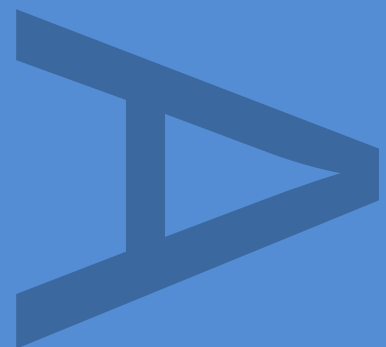


**AN ARCHAEOLOGICAL WATCHING BRIEF AT
ST. MICHAEL'S CHURCH/THE BYKER CENTRE,
HEADLAM STREET, BYKER,
NEWCASTLE-UPON-TYNE,
TYNE AND WEAR**

MARCH 2011



PRE-CONSTRUCT ARCHAEOLOGY

**An Archaeological Watching Brief at St. Michaels Church/The Byker Centre,
Headlam Street, Byker, Newcastle-upon-Tyne, Tyne and Wear**

National Grid Reference: NZ 2728 6447

Site Code: BCC 11

Commissioning Client:

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Tyne and Wear
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March 2011**

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1. NON-TECHNICAL SUMMARY

- 1.1 An archaeological monitoring and recording exercise was conducted in association with landscaping groundworks at St. Michael's Church, Headlam Street, Byker, Newcastle. Adjacent to the church is the former church hall, now the Byker Centre, and the work was undertaken ahead of a project to create a community open space. The site has a central National Grid Reference NZ 2728 6447.
- 1.2 The archaeological investigation was commissioned by AWP on behalf of the Byker Centre and was undertaken in February 2011 by Pre-Construct Archaeology Limited as a condition of planning permission, on the recommendation of the Tyne and Wear Archaeology Officer at Newcastle City Council.
- 1.3 Although the grounds of St. Michael's Church, built in 1862-63, were never used for burials, the site lies within the presumed extent of Byker medieval village and therefore had potential for archaeological remains of importance.
- 1.4 The archaeological work monitored initial ground preparation in two areas to the south-west of the church where the sloping existing ground level was reduced by a depth of up to 0.25m. A third area to the west of the church was examined where the concrete floor slab of a previous building had been removed.
- 1.5 No archaeological remains of note were encountered during the investigation. In the areas to the south-west of the church, groundworks removed an existing topsoil of modern origin and the upper part of an underlying deposit, thought to be the disturbed sub-stratum, while in the area of the former building a rubble make-up layer for the former concrete floor was exposed.

2. INTRODUCTION

2.1 General Background

- 2.1.1 This report details the results of an archaeological monitoring and recording exercise, (hereafter 'watching brief'), undertaken in association with landscaping of the grounds of St. Michael's Church, Headlam Street, Byker Newcastle (Figures 1 and 2). The project will create a community open space, the main element being a garden with an amphitheatre, water playground and maze. AWP commissioned the watching brief on behalf of the Byker Centre, a community centre which now occupies the adjacent former church hall, and it was undertaken by Pre-Construct Archaeology Limited (PCA) in February 2011.
- 2.1.2 The watching brief was carried out as a condition of planning permission at the request of the Tyne and Wear Archaeology Officer attached to Newcastle City Council (NCC). St. Michael's Church is situated within the presumed extent of Byker medieval village, therefore it was considered that landscaping groundworks had the potential to disturb important buried archaeological remains. The work was carried out according to a Specification produced by the Tyne and Wear Archaeology Officer.¹
- 2.1.3 As originally designed, the project would have required extensive ground reduction and terracing. However, a design solution, taking into account the existing topography of the church grounds, meant that, for the most part, existing ground levels could in fact be raised for the development. Therefore, in practice, the archaeological watching brief was a very limited piece of work, requiring just one day of site attendance.
- 2.1.4 The main aim of the archaeological project was to identify and record any archaeological remains of importance revealed during landscaping groundworks.
- 2.1.5 The completed Site Archive, comprising written, drawn and photographic records, will be deposited at Tyne and Wear Museums and Archives, at Arbeia, South Shields, Tyne and Wear under the site code BCC 11. The Online 'Access to the Index of Archaeological Investigations' (OASIS) reference number for the project is: preconst1-97474.

2.2 Site Location and Description

- 2.2.1 The site is located on Headlam Street in the heart of Byker, at central National Grid Reference NZ 2728 6447. It lies c. 1km north of the the Tyne, overlooking the Tyne Gorge (Figure 1).
- 2.2.2 The site itself comprised St Michael's Church, a Grade II listed building built in the 1860's, and its grounds. The former church hall, fronting onto Headlam Street, is now the Byker Centre.

¹ Tyne and Wear Specialist Conservation Team 2009.

2.3 Geology and Topography

- 2.3.1 The solid geology of the lower Tyne valley almost entirely comprises rock of the Upper Carboniferous period.² The coal-bearing part of this system - known as the Coal Measures - essentially consists of shales and sandstones containing numerous coal seams. Quaternary till covers the Carboniferous bedrock over much of this area.
- 2.3.2 The site lies on a plateau overlooking the Tyne Gorge at c. 50m OD. The grounds of St. Michael's Church are rather undulating in form, with an overall fall away to the south-west, reflecting the wider topographic situation. On the west side of the church, where the groundworks herein described were located, ground level was generally at c. 48m OD, with significant slopes away to the western and southern site boundaries; ground level was at c. 42m OD in the extreme south-western corner of the site. A bowl-like depression was evident in the ground to the south-west of the church, with the ground surface at c. 47.0m OD. Eastwards across the site, towards Headlam Street, the ground rises generally. At the north-easternmost corner of the site ground level was at c. 54m OD, while to the south, at the south-eastern corner of the community centre, ground level was at c. 53m OD, this fall reflecting the slope along the street.

2.4 Planning Background

- 2.4.1 In 2009 planning permission (Newcastle City Council planning application reference 2009/0106/01/DET) was granted for the landscaping of church grounds to create a garden with amphitheatre, water playground and stepped maze, along with a car park. Planning permission contained a condition requiring that an archaeological watching brief must be undertaken during landscaping groundworks.
- 2.4.2 The planning condition was imposed on the advice of the Tyne and Wear Specialist Conservation Team of Newcastle City Council, the body which provides archaeological development control in Newcastle. The aforementioned Specification required that any significant ground disturbance was to be monitored by an archaeologist, in order that any archaeological remains of importance thus exposed could be recorded.
- 2.4.3 The Specification for the watching brief was prepared when UK Government policy regarding the protection of archaeological remains on land was set out in *Planning Policy Guidance Note 16: 'Archaeology and Planning'* (PPG 16).³ The planning condition was thus in line with existing national planning policy and policies within the Newcastle City Council Unitary Development Plan (UDP),⁴ specifically:
- **POLICY C04.** DEVELOPMENT THAT WOULD HARM SITES OR AREAS OF ARCHAEOLOGICAL INTEREST AND THEIR SETTINGS WILL NOT BE ALLOWED.

² Johnson 1997.

³ Department of the Environment 1990. *Planning Policy Statement 5: 'Planning for the Historic Environment'* (PPS 5) replaced PPG 16 in March 2010, and this now comprises UK Government guidance on archaeology and heritage conservation.

⁴ Available at the *Planning Portal* website.

- **POLICY C04.2.** WHERE A PROPOSAL MAY AFFECT A SITE OR AREA OF ARCHAEOLOGICAL INTEREST, THE DEVELOPER WILL BE REQUIRED TO SUBMIT AN APPROPRIATE ASSESSMENT OF ITS POTENTIAL IMPACT UPON THE ARCHAEOLOGICAL REMAINS AND WHERE NECESSARY UNDERTAKE AN ARCHAEOLOGICAL EVALUATION.
- **POLICY C04.3.** WHERE ASSESSMENT AND EVALUATION HAVE ESTABLISHED THAT PROPOSED DEVELOPMENT WILL ADVERSELY AFFECT A SITE OR AREA OF ARCHAEOLOGICAL INTEREST, DEVELOPERS WILL BE REQUIRED TO PRESERVE ARCHAEOLOGICAL REMAINS IN SITU UNLESS THIS IS CLEARLY INAPPROPRIATE OR THE DESTRUCTION OF THE REMAINS IS DEMONSTRABLY UNAVOIDABLE, IN WHICH CASE A PROGRAMME OF ARCHAEOLOGICAL WORKS SHALL BE SUBMITTED TO AND AGREED

2.5 Archaeological and Historical Background

Prehistoric

2.5.1 No prehistoric activity is known at the site or within the wider area.

Roman

2.5.2 Although no evidence for Roman activity is known within the site itself, the line of Hadrian's Wall runs only c. 0.2km to the north, this section being between Wall miles 2 and 3. A Roman altar was found in 1884 and a sherd of a Samian bowl was found in the 1950's, both c. 0.5km to the west of the site.

Anglo-Saxon

2.5.3 No Anglo-Saxon activity is known at the site or within the wider area.

Medieval

2.5.4 The site itself lies within the presumed extent of Byker medieval village which was first referenced in 1198 as the 'sergeanty of Byker'. The township was twice reduced in size, in 1299 and 1549, as Newcastle acquired land from its western end. The Ordnance Survey 1st edition map suggests that the medieval settlement was a two-row green village with Headlam Street coming from the north and Allendale Road/Welbeck Road from the south and east.

2.5.5 Documentary evidence also records 'Byker manor', which was held by the Byker family in the first half of the 14th century, and by Henry Percy in the earlier part of the 15th century. It is not known how far the manor corresponded in area with the township of Byker, or indeed if there was a manorial centre.

2.5.6 The Ordnance Survey 1st edition map shows a building, marked as 'Manor House', on the south side of the village of Byker, which is believed to be the same structure described by Mackenzie in 1825 and then sketched by Richardson in 1844. Mackenzie's account describes a 'curious old house', then known as the Blue Bell public house. Richardson's sketch depicts a three bay, two storey stone building.

Early Modern

2.5.7 No activity of archaeological interest is known for the site for the early modern era, although coal mining was certainly undertaken in the wider area during the early modern period, as demonstrated by Kenton Pit, located c. 0.5km north-west of the site.

2.5.8 St. Michaels Church itself was built in 1862-63, with a north aisle and vestry added in 1936. It is a sandstone structure with ashlar dressings and plinth and a Welsh slate roof with stone copings. It is listed at Grade II.

3. PROJECT AIMS AND RESEARCH OBJECTIVES

3.1 Project Aims

- 3.1.1 The main aim of the archaeological project was to mitigate the impact of landscaping groundworks on archaeological remains through a programme of archaeological monitoring and recording.

3.2 Research Objectives

- 3.2.1 Specific research objectives for the project were formulated with reference to *Shared Visions: The North-East Regional Research Framework for the Historic Environment* (NERRF).⁵ The relevant key research theme in the research agenda for the later medieval (MD) period for this project is: 'MD2. Origin of urban communities'.

⁵ Petts and Gerrard 2006.

4. ARCHAEOLOGICAL METHODOLOGY

4.1 Fieldwork

4.1.1 The watching brief was undertaken 7 February 2011. The fieldwork was undertaken in accordance with the relevant standard and guidance document of the Institute for Archaeologists (IfA).⁶ PCA is an IfA-Registered Organisation. The Specification (Appendix C) should be consulted for full details of methodologies employed regarding archaeological recording and sampling.

4.1.2 In the planning stages of the project it was envisaged that significant ground reduction would be required in parts of the site, particularly in order to form the amphitheatre (with ground reduction possibly up to 3m deep) and the stepped maze. However, a subsequent design solution meant that only minimal ground reduction was in fact required, in two localised rectangular areas, defined as Areas 1 and 2 (Figure 2), to the south-west of the church. For the most part, the design necessitated raising existing ground levels ahead of the construction of the various features in the scheme.

4.1.3 Areas 1 and 2 were located to the south-west of the church, the area proposed for the amphitheatre. Area 1 covered c. 150 square metres, Area 2, to the north, covered c. 55 square metres. In these areas, the naturally sloping ground was graded by machine removal of topsoil to a maximum depth of c. 0.25m. A third area, Area 3, to the immediate west of the church and the site of a former building, covered c. 370 square metres (Figure 2). Within this area the concrete floor slab raft from a former building had been previously removed.

4.1.4 All monitored ground reduction was carried out by machine excavation, undertaken using a tracked 'mini-digger'.

4.1.5 Archaeological deposits and features were recorded on *pro forma* 'Context Recording Sheets'. A photographic record was compiled during the watching brief.

4.2 Post-excavation

4.2.1 The stratigraphic data for the project comprises written, drawn and photographic records. A total of three archaeological contexts were defined during the watching brief (Appendix B). Post-excavation work involved checking and collating site records, grouping contexts and phasing the stratigraphic data (Appendix A). A written summary of the archaeological sequence was then compiled, as described below in Section 5.

4.2.2 No artefactual or organic material was recovered during the fieldwork and no suitable archaeological deposits were encountered to warrant the recovery of bulk samples for palaeoenvironmental material.

⁶ IfA 2008a.

4.2.3 The complete Site Archive will be packaged for long-term curation. In preparing the Site Archive for deposition, all relevant standards and guidelines documents referenced in the Archaeological Archives Forum guidelines document⁷ will be adhered to, in particular a well-established United Kingdom Institute for Conservation (UKIC) document⁸ and a more recent IfA publication.⁹ The depositional requirements of the receiving body, in this case Tyne and Wear Museums and Archives, at Arbeia, South Shields, will be met in full.

⁷ Brown 2007.

⁸ Walker, UKIC 1990.

⁹ IfA 2008b.

5. ARCHAEOLOGICAL RESULTS

5.1 Phase 1: Natural Sub-stratum(?)

5.1.1 A layer, [2], comprising firm, mid yellowish brown fragmented sandstone and silty clay was exposed as the basal deposit in Areas 1 and 2, both sited on sloping ground in the south-western portion of the site. This material was likely the natural sub-stratum, although it may have been disturbed by previous activity, most likely landscaping when the church was built in the mid 19th century.

5.2 Phase 2: Modern

5.2.1 Across Areas 1 and 2, overlying layer [2], was a layer,[1], comprising firm, mid brown sandy silt. This deposit contained frequent brick and concrete fragments along with occasional glass shards and sub-rounded pebbles. It had a maximum thickness of c. 0.20m. The material is interpreted as a dump deposit of modern origin to form a topsoil.

5.2.2 In Area 3, no actual machine-excavation took place, although the deposit exposed by the earlier removal of the concrete floor slab of the building which formerly occupied this location comprised a make-up layer, [3], consisting of crushed brick rubble within a sandy silt matrix.

6. CONCLUSIONS AND RECOMMENDATIONS

6.1 Conclusions

6.1.1 Fragmented sandstone and silty clay, probably of natural origin, formed the basal deposit across Areas 1 and 2. An imported topsoil formed the existing ground surface at the time of the investigation. A rubble layer was exposed across Area 3, this being the make-up and consolidation layer for the floor slab of the previous building.

6.1.2 In sum, the work recorded no archaeological remains of significance.

6.2 Recommendations

6.2.1 No further work is required on the information recovered during the watching brief, with the Site Archive, including this report, forming the permanent record of the strata encountered.

7. REFERENCES

Bibliography

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8. ACKNOWLEDGEMENTS AND CREDITS

Acknowledgements

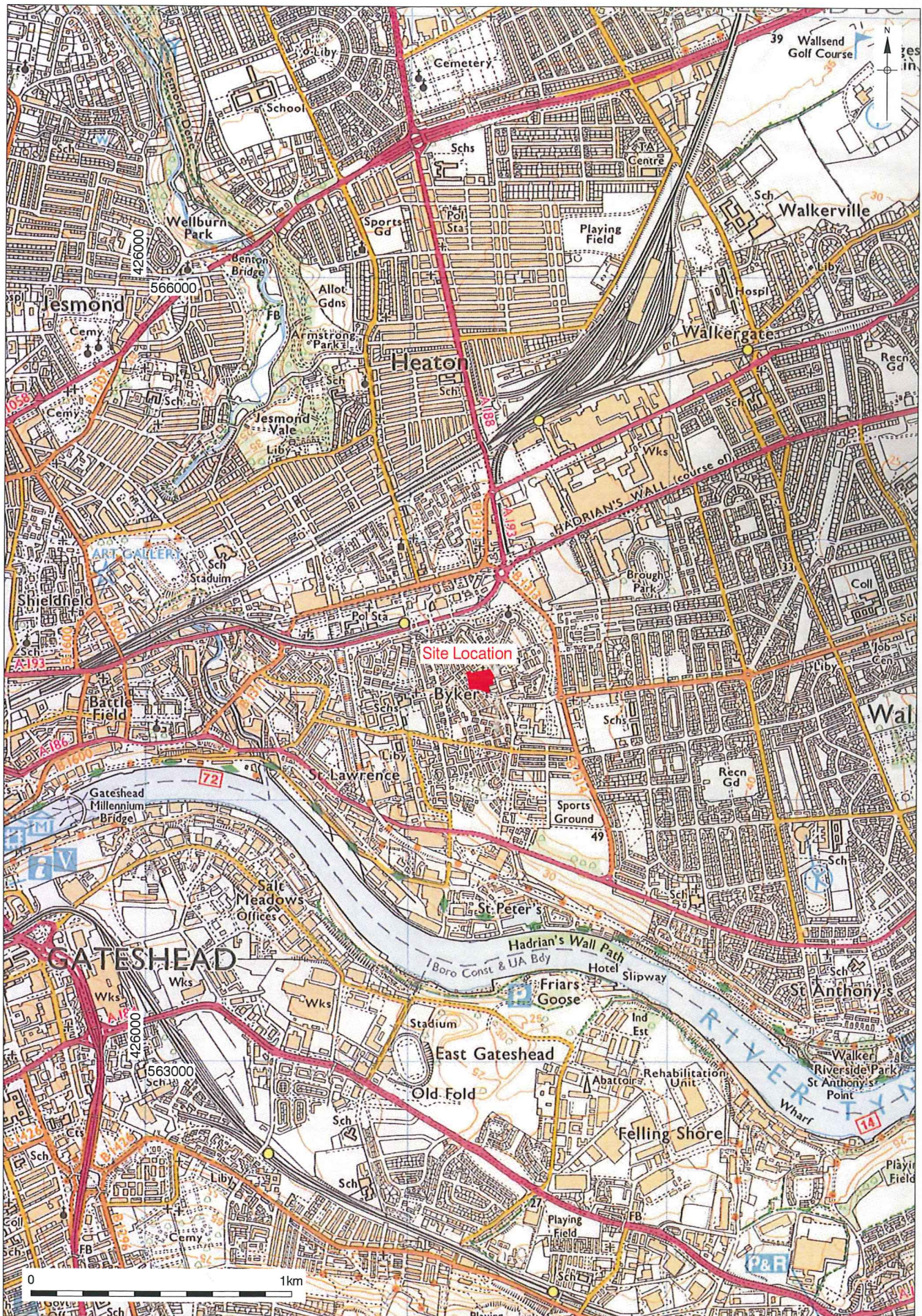
Pre-Construct Archaeology Limited would like to thank Anthony Walker and Partners (AWP), particularly Guy Rawlinson and Yi You, for commissioning the project herein described on behalf of the Byker Centre.

PCA Credits

Fieldwork and Report: Amy Roberts

Project Manager: Robin Taylor-Wilson

CAD: Jennifer Simonson



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Figure 1
 Site Location
 1:20,000 at A4

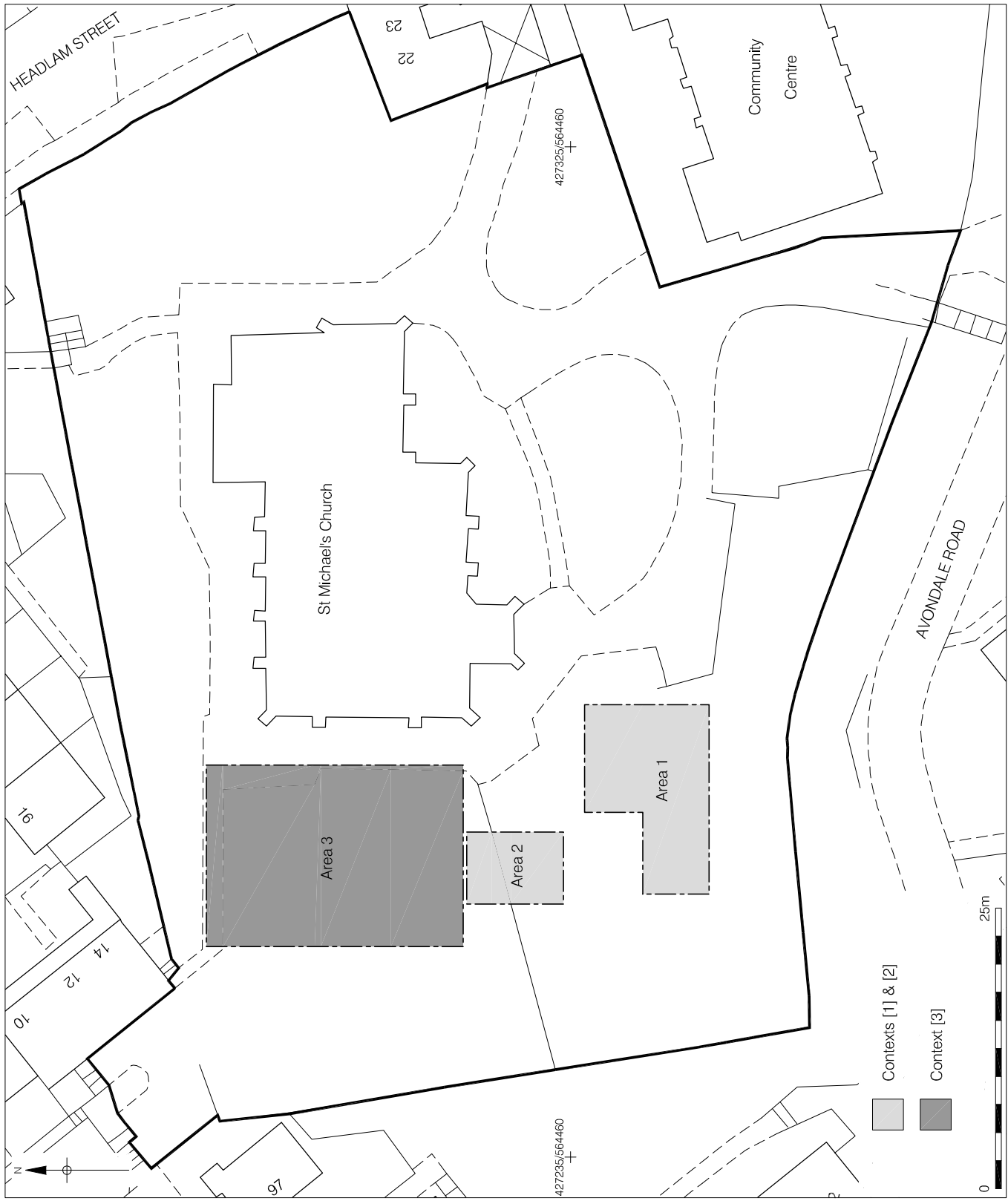


Figure 2
Monitored Areas
1:500 at A4



Figure 3. Site overview, looking north-west



Figure 4. Site overview (Area 3 foreground), looking south-east



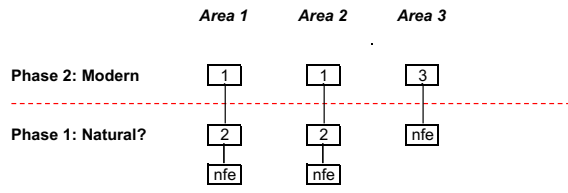
Figure 5. Areas 1 and 2, before ground reduction, looking north-east



Figure 6. Area 3, looking north-east

**APPENDIX A
STRATIGRAPHIC MATRIX**

BCC 11: STRATIGRAPHIC MATRIX



**APPENDIX B
CONTEXT INDEX**

BCC 11: CONTEXT INDEX

Context	Area	Phase	Type 1	Type 2	Interpretation
1	1, 2	2	Deposit	Layer	Topsoil
2	1, 2	1	Deposit	Layer	Natural?
3	3	2	Deposit	Layer	Made ground

**APPENDIX C
SPECIFICATION**

**Specification for an Archaeological Watching Brief at St Michael's Church,
Headlam Street, Byker, Newcastle upon Tyne NE6 2DX**

Introduction

Grid reference NZ 2728 6447

Planning permission has been granted for the landscaping of the church grounds to create a garden with an amphitheatre, water playground, flowerbeds and stepped maze. A small potting shed will be erected.

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

HER 6226 Church of St. Michael with St. Lawrence
Parish church. 1862-3 by W.L. Moffat. 1936 addition of north aisle and vestry. Snecked sandstone with ashlar dressings and plinth. Welsh slate roof with stone copings. Aisled nave with tower over south porch; chancel with north organ chamber and north vestry. Flat Tudor arch to vestry door. Octagonal Gothic font with shields 1843 by R. Scott. Glass in north aisle commemorates H.T. Ormerod, curate from 1893. Listed grade 2.

Byker Community Centre is the former church hall.

The church grounds have **not** been used for burials.

The site lies within the presumed extent of Byker medieval village. Medieval deposits may survive.

HER 1387 Byker village
The earliest reference is 1198, as the sergeanty of Byker. There were 4 taxpayers in 1296, 5 in 1312. A 2-row green village is perhaps suggested by the 1st ed. OS. It lay at the junction of 2 roads, Headlam Street coming from the north, Allendale Road / Welbeck Road from the south and east. Major redevelopment in the second half of the 20th century has left the site barely recognizable. The township was twice reduced in size at its west end. In 1299 its land between Pandon Burn and Swirle was transferred to Newcastle, and in 1549 Newcastle acquired all the ground to the Ouse Burn.

HER 1389 Byker manor
In the first half of the C14 the manor was held by the Byker family, and in the ipm of Robert of Byker in 1354 it was said that it was "held for the service of looking after beasts and chattels taken in the name of distraint for the king, as well as payment of 40s yearly". In 1428 it was held by Henry Percy, earl of Northumberland, by the service of a quarter of a knight's fee and the rent of 40s. From c. 1463 to 1543 Byker was held by the corporation of Newcastle as a tenant of various lords. It was then sold to James Lawson of Newcastle, and in the 19th century sold off in portions. It is not known how far the manor corresponded in area with the township of Byker, or whether there was a manorial centre, perhaps associated with the onetime manor house.

HER 1385 Byker manor house

In 1825 Mackenzie published the following: "There is a curious old house on the south side of the village (Byker), now a public house known by the name of the Blue Bell. The walls, like those of all ancient buildings, are very thick...". In 1844 G.B. Richardson sketched it - a rectangular 3 bay 2 storey building with attic (dormer window) and, attached at one end, a single bay 2 storey block, with an external end stair. The main house had 3 light mullioned windows beneath drip mouldings, a central projecting 2 storey porch, and was probably of stone with a pan-tiled roof between gables with stone water tables and kneelers. There was a curious 3 light opening at ground level beneath one of the windows. It is marked, in Gothic letters, as "Manor House" on the 1st ed. OS map. Date of demolition is not known at the moment. Occupied by the Dent family in 1601, and later by the Lawsons and in 1730 Edward Collingwood.

Significant ground disturbing work (the amphitheatre will need excavations up to 3m deep and the stepped maze will require fairly deep excavations to create the terrace in the slope) must therefore be monitored by an archaeologist as a Watching Brief, in order that any archaeological remains can be recorded. Shallow disturbance such as the creation of parking spaces and flower beds does **not** need to be monitored.

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 relevant key research theme for this work is MD2.

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.

The tasks

1 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 co-ordinate this element of the work.

2 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.

This is a grant-funded community project. It is therefore important to keep costs down if possible. If the first few sites visits make it clear that no archaeological remains are going to be found, the appointed archaeologist will contact the County Archaeology Officer to decide if the watching brief can be halted at that point.

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.

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.

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 Regional Advisor for Archaeological Science (0191 3341137 or 07713 400387) **before** the

evaluation 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. Aceramic 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-slugs (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, 1999

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 Thermo-luminescence 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 (0191 3341137 or 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 work ongoing at the site 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.

Three bound and collated paper copies of the report need to be submitted:

- one for the commissioning client
- one for the planning authority (Newcastle City Council) – to be formally submitted by the applicant with the appropriate fee
- and one for deposition in the County HER at the address below. A digital copy of the report on CD is also required by the HER, in a plastic case and not attached to the 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 note-books, 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 (typically Museum of Antiquities for Newcastle and Tyne and Wear Museums for the rest of Tyne and Wear (check with these institutions) 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.

Jennifer Morrison
Tyne and Wear Archaeology Officer
West Chapel
Jesmond Old Cemetery
Jesmond Road
Newcastle upon Tyne
NE2 1NL
(0191) 2816117
jennifer.morrison@newcastle.gov.uk

Ref: MON7066
19th May 2009
Planning Application: 2009/0106/01/DET

If you need this information in another format or language, please contact Jennifer Morrison at the above address.

PCA

PCA SOUTHERN

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