

## An Archaeological Watching Brief at Heddon-on-the-Wall, Northumberland



ARS Ltd Report 2012/62  
August 2012

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## **EXECUTIVE SUMMARY**

*In August 2012 Archaeological Research Services Ltd were commissioned by Northern Gas Networks to undertake an archaeological watching brief within the village of Heddon-on-the-Wall, in Northumberland. The watching brief was carried out during the replacement of the existing 4 inch cast iron gas main.*

*The section of the existing main that was of concern was that which ran beneath Chare Bank, as this was in a very archaeologically sensitive location, positioned on the known course of the Vallum. Here the line of the Vallum, along with the line of Hadrian's Wall and its associated ditch to the north are Scheduled Monuments (Monument number: 26038) and lie within the Hadrian's Wall Corridor and form part of the Frontiers of Empire World Heritage Site. Northern Gas Networks were granted Scheduled Monument Consent (SMC) to undertake the work, a condition of which was that the work was to take place under constant archaeological supervision and that no ground should be disturbed beyond the cut of the existing service trench.*

*No archaeological features or finds associated with Hadrian's Wall, or any other period were, encountered during the watching brief.*

## 1. INTRODUCTION

### 1.1 Location and Scope of Work

1.1.1. In August 2012 Archaeological Research Services Ltd were commissioned by Northern Gas Networks to undertake an archaeological watching brief during the replacement of the existing 4 inch cast iron gas main within the village of Heddon-on-the-Wall in Northumberland (Fig. 1).

1.1.2 The work involved the principle gas supply main entering the village within Towne Gate and a loop from that main within the northeast of the village beneath Chare Bank and the lanes adjacent to Keeper's Cottage, The Forge and Heddon Methodist Church. The section of main at this point was located in an archaeologically sensitive area, lying on the course of the *Vallum* (with the line of Hadrian's Wall and its associated ditch immediately to the north). Hadrian's Wall and *Vallum*, from East Town House to the A69 Trunk Road, in Wall Mile 12 are Scheduled Monuments (Monument number: 26038, HA 1010617) and lie within the Hadrian's Wall Corridor and form part of the Frontiers of Empire World Heritage Site. Northern gas Networks were granted Scheduled Monument Consent (SMC) to undertake the work, a condition of which was that the work was to take place under constant archaeological supervision and that no ground should be disturbed beyond the cut of the existing service trench.

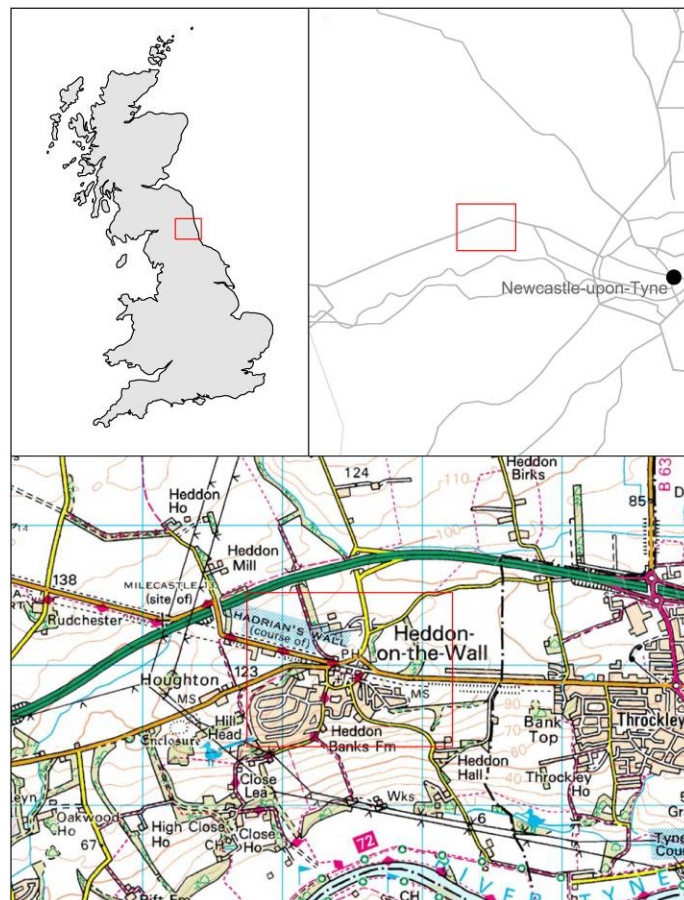


Fig. 1 Location of site.  
Ordnance Survey data copyright OS, reproduced by  
permission, Licence no. 100045420

## **1.2. Geology and soils**

1.2.1. The solid geology of the area is formed by the Pennine Lower Coal Measures Formation and the South Wales Lower Coal Measures Formation. The overlying drift geology comprises superficial deposits of Diamicton till (British Geological Survey 2012).

## **2. METHODOLOGY**

2.1. An archaeological watching brief was undertaken as part of the condition of the Scheduled Monument Consent, which required a continuous archaeological presence during the work. A further condition was that no ground disturbance was permitted other than within the confines of the existing service trench.

2.2. The overall work involved the insertion of 90mm plastic pipe through the existing cast iron main by way of 'launch and receive pits' dug previously within the lane immediately west of Heddon Methodist Church and the lane to the south of Keeper's Cottage. Once this was completed small pits were required to connect the new pipe to the existing domestic services.

2.3. The groundwork involved the excavation with hand tools through disturbed ground of four pits in total (Fig. 2):

- Pit 1 (measuring 1.70m by 0.95m by 0.80m deep) was dug to locate a 'plug', which had to be removed to allow the plastic pipe to pass freely. This involved hand digging to locate the existing cast iron main.
- Pit 2 (1.35m by 0.85m by 0.90m deep) was dug to locate and connect the domestic branch service to Tank House.
- Pit 3 (0.75m by 0.65m by 0.82m deep) was dug to locate a further obstruction.
- Pit 4 (0.80m by 0.80m by 0.85m deep) was dug to locate and connect the domestic branch service to Garden House.

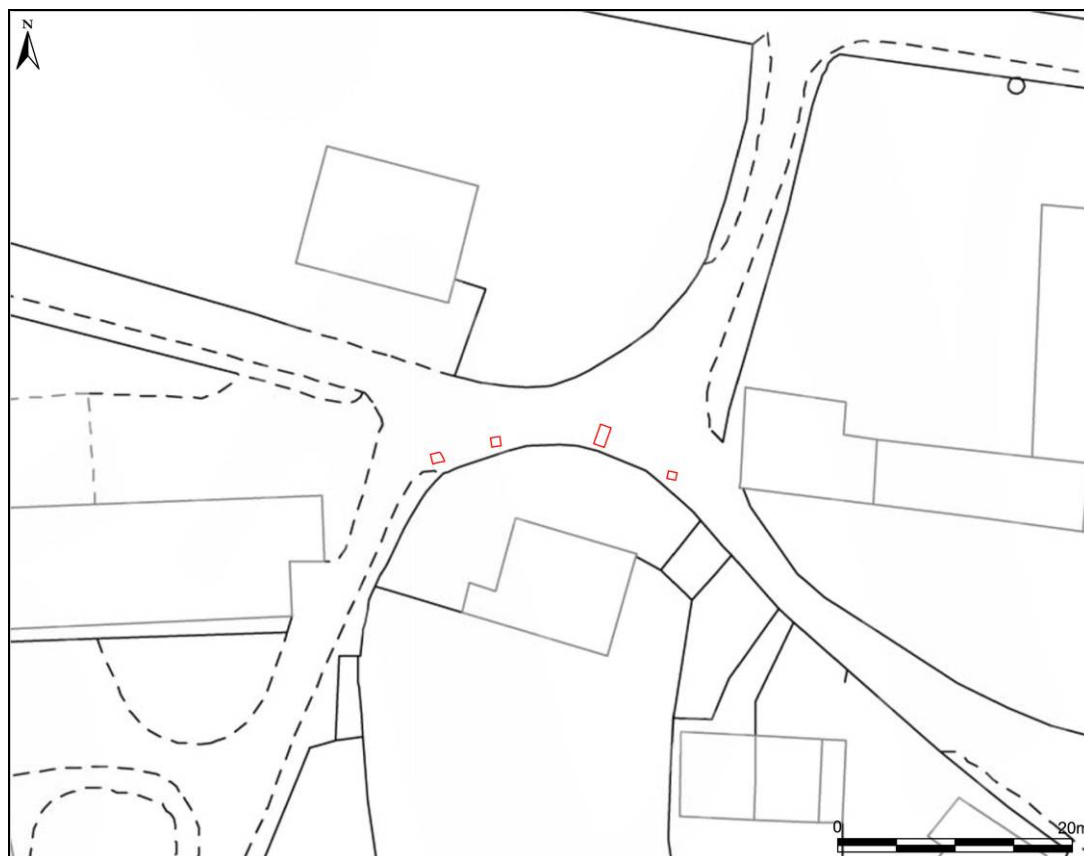


Figure 2: Locations of the four small pits.

### 3. HISTORICAL & ARCHAEOLOGICAL BACKGROUND

#### Prehistoric

3.1 There is no direct evidence for prehistoric remains within the immediate area of the Watching Brief, however, finds from nearby indicate some activity with the general area. In 1893 a flint scraper and a bronze axe head was found towards the eastern end of the consolidated portion of Hadrian's Wall during a section cutting of the *Vallum* (Holmes 1894, 338). In 1968 four complete stones axes, together with two fragmentary axes and a possible 'rough out' were discovered within the fill of a large pit or ditch at 44 Antonine Walk, in the eastern part of the village (Socket 1971, 241-44 & Burgess 1984, 140).

#### Roman

3.2 Hadrian's Wall formed part of the defensive system of the northern frontier of the Roman Empire in Britain between the early second and the early fifth centuries AD, and the general history, development, form, and function of the Wall is adequately summarised in Breeze and Dobson (2000), while a description of the remains is provided by Daniels (1978), Breeze (2006), and more recently Hodgson (2009). The Wall and associated features including the Wall Ditch, *Vallum*, turrets, and milecastles are Scheduled Ancient Monuments, and together these features are recognised as part of the Frontiers of the Roman Empire World Heritage Site by UNESCO.

3.3 Hadrian's Wall consisted of a wall up to 3m in width, with an estimated height of between 3.60m and 4.50m. Along its length milecastles (effectively small garrisoned fortlets) were situated a Roman mile apart from each other and between each of these were two smaller turrets (effectively watchtowers).

3.4 At a distance of approximately 6m to the north of the Wall lay a V-profiled ditch, c.3m in depth and 8 - 12m in width, known as the Wall Ditch. Between the Wall Ditch and the Wall itself lies a flat area known as the berm. Recent work at the eastern end of the wall at Wallsend (Bidwell and Griffiths 1999), Throckley (Frain 2003; Frain, McKelvey and Bidwell 2005) and Byker (McKelvey and Bidwell 2005) has established the existence of an additional defensive feature in the form of pits forming settings for an entanglement (known as *cippi*: Bidwell 2005).

3.5 To the south of the Wall lay the *Vallum*, a flat-bottomed ditch 6.50m wide and 3m deep. The upcast spoil resulting from the digging of this ditch was formed into a bank on either side, commonly referred to as the north and south mounds of the *Vallum*. The individual elements of the Wall were usually spaced to form a linear barrier 40m in width, commonly referred to as the Hadrian's Wall Corridor.

3.6 The area of the Watching Brief here reported falls within the area of Wall Mile 12. A well-preserved portion of the Wall is consolidated for display at Heddon-on-the-Wall, around 140m to the east of the Watching Brief area; while the Wall Ditch and components of the *Vallum* can be traced intermittently as earthworks to either side of the B6528 Military Road to the west of the area.

3.7 Between Heddon-on-the-Wall and Rudchester, the Wall and the *Vallum* run straight and parallel. The south mound of the *Vallum* can be seen for much of this distance (Daniels 1978, 76). This stretch of the *Vallum* is thought to be well preserved, as a section was discovered 210 yards east of turret 12b in 1956 as 27 feet wide and 7 feet deep with an upcast mound 30 feet wide. Turrets 12a and 12b were found in the expected positions on the south side of the road and were excavated in 1930. Turret 12a produced pottery dating to the third century. Excavations in 1975 showed the Wall to be standing five courses high in places with a stone foundation 2.5 feet deep (Daniels 1978). It is considered that the section of Wall between milecastles 7 and 22 was probably completed during the first full season of work in AD 123 (Breeze and Dobson 2000). Three inscriptions were found in the area (RIB 1385, 1390, 1391); two being found in 1751 during the construction of Military Road, although these cannot be securely associated with this part of the Wall, and have since been lost. It is also likely that several stretches of curtain around Heddon underwent episodes of repair and reconstruction at various stages in the period from the mid-second to early third century (Rushworth and Lucas 1997, 9).

3.8 A large hoard of gold and silver coins, the latest of which dated to AD 168, was found in 1752 within wooden boxes during the construction of the Military Road '...in the ruins of the old Wall near Heddon.' (Brand 1789, 607; cf. Bruce 1867, 98). A second, smaller, hoard was discovered around 1820 and presented to Newcastle's Society of Antiquaries in 1856, with the latest coin being dated to 394 (Bruce 1867, 98; Daniels 1978, 75; Robertson 1972, 5). This indicates continuing activity in the vicinity of the Wall up to the end of the fourth century at least.



3.9 In 2002 watching briefs undertaken at No. 47 and North Lodge, Military Road, to the northeast of the present watching brief area revealed no evidence of archaeological deposits associated with the Wall (Mabbitt 2002).

### **Early Medieval**

3.10 The presence of the Saxon church (with its Norman chancel arch) within the village is the most tangible evidence of early medieval occupation there. Various antiquaries have attempted to identify the village as the site of a Northumbrian royal estate centre, the *villa ad murum*, mentioned by Bede as lying 12 miles from the sea. Such a suggestion should be discarded as the distance from the sea to Heddon is beyond this.

### **Medieval**

3.11 The village of Heddon forms part of the Barony of Styford granted to Walter de Bolbec by Henry I.

### **Post-Medieval**

3.12 The present buildings forming the core of the village around the area of the present watching brief date in origin to the eighteenth- and nineteenth-centuries.

## **4. RESULTS**

4.1 The groundworks involved excavation with hand tools of the four pits, described in 2.3, above, through made-ground beneath the tarmac surface (**100**) of Chare Bank. The material within Pits 1 & 3 consisted of whinstone road chippings within a matrix of black coarse sandy-silt (**101 & 103**), containing medium to large fragments of yellow sandstone. The fill of Pit 2 consisted of a black silty-sand (102) containing an abundance of small, medium and large yellow sandstone fragments. Pit 4 contained a black coarse silty-sand (**104**), with common medium to large sized yellow sandstone fragments.

4.2 All of the pits were dug through made-ground, which had been previously disturbed by the insertion of the existing gas main and by other services that were also present. There was no trace of undisturbed ground (sub-soil or deposits) or of any archaeological features. Only in Pit 4 was the natural sandstone bedrock observed in the side of the pit. There were no finds, except for Pit 4 which had a few small sherds of post-medieval pottery within the made-ground.

## **5. CONCLUSION**

5.1 No evidence of Hadrian's Wall or any of its associated features was encountered during the watching brief. No ground was disturbed beyond the confines of the existing service trench cut.

## **6. PUBLICITY, CONFIDENTIALITY AND COPYRIGHT**

- 6.1. Any publicity will be handled by the client.
- 6.2. Archaeological Research Services Ltd will retain the copyright of all documentary and photographic material under the Copyright, Designs and Patent Act (1988).

## **7. STATEMENT OF INDEMNITY**

- 7.1. All statements and opinions contained within this report arising from the works undertaken are offered in good faith and compiled according to professional standards. No responsibility can be accepted by the author/s of the report for any errors of fact or opinion resulting from data supplied by any third party, or for loss or other consequence arising from decisions or actions made upon the basis of facts or opinions expressed in any such report(s), howsoever such facts and opinions may have been derived.

## **8. ACKNOWLEDGEMENTS**

- 8.1. Archaeological Research Services Ltd would like to thank all those involved in this project, in particular Kevin Young of Northern Gas Networks and Mike Collins of English Heritage.

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- Spain, G. 1931. Third Report of the North of England Excavation Committee

## **Websites**

British Geological Survey                      <http://www.bgs.ac.uk/geoindex/index.htm>

## APPENDIX I- FIGURES



Figure 3. Pit 1, looking south.



Figure 4. Pit 2, looking east.





Figure 5. Pit 3, looking southeast.



Figure 6. Pit 4, looking northwest.



## Heddon on the Wall, Northumberland

### Written Scheme of Investigation for Archaeological Advisory Watching Brief



Archaeological Research  
Services Ltd

#### 1. Introduction

- 1.1. This scheme of works relates to groundworks associated with replacement and improvement works to underground gas infrastructure in Heddon on the Wall, Northumberland (Figure 1). The work is to be carried out by Northern Gas Networks. The site sits on the line of Hadrian's Wall, which is a Scheduled Ancient Monument and a World Heritage Site. Scheduled Monument Consent has been granted for trenching works to be undertaken on the line of pre-existing gas infrastructure. There is the potential for Hadrian's Wall, or features associated with the Wall, to be encountered during the groundworks.
- 1.2. This document is a written scheme of investigation (WSI) confirming the nature of the archaeological works to be undertaken during a watching brief by Archaeological Research Services Ltd (ARS Ltd) at Heddon in accordance with guidance from Mike Collins at English Heritage.

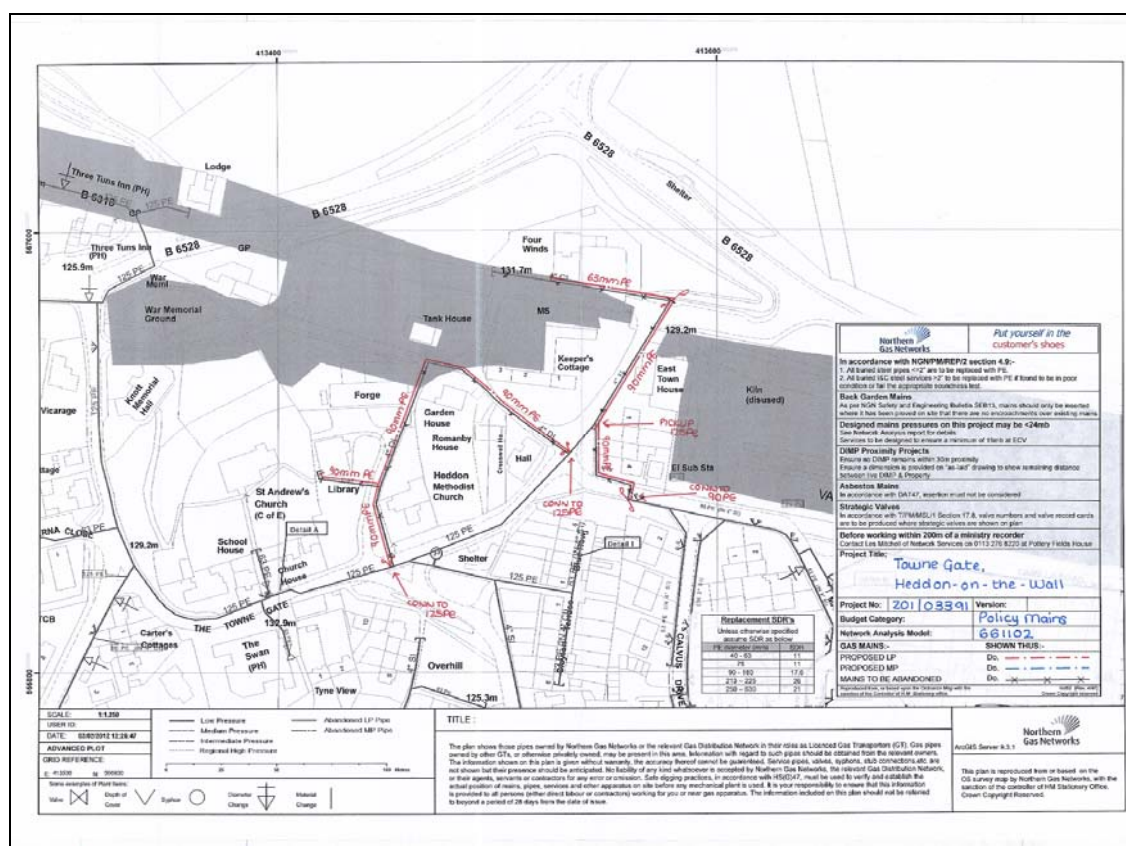


Figure 1: Trench location plan

## **2. Site Specific Requirements**

- 2.1. The client for this work is Mr. Michael Smith of Northern Gas Networks. The nature and extent of the works has been confirmed with the client. This involves the excavation of in-situ gas services and their replacement. The watching brief will cover the following groundworks for the development and will provide advice and monitoring on site to ensure no in-situ archaeological remains are disturbed:
  - Groundworks associated with excavation in order to improve gas infrastructure
- 2.2 The work to be undertaken is an advisory archaeological watching brief which aims to ensure that important remains are preserved in-situ.
- 2.3 Should archaeology be discovered a course of action will be discussed with Mike Collins of English Heritage and a representative of the developer, and be approved prior to further work being undertaken on the site. An assessment will be made of the importance of the remains and any provision for their recording or preservation *in situ* as appropriate.

## **3. Project Management and Standards**

- 3.1. The project will be carried out in compliance with the codes of the Institute of Field Archaeologists (IFA) (2008) and will follow the IFA Standard and Guidance for Excavations (1995).
- 3.2. All staff employed on the project will be suitably qualified and experienced for their respective project roles and have practical experience of archaeological excavation and recording. All staff will be made aware of the archaeological importance of the area surrounding the site and will be fully briefed on the work required by this specification. Each member of staff will be fully conversant with the aims and methodologies and will be given a copy of this written scheme of investigation to read. All members of staff employed by Archaeological Research Services Ltd are fully qualified and experienced archaeologists, this will ensure that appropriate decisions regarding environmental and dating sampling will be made in the field.
- 3.3. All staff will familiarise themselves with the archaeological background of the site, and the results of any previous work in the area, prior to the start of work on site. All staff will be aware of the work required under the specification, and will understand the project aims and methodologies. Liaison will be undertaken with the client and building recording contractor to ensure that both schemes of work form a coherent whole in respect of the site investigation.

## **4. Methods**

- 4.1. Unstratified modern material will be removed by a machine using a toothless ditching bucket, or by hand, under continuous archaeological supervision. The topsoil or recent overburden will be removed down to the current gas services in successive level spits. No machinery will further disturb areas that have been stripped, until they have been checked by the representative of Archaeological Research Services Ltd.
- 4.2. All archaeological features and deposits will be recorded on a plan of the site.

- 4.3. All features exposed will be recorded and preserved in-situ.
- 4.4. In the event of human burials being discovered, they will be left *in-situ* and, if removal is deemed necessary, this will be undertaken in accordance with the relevant Ministry of Justice regulations. If removal is essential, work will comply with relevant Home Office regulations. If burials are removed they will be lifted in their entirety and fully recorded.
- 4.5. Appropriate procedures under the relevant legislation will be followed in the event of the discovery of artefacts covered by the provisions of the Treasures Act 1996.

## **5. Recording**

- 5.1 The site will be accurately tied into the National Grid and located on a 1:2500 or 1:1250 map of the area.
- 5.2 A full and proper record (written, graphic and photographic as appropriate) will be made for all work, using pro-forma record sheets and text descriptions appropriate to the work. Accurate scale plans and section drawings will be drawn at 1:50, 1:20 and 1:10 scales as appropriate.
- 5.3 The stratigraphy of the trenches will be recorded even where no archaeological deposits have been identified.
- 5.4 All archaeological deposits and features will be recorded with above ordnance datum (AOD) levels.
- 5.5 A photographic record of all contexts will be taken in colour transparency and black and white print and will include a clearly visible, graduated metric scale. A register of all photographs will be kept.
- 5.6 Where stratified deposits are encountered, a 'Harris' matrix will be compiled.

## **6. Access**

- 6.1 Archaeological Research Services Ltd will give the County Archaeologist and the English Heritage Inspector for Hadrian's Wall 10 working days (or less if so agreed) notice of the commencement of fieldwork.
- 6.2 Archaeological Research Services Ltd will afford access to the County Archaeologist or their representative and the English Heritage Inspector for Hadrian's Wall at all times, for the purposes of monitoring the archaeological watching brief.
- 6.3 Archaeological Research Services Ltd will maintain regular communication with the County Archaeologist and the English Heritage Inspector for Hadrian's Wall to ensure that the project aims and objectives are met.

## **7. Finds Processing and Storage**



- 7.1. All finds processing, conservation work and storage of finds will be carried out in compliance with the IFA guidelines for Finds Work (2001) and those set out by UKIC (1990).
- 7.2. Artefact collection and discard policies will be appropriate for the defined purpose.
- 7.3. Bulk finds which are not discarded will be washed and, with the exception of animal bone, marked. Marking and labelling will be indelible and irremovable by abrasion. Bulk finds will be appropriately bagged, boxed and recorded. This process will be carried out no later than two months after the end of the excavation.
- 7.4. All small finds will be recorded as individual items and appropriately packaged (e.g. lithics in self-sealing plastic bags and ceramic in acid-free tissue paper). Vulnerable objects will be specially packaged and textile, painted glass and coins stored in appropriate specialist systems. This process will be carried out within two days of the small find being excavated. Prehistoric pottery will not be cleaned or be subject to any abrasion or loss of adhering residues.
- 7.5. During and after the excavation all objects will be stored in appropriate materials and storage conditions to ensure minimal deterioration and loss of information (including controlled storage, correct packaging, and regular monitoring, immediate selection for conservation of vulnerable material). All storage will have appropriate security provision.
- 7.6. The deposition and disposal of artefacts will be agreed with the legal owner and the Museum of Antiquities prior to the work taking place. All finds except treasure trove are the property of the landowner.
- 7.7. All retained artefacts and ecofacts will be cleaned and packaged in accordance with the requirements of the recipient museum.

## **8. Site archive**

- 8.1. The archive will be compiled in an orderly fashion to the standards and format set out in MORPHE (2006, 31, paragraph 2.5.3) and in accordance with the Guidelines for the Preparation of Excavation Archives for Long Term Storage (UKIC 1990). The archive will be deposited with the Great North Museum within 6 months of the fieldwork once all post-excavation work is completed and the final report produced.

## **9. Report**

- 9.1. One copy of the report will be submitted to the client. Three additional copies will be produced, one for the Northumberland HER, one for the Northumberland archives, and a final copy for English Heritage. These will be produced within fourteen working days of the completion of the fieldwork. Each report will be bound with each page and paragraph numbered and will include as a minimum the following:
  - Executive summary
  - A site location plan to at least 1:10,000 scale with 10 figure central grid reference
  - Contractor's details including date work carried out

- Nature and extent of the proposed development, including developer/client details
- Description of the site location and geology
- Trench plans to a suitable scale and tied into the national grid so that features can be correctly orientated
- Discussion of the results of field work
- Context & feature descriptions
- Features, number and class of artefacts, spot dating & scientific dating of significant finds presented in tabular format
- Plans and section drawings of the features drawn at a suitable scale
- Additional plans/map extracts to display noted and recorded archaeological features as appropriate
- Recommendations regarding the need for, and scope of, any further archaeological work including publication
- Bibliography

## **10. OASIS**

- 10.1 ARS Ltd will complete an on-line OASIS form for this watching brief. ARS Ltd is a registered contractor on the OASIS system and has uploaded archaeological reports before.

## **11. Dissemination/Publication**

- 11.1 A short article will be prepared for a local journal if appropriate.

## **12. References**

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