



STANWIX SCHOOL, STANWIX Carlisle

Archaeological Watching Brief



Oxford Archaeology North

March 2006

Swarbrick Associates

Issue No: 2006/502

OAN Job No: L9555

NGR: NY 4015 5715

Document Title: STANWIX SCHOOL, STANWIX, CARLISLE

Document Type: Archaeological watching brief

Client Name: Swarbrick Associates

Issue Number: 2006/502

OA Job Number: L9555

Site Code: SS06

National Grid Reference: NY 4015 5715

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CONTENTS

CONTENTS.....	1
SUMMARY	2
ACKNOWLEDGEMENTS.....	3
1. INTRODUCTION.....	4
1.1 Circumstances of the Project.....	4
2. METHODOLOGY.....	5
2.1 Introduction.....	5
2.2 Watching Brief.....	5
2.3 Archive.....	5
3. FIELDWORK RESULTS	6
4.1 Watching Brief Results	6
5. DISCUSSION.....	7
5.1 Discussion	7
6. BIBLIOGRAPHY	8
7. ILLUSTRATIONS	9
7.1 List of Figures	9
7.2 List of Plates.....	9

SUMMARY

Oxford Archaeology North (OA North) was commissioned by Swarbrick Associated on behalf of Stanwix school, Carlisle (NY 34015 55715), to undertake an archaeological watching brief during the excavation of foundations for the construction of a small extension to the east of the existing complex.

The school is situated in an area which has been identified as being of high archaeological importance and is statutorily protected as a Scheduled Monument (County Sites and Monuments Record 5783, Scheduled Monument 28484).

An archaeological evaluation was undertaken by Oxford Archaeology North (OA North) in 2004 and the subsequent report identified stratified archaeological deposits (OA North 2004). A man made membrane was inserted to cover the archaeological deposits and it was agreed that the extension foundations would be excavated to this level. The watching brief was undertaken on the 24th June 2005.

ACKNOWLEDGEMENTS

Oxford Archaeology North would like to Mr W Johnson of Stanwix school and David Irwin of Swarbrick Associates for commissioning the work..

The watching brief was undertaken by Jason Clarke, who also compiled this report; the drawings were produced by Christina Clarke and Mark Tidmarsh.. The project was managed by Jamie Quartermaine, who also edited the report, together with Alan Lupton.

1. INTRODUCTION

1.1 CIRCUMSTANCES OF THE PROJECT

- 1.1.1 Oxford Archaeology North (OA North) undertook an archaeological evaluation in 2004 at the proposed extension to Stanwix school, Carlisle, which identified stratified archaeological deposits (OA North 2004).
- 1.1.2 The site being situated within a scheduled monument it was agreed that a teram membrane would be laid over the archaeological deposits and the foundations would, where possible, be excavated down to level of the membrane.

2. METHODOLOGY

2.1 INTRODUCTION

- 2.1.1 The OA North project design (*Appendix 1*), approved by Swarbrick Associates, was adhered to in full throughout the duration of the project and conformed to IFA standards and accepted best practice.

2.2 WATCHING BRIEF

- 2.2.1 All groundworks on the site were conducted under constant archaeological supervision and comprised stripping the overburden to the level of the teram membrane with a 360° mini excavator using a 0.5m toothed bucket.
- 2.2.2 The role of the Archaeologist on site was to monitor that the groundworks did not penetrate archaeological deposits that had already been identified. A monochrome and colour slide photographic record was maintained throughout.

2.3 ARCHIVE

- 2.3.1 A full professional archive has been compiled in accordance with current UKIC (1990) and English Heritage guidelines (1991). The paper and digital archive will be deposited

3. FIELDWORK RESULTS

4.1 WATCHING BRIEF RESULTS

- 4.1.1 The taram membrane was located at the southern end of the excavation to be at a depth of 0.4m and was overlaid by hardcore and tarmac. As the excavation moved north the depth of the hardcore and tarmac surface dropped to a depth of 0.15m which became too shallow for the foundation trench. After consultation with English Heritage it was agreed that the teram membrane could be penetrated to provide sufficient depth forthe foundation trench.
- 4.1.2 The deposit was dug to a depth of 0.3m and was identified in the evaluation report (OA North 2004) as post medieval garden soil, no artefacts were recovered.

5. DISCUSSION

5.1 DISCUSSION

- 5.1.1 The majority of the taram membrane was left in tact during the excavation of the school foundation trench. The area where the taram membrane was penetrated the impact on the archaeology was minimum with only the upper deposit being disturbed. The Roman deposits were not impacted on during the excavation of Stanwix school extension foundation trench.

6. BIBLIOGRAPHY

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7. ILLUSTRATIONS

7.1 LIST OF FIGURES

7.2 LIST OF PLATES

Plate 1: Shot of excavated foundation trench

Plate 2: Section showing deposit below membrane



Plate 1: Showing excavated foundation trench



Plate 2: Section showing excavated deposit below the membrane

February 2005

**STANWIX SCHOOL,
STANWIX,
CARLISLE**

ARCHAEOLOGICAL WATCHING BRIEF PROJECT DESIGN

Proposals

The following project design is offered in response to a request from David Irwin of Swarbrick Associates, for an archaeological watching brief at Stanwix School, Carlisle.

1.1 CONTRACT BACKGROUND

- 1.1.1 Swarbrick Associates, on behalf of Stanwix School, has requested that Oxford Archaeology North submit a project design for an archaeological watching brief in the course of the construction of a small extension to the school. This excavation follows on from an archaeological evaluation undertaken by the OA North (2004) which identified deposits and structures from within the Stanwix Roman fort, but at a depth below the maximum proposed depth of the raft foundations of the present development.

1.2 ARCHAEOLOGICAL BACKGROUND

- 1.2.1 *Stanwix Fort*: excavations of the fort at Stanwix in the 1930s by Simpson, Hogg and Richmond established the positions of the south gate, and the defences on the north-eastern, south-eastern and south-western sides. Internal buildings, including a granary, were located in the playground of Stanwix Primary School (Simpson and Hogg 1935). In the 1980s, an excavation in the car park of the Cumbria Park Hotel, immediately north of the school playground, located the stone footings of the north-western fort wall and an interval tower, together with two ditches beyond (McCarthy 1999). This demonstrated that the fort had been enlarged in the Antonine period, projecting it north of Hadrian's Wall. The other key discovery was that of a ditch underlying the interval tower, which was clearly earlier than the enlargement of the fort and was presumed to be associated with Hadrian's Wall, the foundations of which had been discovered by Simpson and Hogg in 1932-4 (Simpson and Hogg 1935; McCarthy 1999, 163).
- 1.2.2 In 1997, Carlisle Archaeological Unit (CAU) carried out further work in the playground of the Primary School, in advance of the construction of an extension to the school (McCarthy 1999, 164). The earliest identifiable feature consisted of a turf deposit, overlain by a substantial deposit of clay; this turf deposit was either part of a rampart or perhaps evidence of the Turf Wall that predates the stone version of Hadrian's Wall to the west of the River Irthing. There were no obvious front or rear faces to this turf deposit, but it was located some metres south of the stone Hadrian's Wall discovered in the 1930s (Simpson and Hogg 1935). The walls located by Simpson and Hogg were not found, but stone and cobbled surfaces and rubble deposits were identified and were presumed to have belonged with the walls found in the 1930s. Timber buildings erected after the deposition of Huntcliff ware in the fourth century were also discovered (McCarthy 1999).
- 1.2.3 In 1997 and 1998, CAU dug two further trenches in a narrow passage immediately adjacent to the north-western side of the Victorian school, locating the inner ditch and the stone footings of the fort wall (McCarthy 1999). Other work in Stanwix in 1993 revealed two phases of walls and surfaces (CAU 1993).

- 1.2.4 In 1999 CAU undertook a further excavation, in the area of the proposed school extension, which revealed multiple phases of activity on the site within a relatively shallow deposit. The earliest deposits was an area of cobbling (Phase 1), cut by the beam slots of one timber building (Phase 2a), closely followed by those of a succeeding timber structure (Phase 2b). These timber buildings were replaced by one in stone (Phase 3), which were then subsequently remodelled (Phase 4). The site was then abandoned, and the site was stripped down to foundation level, which probably occurred in the late Roman period (Phase 5) and there was a subsequent accumulation of dark soils (Phase 6). Into these soils was set a large two phased timber building with 25 post holes (Phase 7), believed to be of early medieval date. This was then overlain by medieval garden soils (Phase 8) and then the construction of the Victorian Stanwix school (Phase 9) (CAU 2000).
- 1.2.5 **OA North Evaluation 2004:** an evaluation was undertaken within the proposed footprint of the extension, which revealed overburden deposits relating to the construction of the extension to the school in 1999-2000. These directly overlay post-medieval construction deposits (relating to the school's construction) and garden-soils, relating to the use of the land as a gardens and orchards prior to the school's construction. Sealed beneath the garden soils was a cobbled surface, thought to be Roman in origin. This relates to the cobbled surfaces identified during previous excavations, most recently by CAU in 1999, and is broadly dated to the second century AD, though no dating evidence was recovered on this occasion. At the western end of the trench, a ditch was identified, clearly cutting the cobbled surface but sealed by the post-medieval garden soils. The ditch is roughly dated to either the medieval or Roman periods. A post-medieval pipe trench was also identified.

1.3 OXFORD ARCHAEOLOGY

- 1.3.1 Oxford Archaeology has over 30 years of experience in professional archaeology, and can provide a professional and cost-effective service. We are the largest employer of archaeologists in the country (we currently have more than 200 members of staff) and can thus deploy considerable resources with extensive experience to deal with any archaeological obligations you or your clients may have. We have offices in Lancaster and Oxford, trading as Oxford Archaeology North (OA North), and Oxford Archaeology (OA) respectively, enabling us to provide a truly nationwide service. OA is an Institute of Field Archaeologists Registered Organisation (No 17), and is thus bound by the IFA's Code of Conduct and required to apply the IFA's quality standards.

1.3.2 Between our two offices our company has unrivalled experience of working on sites of all periods, and is recognised as one of the leading archaeological units in the country with regard to dealing with large-scale archaeological projects. OA North has considerable experience of the assessment, evaluation and excavation of sites of all periods, and has particular experience of archaeology in the North West having undertaken in recent years excavation, survey, building recording and post-excavation projects in both urban and rural environments. Watching briefs, evaluations and excavations have taken place within the planning process, to fulfil the requirements of clients and planning authorities, to very rigorous timetables. In particular OA North has been involved in the archaeological evaluation and investigations at the Cumbria Institute of the Arts, since 2000, and has considerable experience of working on Hadrianic Wall sites.

2. OBJECTIVES

2.2 The following programme has been designed to provide a suitable level of archaeological observation, recording, and response during the excavation works for the proposed extension at Stanwix School. The mitigation strategy agreed between English Heritage and the Client for recommendation for SMC to the DCMS is for the membrane left from the 1999-2000 excavations detailed above to be left intact. This has been agreed by all parties, and it will be the responsibility of the archaeologist on site to ensure this is adhered to, and if they are unable to do so to inform English Heritage, the County Archaeologist and the Client immediately. The project will be overseen by the Mike Collins, English Heritage. The required stages to achieve these ends are as follows:

2.1 PERMANENT PRESENCE WATCHING BRIEF

2.1.1 To record accurately any surviving archaeological features or deposits by means of detailed observation and recording. To record the presence of buried features by appropriate recovery techniques, where applicable.

2.2 ARCHIVE/REPORT

2.2.1 A full written report will assess the significance of the data generated by the entire programme of work, in a local and regional context, and will be suitable for deposition as a permanent archive of the work undertaken.

3.1 PERMANENT PRESENCE WATCHING BRIEF

3.2.1 **Methodology:** a permanent programme of field observation will accurately record the location, extent, and character of any surviving archaeological features within the excavation for the raft foundations of the school extension. This work will comprise the observation of the process of excavation for these works, the systematic examination of any subsoil horizons exposed during the course of works, and the accurate recording of all archaeological features and horizons, and any artefacts, identified during observation.

- 3.2.2 During this phase of work, recording will comprise a full description and preliminary classification of features or materials revealed, and their accurate location (either on plan and/or section, and as grid coordinates where appropriate). All archaeological information collected in the course of fieldwork will be recorded in standardised form, and will include accurate national grid references tied into the grid using a total station. Features will be planned accurately at appropriate scales and annotated on to a large scale plan provided by the Client. A photographic record will be undertaken simultaneously. The recording techniques and procedures employed by OA North for such detailed recording represent current best practice.
- 3.2.3 It is assumed that OA North will have the authority to stop works to enable the recording of important deposits, and to call in additional archaeological support if a find of particular importance is identified. It is assumed for the purposes of this project that a contingency of up to three person days is available in these circumstances. This would only be called into effect in agreement with the Client and English Heritage and will require a variation to costing, although the final decision on whether this contingency needs to be utilized will rest with the DCMS, advised by English Heritage. In normal circumstances, field recording will also include a continual process of analysis, evaluation, and interpretation of the data, in order to establish the necessity for any further more detailed recording that may prove essential.
- 3.2.4 Bulk samples from the fills of all uncontaminated cut features with the potential to preserve environmental information will be collected with a view to establishing a programme of analytical assessment during the post-excavation work. Indicative costs of palaeo-environmental analysis can be provided if requested. English Heritage's regional Advisor on Archaeological Science will be consulted on the works, and the implementation of her recommendations on evaluation and full analysis will be considered an integral part of this project design.
- 3.2.5 In the event of burials being discovered the archaeologist will procure and comply with all statutory consents under the Burial Act 1857.

3.3 ARCHIVE/REPORT

- 3.3.1 **Archive:** the results of all archaeological work carried out during fieldwork will form the basis for a full archive to professional standards, in accordance with current English Heritage guidelines (*The Management of Archaeological Projects*, 2nd edition, 1991). The project archive represents the collation and indexing of all the data and material gathered during the course of the project. It will include summary processing and analysis of all features, finds, or palaeoenvironmental data recovered during fieldwork to the appropriate level. OA North conforms to best practice in the preparation of project archives for long-term storage. This archive will be provided in the English Heritage Centre for Archaeology format and a synthesis will be submitted to the Cumbria Sites and Monuments Record (the index to the archive and a copy of the report). OA North practice is to deposit appropriate elements of the original record archive of projects (paper, magnetic and plastic media) with the appropriate County Record Office, and a full copy of the record archive (microform or microfiche) together with the material archive (artefacts, ecofacts, and samples) with an appropriate museum. The actual details of the arrangements for the deposition/loan and long term storage of this material will be agreed with the landowner and the receiving institution. The archive will be compiled in an orderly fashion and submitted to the County SMR within 6 months of the end of the fieldwork. The location of artefacts must be stated in the archive.
- 3.3.2 **Report:** one bound and one unbound copy of a written synthetic report will be submitted to the Client within five weeks of completion of fieldwork, and a further copy submitted to the Cumbria Sites and Monuments Record following any comments from the Client. Three copies will be submitted to English Heritage. The report will include a copy of the agreed project design, and indications of any agreed departure from that design. It will present, summarise, and interpret the results of the programme detailed above and will include a full index of archaeological features identified in the course of the project, with an assessment of the overall stratigraphy, together with appropriate illustrations, including detailed plans and sections indicating the locations of archaeological features. Any finds recovered from the watching brief will be assessed with reference to other local material and any particular or unusual features of the assemblage will be highlighted and the potential of the site for palaeoenvironmental analysis will be considered. The report will also include a complete bibliography of sources from which data has been derived.

- 3.3.3 The report will be bound, with each page and paragraph numbered. The report will include as a minimum the following:
- i. A location plan of the site
 - ii. A location plan of the extent of the watching brief within the site. This must be at a suitable scale, and located with reference to the national grid, to allow the results to be accurately plotted on the Sites and Monuments Record.
 - iii. Plans and sections of archaeology located.
 - iv. A summary statement of the results.
 - v. A table summarising the deposits, features, classes and numbers of artefacts encountered and spot dating of significant finds.
- 3.3.4 The report will identify areas of defined archaeology. An assessment and statement of the actual and potential archaeological significance of the site within the broader context of regional and national archaeological priorities will be made. Illustrative material will include a location map, section drawings, and plans.
- 3.3.5 A short publication on the results of the watching brief will be submitted to a local journal as appropriate.

3.4 OTHER MATTERS

- 3.4.1 **Health and Safety:** OA North conforms to all health and safety guidelines as contained in the OA Manual of Health and Safety and the safety manual compiled by the Standing Conference of Archaeological Unit Managers. The work will be in accordance with Health and Safety at Work Act (1974), the Council for British Archaeology Handbook No. 6, *Safety in Archaeological Fieldwork* (1989).
- 3.4.2 Full regard will, of course, be given to all constraints (services etc) during the evaluation, as well as to all Health and Safety considerations. OA North provides a Health and Safety Statement for all projects and maintains a Unit Safety policy. A risk assessment will be completed in advance of the project's commencement.
- 3.4.3 There is only very restricted access to the area of the development, but these will need to be closed off by means of fence panels to prevent school children gaining access to the site.
- 3.4.4 **Insurance:** the insurance in respect of claims for personal injury to or the death of any person under a contract of service with the unit and arising out of an in the course of such person's employment shall comply with the employers' liability (Compulsory Insurance) Act 1969 and any statutory orders made there under. OA North has professional indemnity to a value of £2,000,000, employer's liability cover to a value of £10,000,000 and public liability to a value of £15,000,000. Written details of insurance cover can be provided if required.

- 3.4.5 **Working Hours:** normal OA North working hours are between 9.00 am and 5.00 pm, Monday to Friday, though adjustments to hours may be made to maximise daylight working time in winter and to meet travel requirements. It is not normal practice for OA North staff to be asked to work weekends or bank holidays and should the client require such time to be worked during the course of a project a contract variation to cover additional costs will be necessary.
- 3.4.6 **Confidentiality:** the report is designed as a document for the specific use of the Client, for the particular purpose as defined in the project design, and should be treated as such; it is not suitable for publication as an academic report, or otherwise, without amendment or revision. Any requirement to revise or reorder the material for submission or presentation to third parties beyond the project brief and project design, or for any other explicit purpose can be fulfilled, but will require separate discussion and funding.
- 3.4.7 **Project Monitoring:** OA North will consult with the client regarding access to the site. Whilst the work is undertaken for the client, the English Heritage Hadrians Wall Archaeologist will be kept fully informed of the work and its results. Any proposed changes to the project design will be agreed with the English Heritage Hadrians Wall Archaeologist in consultation with the Client.

4. WORK TIMETABLE

- 4.1 The phases of work would comprise:
- 4.2 **Permanent Presence Watching Brief:** monitoring of excavation of trenches, and observation and recording of any archaeological features and materials revealed. The timescale of this phase will be dictated by the construction programme.
- 4.3 **Archive/Report:** OA North generally calculates a 1:0.5 ratio of fieldwork: post-fieldwork (archive, analysis, and report preparation).
- 4.4 OA North can execute projects at very short notice once an agreement has been signed with the client. The date for completion of the works would be dictated by the site construction programme. The report will be submitted to the Client within five weeks of the completion of field work.
- 4.5 **Personnel:** the project will be managed by **Jamie Quartermaine, BA Hons Surv Dip** (Unit Project Manager), to whom all correspondence should be addressed. All Unit staff are experienced, qualified archaeologists, each with several years professional expertise. Assessment of any finds from the excavation will be undertaken by OA North's in-house finds specialist **Chris Howard-Davis, BA, MIFA**.

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PROJECT COSTINGS

Stanwix School: Watching Brief

Date: 3rd February 2005

The following resource base will be necessary to achieve the proposals detailed above. The cost on the accompanying sheet is quoted as a day rate, inclusive of day to day management, overheads, and other disbursement costs (travel and expenses), to undertake the programme of work as defined in the project brief and this project design. The total day-rates is inclusive of report and post-excavation analysis costs, which is costed at 0.5 of the fieldwork day-rate cost. This will allow maximum flexibility in the need for archaeological monitoring of the topsoil strip. Any other variations from this programme of work at the client's direction will require recosting. It is anticipated that this will amount to one or two days.

Day Rate

Total Costs £ 295.00 per day

Notes:

1. Salaries and wages inclusive of NI, Superannuation and overheads
2. Total costs exclusive of VAT
3. All costs at 2004/2005 prices
4. Project duration beyond 31-03-2005 will require adjustment for inflation