Archives Forum recommendations (Brown 2007). The archive will be deposited with Tyne and Wear Museums, with copies of the report sent to the Tyne and Wear Historic Environment Record, available upon request. The archive can be accessed under the unique project identifier NPA12, CP 10151/12.

2.3.2 WA Archaeology and Newcastle City Council support the **Online AccesS** to the **Index of Archaeological InvestigationS (OASIS)** project. This project aims to provide an on-line index and access to the extensive and expanding body of grey literature, created as a result of developer-funded archaeological work. As a result, details of the results of this project will be made available by WA Archaeology, as a part of this national project.

3 BACKGROUND

3.1 LOCATION AND GEOLOGICAL CONTEXT

- 3.1.1 Low Eighton lies within the undulating farmland and former coalmines of South Tyneside, to the south of Gateshead. South Tyneside lies between the Newcastle and North Tyneside to the North, and County Durham to the south. The development area was a part of the former Spring Pit, and was formerly part of the buildings which were associated with the pit ponies. The remains of the pit were originally located near the site but have since been demolished. The area is shown in Figure 1.
- 3.1.2 The underlying geology of the area is of the Upper Carboniferous Coal Measures that are overlain by glacial till deposits (Johnson 1995).

3.2 HISTORICAL CONTEXT

- 3.2.1 *Introduction:* this historical background is compiled mostly from secondary sources, and is intended only as a brief summary of historical developments specific to the study area.
- 3.2.2 *Prehistoric:* there is no evidence of prehistoric activity in the immediate vicinity of Low Eighton.
- 3.2.3 *Roman:* Roman activity is well known in the area; a possible Roman fort is thought to exist at Wrekenton to the north east and the Old Great North Road runs to the west. This road originated in the Roman period and is thought to have connected Chester-le-Street with a bridge across the Tyne. No Roman remains have been found close to the site of the current development.
- 3.2.4 *Medieval:* within the HER are references to medieval Eighton village dating to between 1128 and 1608. The exact location is not known, however descriptions of the boundaries of the village suggest that Eighton may be around the site of modern Low Eighton.
- 3.2.5 Between 1387 and 1463 there are references to a chapel and hermitage which may be in the vicinity of modern Low Eighton. Again the location is uncertain and the area disturbed by the former Spring Pit.
- 3.2.6 *Post-medieval and Modern:* the area around Low Eighton was heavily disturbed by the former Spring Pit. Many of the houses in modern Low Eighton are former colliery buildings, including Long Acre Cottage and the former workshop to be converted.

3.2.7 The workshop due to be converted was built by the National Coal Board in the 1950's as part of a series of coal testing exercises. The building was used to crush up coal samples into a fine powder, a process which was done on the large central iron plate located centrally in the floor of the workshop. Coal was then pounded on this plate.

4 ARCHAEOLOGICAL WATCHING BRIEF

4.1 INTRODUCTION

4.1.1 The watching brief monitoring was undertaken in two key phases, carried out on 27/02/2012 and 28/02/2012. The watching brief covered the controlled removal of concrete slab and the excavation of the foundation trenches within the building (Figure 3).

4.2 PHASE 1: REMOVAL OF CONCRETE SLAB

4.2.1 The Phase 1 Watching Brief covered the controlled stripping of concrete slab around the site prior to the main excavation of the foundation trenches (Figure 3).

4.2.2 Prior to the removal of the concrete slab (100), three test pits had been opened, without archaeological supervision. Test Pit 1 measured 1.10m x 0.90m x 1m and showed the stratigraphy of deposits within the building; 0.30m of concrete above 0.20m brick rubble which lay above mixed made ground containing rubble and clinker. Test Pit 2 measured 0.60m x 0.78m x 0.70m exposed 0.20m concrete above 0.20m which covered mixed clinker rubble deposit. A large ceramic service pipe/drain was observed in Test Pit 2. Test Pit 3 was 1.40m x 0.60m x 0.70m and showed the same deposits as seen in Pit 1.

4.2.3 The concrete was stripped by a mini JCB. The concrete was present across the whole of the interior of the building. Due to the nature of the work being carried out in the building, the pounding and smashing up of coal prior to testing, the concrete floor was much more substantial than would otherwise have been the norm and had a minimum depth of 0.30m. Beneath the concrete a mixed clay deposit containing frequent brick and stone rubble was visible.

4.2.4 The steel floor which was central in the building was also removed. This had been formed of a steel plate welded onto iron girders and set into the concrete.



Plate 1: Interior of workshop after removal of concrete slab – SW Facing

4.2.5 The concrete in the rear porch extension was approximately 0.15cm deep above brick rubble hardcore.

4.2.6 No archaeological features were noted after removal of the concrete floor.

4.3 PHASE 2: FOUNDATION TRENCHES

4.3.1 The Phase 2 Watching Brief aimed to monitor subsequent groundworks associated with the excavation of the foundation trenches (Figure 3).

4.3.2 Foundation trenches were excavated along the interior walls of the former workshop to a width of 0.70m and a depth of 1m. These trenches were wider than the original foundation trenches and cut into the interior ground of the building.

4.3.3 The stratigraphic matrix observed within the excavated area remained constant throughout. The uppermost layer removed consisted of a layer of brick rubble which formed a base for the concrete floor. This was a minimum of 0.10m in the main interior. This overlay a made ground deposit which consisted of black clinker/silty clay with frequent brick and sandstone inclusions and was up to 0.60m in depth.

4.3.4 Foundation trenches were also dug to the rear exterior of the building to form a uniform rectangular shape to the converted dwelling house. These foundations were dug to a depth of 0.90m

4.3.5 A firm grey clay was observed at 1m below the surface of the concrete which was presumed to be the natural geology (101).

4.3.6 No archaeological remains were noted during the excavation of the trenches.



Plate 2: Trench Running NE-SW along interior foundation of SE wall

4.4 ARCHAEOLOGICAL FINDS AND ENVIRONMENTAL SAMPLING

4.4.1 No archaeological finds were recovered, and no environmental samples were retained during the groundworks.

5 CONCLUSIONS AND RECOMMENDATIONS

5.1 CONCLUSIONS

- 5.1.1 *Phase 1:* the site was stripped of concrete to create a working area, under archaeological supervision. No other archaeological remains were noted.
- 5.1.2 *Phase 2:* the excavation of trenching and foundation cuts were monitored during the watching brief. No archaeological remains were noted.
- 5.1.3 Due to the nature of the work being carried out in the former workshop, it seems that when the foundations were cut, much of the interior was also removed, in order that a good firm base could be created for the thick concrete floor. Any archaeology which may have been present would have been destroyed in the construction of the workshop and any surviving at lower levels would not be affected in the current conversion.

5.2 RECOMMENDATIONS

- 5.2.1 As this watching brief was conducted as a condition of groundworks associated with the conversion of a former industrial workshop, no further archaeological work is deemed necessary. However, given the site's location in relation to the medieval settlement of Eighton, it is recommended that any work conducted in the future be subject to a similar programme of archaeological investigation.

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APPENDIX 1: CONTEXT TABLE

Context Number	Context Type	Description
100	Deposit	Concrete
101	Deposit	Natural Clay
102	Deposit	Deposit of mixed clay and rubble

Table 1: List of Contexts issued during Watching Brief

APPENDIX 2: SPECIFICATION

Tyne and Wear Specialist Conservation Team

Specification for Archaeological Watching Brief at Longacre Cottage, Low Eighton, Gateshead NE9 7UB

Planning Application: DC/11/00796/FUL

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Date: 13 January 2012

County Archaeologist's Reference Number: MON9312

The Tyne and Wear Specialist Conservation Team is the curatorial service for archaeology, industrial archaeology and historic buildings throughout the Tyne and Wear districts. It helps and advises Newcastle, Gateshead, North Tyneside, South Tyneside and Sunderland Councils to carry out their statutory duties to care for the precious historic environment of Tyneside and Wearside.

Introduction

Site grid reference: NZ 2675 5767

Planning permission has been granted for the conversion of a former industrial building (a workshop) to a dwellinghouse including the erection of extensions and installation of dormer windows and rooflights.

The permission is subject to an archaeological watching brief condition (conditions 5 and 6).

The reason for the watching brief is that the site lies within the former extent of Eighton medieval village. Buried evidence for historic mining might also exist. The excavations required for the extensions may disturb medieval or post medieval remains.

HER 661 Eighton village

By a grant dated before 1128 Ranulph bishop of Durham gave his nephew Richard Hectona (Eighton), Ravensworth and Blaikeston. The description of the boundaries suggests that "the high road" (presumably Long Bank and Old Durham Road) was the eastern boundary, and hence that Eighton is perhaps represented by the modern Low

Eighton. The vill seems always to have been small, and it continued to be part of the Ravensworth estate -of the Lumleys in C14-15, and passing with the rest to the Liddells in the early C17. Surtees quotes a deed of 1608 which mentions Eighton, Over Eighton and Nether Eighton -if the last two are the modern High and Low Eighton, where was Eighton itself? Between them? Not listed by Roberts and Austin.

HER 659 Eighton chapel

In 1387 Bishop Fordham granted to Robert Lamb, hermit, an acre of waste at the north end of the vill of Eighton, next to and west of the high road leading to Gateshead and near a stream descending from the spring called Scotteswell (HER 5137), for a chapel and hermitage in honour of the Holy Trinity in which to serve God and pray for the bishop, his predecessors and successors. In 1463 Sir William and Thomas Lumley granted the hermitage and 2 acres to Henry and Agnes Chamer for life -"William Jakson, who formerly dwelt in the hermitage, to live without molestation in a house belonging to the hermitage and which he now inhabits". There are no further references. At a guess medieval Eighton seems likely to be Low Eighton, and the hermitage and chapel were perhaps sited close to Longacre Dean (NZ 268 578). Scot's Well however, is some distance to the north east at NZ 2754 5832 and it could be that the chapel and hermitage were closer to this grid reference. This area has been disturbed by the former Spring Pit.

HER 658 Eighton hermitage

In 1387 Bishop Fordham granted to Robert Lamb, hermit, an acre of waste at the north end of the vill of Eighton, next to and west of the high road leading to Gateshead and near a stream descending from the spring called Scotteswell (SMR 5137), for a chapel and hermitage in honour of the Holy Trinity in which to serve God and pray for the bishop, his predecessors and successors. In 1463 Sir William and Thomas Lumley granted the hermitage and 2 acres to Henry and Agnes Chamer for life -"William Jakson, who formerly dwelt in the hermitage, to live without molestation in a house belonging to the hermitage and which he now inhabits". There are no other references. At a guess medieval Eighton seems likely to be Low Eighton, and the hermitage was perhaps sited close to Longacre Dean (NZ 268 578). Scot's Well however, is some distance to the north east at NZ 2754 5832 and it could be that the chapel and hermitage were closer to this grid reference. This area has been disturbed by the former Spring Pit.

Ground disturbing work (including site preparation, foundation and service trenching) must therefore be monitored by an archaeologist as a Watching Brief, in order that any archaeological remains can be recorded.

The watching brief must be carried out by a suitably qualified and experienced archaeological organisation.

All work must be carried out in compliance with the codes of practice of the Institute of Field Archaeologists and must follow the IFA Standard and Guidance for Watching Briefs (revised 2001).

The work will record, excavate and environmentally sample (if necessary) any archaeological deposits of importance found on the plot. The purpose of this brief is to obtain tenders for this work. The report must be the definitive record for deposition in the Tyne and Wear HER.

A toothless bucket will be used on the plant employed on site to reduce damage to archaeological remains.

The North-East Regional Research Framework for the Historic Environment (2006) notes the importance of research as a vital element of development-led archaeological work. It sets out key research priorities for all periods of the past allowing commercial contractors to demonstrate how their fieldwork relates to wider regional and national priorities for the study of archaeology and the historic environment. The aim of NERRF is to ensure that all fieldwork is carried out in a secure research context and that commercial contractors ensure that their investigations ask the right questions.

The commissioning client will provide plans indicating the location of the proposed work.

Notification

The County Archaeologist needs to know when archaeological fieldwork is taking place in Tyne and Wear so that he can inform the local planning authority and can visit the site to monitor the work in progress. The Archaeological Contractor must therefore inform the County Archaeologist of the start and end dates of the Watching Brief. He must also keep the County Archaeologist informed as to progress on the site. The CA must be informed of the degree of archaeological survival. The Client will give the County Archaeologist reasonable access to the development to undertake monitoring.

Project Design

Because this is a detailed specification, the County Archaeologist does not require a Project Design from the appointed archaeologist. The appointed archaeologist is expected to comply with the requirements of this specification.

The Tasks

A construction timetable has yet to be agreed. Tenders for the Watching Brief should therefore be a cost per day including overheads such as travel costs and equipment. Contingency costs will be provided for environmental sampling and scientific dating per sample and for finds analysis. Any variation on the agreed timetable will be notified by the client, who will give a minimum of 48 hours notice of a change on the days of site attendance. Close liaison between the parties involved will be needed to coordinate this element of the work.

The work involves undertaking a structured watching brief to observe and record any archaeological deposits and finds from this locality. The absence of deposits and finds must be recorded as negative evidence. The Watching Brief will not aim to hinder the construction programme, however should archaeological remains be found, the appointed archaeologist must be allowed sufficient time to fully record (by photograph and scale plan and section), excavate and environmentally sample (if necessary) the archaeological deposits. Within the course of the Watching Brief, it may be possible to record sections through the stratigraphy exposed during the construction work.

General Conditions

All staff employed by the Archaeological Contractor shall be professional field archaeologists with appropriate skills and experience to undertake work to the highest professional standards.

The Archaeological Contractor must maintain a Site Diary for the benefit of the Client, with full details of Site Staff present, duration of time on site, etc. and contact with third parties.

The Archaeological Contractor must be able to provide written proof that the necessary levels of Insurance Cover are in place.

The Client may wish to see copies of the Archaeological Contractor's Health and Safety Policies.

Environmental Sampling and Scientific Dating

Scientific investigations should be undertaken in a manner consistent with "The Management of Archaeological Projects", English Heritage 1991 and with "Archaeological Science at PPG16 Interventions: Best Practice for Curators and Commissioning Archaeologists", English Heritage, 2003.

See also 'Environmental Archaeology: A guide to the theory and practice of methods, from sampling and recovery to post excavation', English Heritage, second edition 2011.

<http://www.english-heritage.org.uk/publications/environmental-archaeology-2nd/>

Aims of environmental sampling – to determine the abundance/concentration of the material within the features and how well the material is preserved, to characterise the resource (the site) and each phase, to determine the significance of the material and its group value, what crop processing activities took place on the site? What does this tell us about the nature of the site? Is there any evidence for changes in the farming practice through time? How did people use this landscape? Can we place certain activities at certain locations within the site? Function and date of individual features such as pits, hearths etc. Are the charred assemblages the result of ritual deposition or rubbish? Is the charcoal the result of domestic or industrial fuel?

Advice on the sampling strategy for environmental samples and samples for scientific dating etc. must be sought from Jacqui Huntley, English Heritage Advisor for Archaeological Science (07713 400387) before the watching brief begins. The sampling strategy should include a reasoned justification for selection of deposits for sampling.

Deposits should be sampled for retrieval and assessment of the preservation conditions and potential for analysis of biological remains (English Heritage 2002). Flotation samples and samples taken for coarse-mesh sieving from dry deposits should be processed at the time of fieldwork wherever possible. Sieving recovers fish, amphibian, small bird and mammal bone, small parts of adult mammals and young infused bones which may be under-represented otherwise. However it is noted that clay soils in this region make sieving difficult. Discuss the potential for sieving with Regional Advisor for Archaeological Science.

Environmental samples (bulk soil samples of 30 litres volume, to be sub-sampled at a later stage) will be collected by the excavator from suitable (i.e. uncontaminated) deposits. It is suggested that a large number of samples be collected during evaluation from which a selection of the most suitable (uncontaminated) can be processed. All tenders will give a price for the full analysis, report production and publication per sample.

Deposits will be assessed for their potential for radiocarbon, archaeomagnetic (guidance is available in the Centre for Archaeology Guideline on Archaeometallurgy 2001) and Optically Stimulated

Luminescence dating. Timbers will be assessed for their potential for dendrochronology dating. Sampling should follow procedures in "Dendrochronology: guidelines on producing and interpreting dendrochronological dates", Hillam, 1998. All tenders will quote the price of these techniques per sample.

The following information should be provided with the environmental samples to be processed – brief account of nature and history of the site, aims and objectives of the project, summary of archaeological results, context types and stratigraphic relationships, phase and dating information, sampling and processing methods, sample locations, preservation conditions, residuality/contamination etc.

Laboratory processing of samples shall only be undertaken if deposits are found to be reasonably well dated, or linked to recognisable features and from contexts the derivation of which can be understood with a degree of confidence.

A range of features, and all phases of activity, need to be sampled for charred plant remains and charcoal. Ceramic features should not be avoided as the plant remains from these features may help to date them. Deep features should be sampled in spits to pick up changes over time. Part, or all of each of the contexts should be processed. In general samples should be processed in their entirety. All flots should be scanned, and some of the residues.

Pollen samples can be taken from features such as lakes, ponds, palaeochannels, estuaries, saltmarshes, mires, alluvium and colluvium, and from waterlogged layers in wells, ditches and latrines etc. Substances such as honey, beer or food residues can be detected in vessels. Activities such as threshing, crop processing and the retting of flax can be identified. When taken on site, pollen samples should overlap. Your regional science advisor can advise on the type of corer or auger which would be most appropriate for your site. Samples need to be wrapped in clingfilm and kept dark and cool. Make a description of the sediments in which the pollen was found, and send this with the sample to be assessed.

Coastal or estuary sites (even those which are now well drained) are suitable for sampling for foraminifera. Diatoms can also be found on marine sites, but also in urban settings (sewers, wells, drains, ditches etc). They only survive in waterlogged conditions. These aquatic microfossils are used as proxy indicators of the former aquatic ecological conditions on site, changes in sea levels and temperature, salinity, PH and pollution. Forams are taken from cores, monolith tins or bulk samples. Diatoms are cut from monolith tins or cores or taken as spot samples.

Insects, which are useful as palaeoenvironmental indicators, survive best in waterlogged deposits such as palaeochannels and wells. They can provide information on climate change and landscape reconstruction as some species are adapted to particular temperatures, habitats or even particular trees. Certain insects can indicate the function of a feature or building (eg. Weevils, which were introduced by the Romans, often indicate granary sites, parasites will indicate the presence of particular animals such as sheep or horse, latrine flies survive in the mineral deposits in latrines, or in the daub of medieval buildings etc). Samples need to be sealed (eg. in a plastic box).

Where there is evidence for industrial activity, macroscopic technological residues should be collected by hand. Separate samples should be collected for micro-slags (hammer-scale and spherical droplets). Guidance is available in the English Heritage "Archaeometallurgy" guidelines, 2001.

Buried soils and sediment sequences should be inspected and recorded on site by a recognised geoarchaeologist. Procedures and techniques in the English Heritage document "Environmental Archaeology", 2002 and "Geoarchaeology", 2004 should be followed.

Sampling strategies for wooden structures should follow the methodologies presented in "Waterlogged wood. Guidelines on the recording, sampling, conservation and curation of waterlogged wood" R. Brunning, 1996. If timbers are likely to be present on your site, contact a wood specialist beforehand. Pre-excavation planning – determine questions to ask, agree on a sampling strategy, allocate reasonable time and budget. Soil samples should be taken of the sediments surrounding the timber. Keep the timbers wet! Record them asap on-site – plan, photograph, record the size and orientation of the wood (radial, tangential, transverse), any toolmarks, joints, presence of bark, insect damage, recent breaks, and if another piece of wood was on top of or below the piece sampled. Both vertical and horizontal positioning of wattling must be recorded. Wood samples can provide information on woodland management such as medieval coppicing, type of taxa (native or foreign), conversion technology (how the wood was turned into planks), building techniques and type of tools used.

Waterlogged organic materials should be dealt with following recommendations in "Guidelines for the care of waterlogged archaeological leather", English Heritage and Archaeological Leather Group 1995.

Animal Bone

Animal bone can explore themes such as hunting and fowling, fishing, plant use and trade, seasonality, diet, age structures, farrowing areas, species ratios, local environment.

Animal bone assemblages should be assessed by a recognised specialist.

The specialist will need to know a brief account of the nature and history of the site, an account of the purpose, methods (details of sampling) for recovery of animal bones, and the main aims and results of the excavation, details of any specific questions that the excavator wants the animal bone specialist to consider, information about other relevant finds from the excavation (e.g. bone tools, fishing equipment, weaving equipment), specific information about each context that has produced significant quantities of animal bone (recovery method, phase, context type, position in relation to major structures, contamination by more recent material, some indication of the amount of bone (by weight or by container size). See "Ancient Monuments Laboratory Advisory Note, "Assessment of animal bone collections from excavations", Sebastian Payne, 1991 and "The Assessment of a collection of animal bones", S. Davis, n.d., Ancient Monuments Laboratory.

Human Remains

Human remains must be treated with care, dignity and respect.

Excavators must comply with the relevant legislation (essentially the Burial Act 1857) and local environmental health concerns. If found, human remains must be left in-situ, covered and protected. The archaeological contractor will be responsible for informing the police, coroner and County Archaeologist. If it is agreed that removal of the remains is essential, the archaeological contractor will apply for a licence from the Home Office and their regulations must be complied with.

Site inspection by a recognised osteologist is desirable for isolated burials and essential for cemeteries. The remains will be recorded in-situ and subsequently lifted, washed in water (without additives). They will be marked and packed to standards compatible with "Excavation and post-excavation treatment of cremated and inhumed human remains", McKinley and Roberts, 1993. After excavation, the remains will be subject to specialist assessment.

Analysis of the osteological material should take place according to published guidelines "Human Remains from Archaeological Sites, Guidelines for producing assessment documents and analytical reports, English Heritage, 2002.

Some of the potential benefits from the study of human skeletons – demography, growth profiles, patterns of disease, genetic relationships, activity patterns, diet, burial practices, human evolution. New scientific techniques available include DNA and stable isotope analyses.

The final placing of the remains after scientific study and analysis will be agreed beforehand.

Further guidance is available in:

"Guidance for best practice for treatment of human remains excavated from Christian burial grounds in England", The Church of England and English Heritage, 2005 (www.english-heritage.org.uk/upload/pdf/16602_HumanRemains1.pdf)

"Church Archaeology: its care and management", Council for the Care of Churches,

The Advisory Panel on the Archaeology of Christian burials in England can provide free well-informed advice with consideration of relevant religious, ethical, legal, archaeological and scientific issues. Panel's website:

<http://www.britarch.ac.uk/churches/humanremains/index.html>

or email the secretary simon.mays@english-heritage.org.uk

Treasure

Defined as:

- Any metallic object, other than a coin, provided that at least 10% by weight of metal is precious metal and that is at least 300 years old when found
- Any group of two or more metallic objects of any composition of prehistoric date that come from the same find
- All coins from the same find provided that they are at least 300 years old when found, but if the coins contain less than 10% gold or silver there must be at least ten
- Any object, whatever it is made of, that is found in the same place as, or had previously been together with, another object that is Treasure
- Any object that would previously have been treasure trove, but does not fall within the specific categories given above. Only objects that are less than 300 years old, that are made substantially of gold or silver, that have been deliberately hidden with the intention of recovery and whose owners or heirs are unknown will come into this category.

If anything is found which could be Treasure, under the Treasure Act 1996, it is a legal requirement to report it to the local coroner within 14 days of discovery. The Archaeological Contractor must comply with the procedures set out in The Treasure Act 1996. Any treasure must be reported to the coroner and to The Portable Antiquities Scheme Finds Liaison Officer, Rob Collins (0191 2225076 or Robert.Collins@newcastle.ac.uk) who can provide guidance on the Treasure Act procedures.

Finds Processing and Storage

Finds shall be recorded and processed in accordance with the IFA Guidelines for Finds Work

Finds will be assessed by an experienced finds specialist.

The Archaeological Contractor will process and catalogue the finds in accordance with Museum and Galleries Commissions Guidelines (1992) and the UKIC Conservation Guidelines, and arrange for the long term disposal of the objects on behalf of the Client.

A catalogue of finds and a record of discard policies, will be lodged with the finds for ease of curation.

Assessment should include x-radiography of all iron objects (after initial screening to exclude recent debris) and a selection of non-ferrous artefacts (including all coins). Refer to "Guidelines on the x-radiography of archaeological metalwork, English Heritage, 2006.

If necessary, pottery sherds and bricks should be recommended for Thermoluminescence dating.

Finds processing, storage and conservation methods must be broadly in line with current practice, as exemplified by the IFA "Standard and guidance for the collection, documentation, conservation and research of archaeological materials", 2001. Finds should be appropriately packaged and stored under optimum conditions, as detailed in the RESCUE/UKIC publication "First Aid for Finds" (Watkinson and Neal 1998). Proposals for ultimate storage of finds should follow the UKIC publication "Guidelines for the Preparation of Excavation Archives for Long-term Storage" (Walker 1990). Details of methodologies may be requested from the Archaeological Contractor.

Other useful guidance – "A Strategy for the Care and Investigation of Finds", English Heritage, 2003, "Finds and Conservation Training Package", English Heritage, 2003.

All objects must be stored in appropriate materials and conditions to ensure minimal deterioration. Advice can be sought from Jacqui Huntley of English Heritage (07713 400387) where necessary.

The Report

The production of Site Archives and Finds Analysis will be undertaken according to English Heritage Guidelines (Managing Archaeological Projects 2nd Edition).

The archaeological contractor will provide a report of archaeological operations, including:

- a site location plan and grid reference
- brief description of recording procedures
- plans and sections of stratigraphy recorded (if practical)
- report on the finds (if any)
- environmental report (if relevant)
- colour photographs of the site, the workshop building and any significant archaeological features/finds
- a summary of the results of the work
- copy of this specification

The report will form an addition to the Short Reports files in the Tyne and Wear Historic Environment Record.

One bound and collated paper copy of the report needs to be submitted:

- for deposition in the County HER

Three pdf copies on CD are needed:

- one for the commissioning client
- one for the planning authority (Gateshead Council) – to be submitted formally by the developer with the appropriate fee
- and one for deposition in the County HER at the address on the first page. Please do not attach this to the paper report.

The report and CD for the HER must be sent by the archaeological consultant or their client directly to the address below. If the report is sent via the planning department, every page of the report will be stamped with the planning application number which ruins the illustrations. The HER is also often sent a photocopy instead of a bound colour original which is unacceptable.

Site Archive

The archive should be a record of every aspect of an archaeological project – the aims and methods, information and objects collected, results of analysis, research, interpretation and publication. It must be as complete as possible, including all relevant documents, records, data and objects {Brown, 2007, 1}.

The site archive (records and materials recovered) should be prepared in accordance with *Managing Archaeological Projects*, Second Edition, 5.4 and appendix 3 (HBMC 1991), "Archaeological documentary archives" IFA Paper No. 1, "Archaeological Archives – creation, preparation, transfer and curation" Archaeological Archives Forum etc., *Guidelines for the Preparation of Excavation Archives for Long Term Storage* (UKIC 1990) and "Archaeological Archives – A guide to best practice in creation, compilation, transfer and curation" by Duncan H. Brown, Archaeological Archives Forum, July 2007.

Documentary Archive

The documentary archive comprises all records made during the archaeological project, including those in hard copy and digital form.

This should include written records, indexing, ordering, quantification and checking for consistency of all original context sheets, object records, bulk find records, sample records, skeleton records, photographic records (including negatives, prints, transparencies and x-radiographs), drawing records, drawings, level books, site notebooks, spot-dating records and conservation records, publication drafts, published work, publication drawings and photographs etc.

A summary account of the context record, prepared by the supervising archaeologist, should be included.

All paper-based material must at all times be stored in conditions that minimise the risk of damage, deterioration, loss or theft.

Do not fold documents

Do not use self-adhesive labels or adhesive or tape of any kind

High quality paper (low-acid) and permanent writing materials must be used

Original drawings on film must be made with a hard pencil, at least 4H.

Do not ink over original pencil drawings.

Use polyester based film for drawings (lasts longer than plastic).

Store documents in acid-free, dust-proof cardboard boxes

Store documents flat

All documents must be marked with the project identifier (e.g. site code) and/or the museum accession number.

All types of record must use a consistent terminology and format.

Use non-metal fastenings, and packaging and binding materials that ensure the longevity of documents.

Copies of reports and appropriate drafts, with associated illustrative material, must be submitted for inclusion with the archive.

Material Archive

The material archive comprises all objects (artefacts, building materials or environmental remains) and associated samples of contextual materials or objects.

All artefacts and ecofacts retained from the site must be packed in appropriate materials.

All finds must be cleaned as appropriate to ensure their long-term survival

All metal objects retained with the archive must be recorded by x-radiograph (except gold or lead alloys or lead alloys with a high lead content and objects too thick to be x-rayed effectively e.t.c.)

All finds must be marked or labelled with the project and context identifiers and where relevant the small-finds number

Use tie-on rot-proof labels where necessary

Bulk finds of the same material type, from the same context, may be packed together in stable paper or polythene bags

Mark all bags on the outside with site and context identifiers and the material type and include a polyethylene label marked with the same information

Use permanent ink on bags and labels

Sensitive finds must be supported, where appropriate, on inert plastic foam or acid-free tissue paper. It is not advisable to wrap objects in tissue as the unwrapping could cause damage.

The archive will be placed in a suitable form in the appropriate museum (Tyne and Wear Museums – Alex Croom, Arbeia Roman Fort 0191 4544093) with the landowner's permission.

A letter will be sent to the County Archaeology Officer within six months of the report having been submitted, confirming where the archive has been deposited.

Monitoring

The Archaeological Contractor will inform the County Archaeologist of the start and end dates of the Watching Brief to enable the County Archaeologist to monitor the work in progress. The Client will give the County Archaeologist reasonable access to the development to undertake monitoring.

OASIS

The Tyne and Wear County Archaeologist supports the Online Access to the Index of Archaeological Investigations (OASIS) project. This project aims to provide an online index/access to the large and growing body of archaeological grey literature, created as a result of developer-funded fieldwork.

The archaeological contractor is therefore required to register with OASIS and to complete the online OASIS form for their watching brief at <http://www.oasis.ac.uk/>. Please ensure that tenders for this work takes into account the time needed to complete the form.

Once the OASIS record has been completed and signed off by the HER and NMR the information will be incorporated into the English Heritage Excavation Index, hosted online by the Archaeology Data Service.

The ultimate aim of OASIS is for an online virtual library of grey literature to be built up, linked to the index. The unit therefore has the option of uploading their grey literature report as part of their OASIS record, as a Microsoft Word document, rich text format, pdf or html format. The grey literature report will only be mounted by the ADS if both the unit and the HER give their agreement. The grey literature report will be made available through a library catalogue facility.

Please ensure that you and your client understand this procedure. If you choose to

upload your grey literature report please ensure that your client agrees to this in writing to the HER at the address below.

For general enquiries about the OASIS project aims and the use of the form please contact: Mark Barratt at the National Monuments Record (tel. 01793 414600 or oasis@english-heritage.org.uk). For enquiries of a technical nature please contact: Catherine Hardman at the Archaeology Data Service (tel. 01904 433954 or oasis@ads.ahds.ac.uk). Or contact the Tyne and Wear Archaeology Officer at the address below.

If you need this information in another format or language, please contact Jennifer Morrison, Archaeology Officer.

APPENDIX 3: FIGURES
