



**Training Plan:** Institute for Archaeologists Workplace Learning Bursary

**Host Organisation:** Centre for Applied Archaeology

**Placement Title:** Non-Intrusive Archaeological Survey: Historic Building and Geophysical analysis

**Date:** 2010-2011

## 1. Introduction

This document sets out the background to this bursary funded placement, its desired outcomes and the skills it offers set against the National Occupational Standards in Archaeological Practice.

Between 8 and 10 HLF-funded IfA Workplace Learning Bursaries will be available every year for 4 years across the UK. Through Workplace Learning Bursaries, IfA aims to address identified archaeological skills gaps and create opportunities for all sectors of the community to gain professional skills in archaeology.

The placement will be for a period of 12 months at PIFA level (£15,100), hosted by the Centre for Applied Archaeology at the University of Salford. It aims to provide training in the technical requirements of conducting Non-Intrusive Archaeological Surveys, in particular Historic Building and Geophysical Surveys and provide training in the analysis and production of technical reports relating to these specialities.

## 2. Supporting staff

The trainee will work under the supervision of Mike Nevell, Head of Centre, with the support of other specialist staff. Adam Thompson, Principal Archaeologist will act as line manager, and Brian Grimsditch, Senior Archaeologist, as mentor, to provide additional support and encouragement throughout the placement.

Name	Education	Relevant skills and experience	Any previous experience in a training or support role?
Dr Mike Nevell	BA, Mphil, MIFA	Over 20 years experience in industrial and vernacular buildings archaeology and publication	Teaching of undergraduate and postgraduate courses, PhD supervisor, Industrial archaeology/building day schools, workshops
Adam Thompson	BA (hons) MA, MIFA	Over 10 years experience in commercial archaeology, including building surveys and survey techniques	Teaching of archaeological survey techniques (invasive and non-invasive to undergraduate and postgraduate students and volunteers.
Brian Grimsditch	BA (hons) MA	Over 10 years experience in community archaeology including buildings surveys and geophysical analysis (mag, res and radar)	Teaching of archaeological survey techniques (invasive and non-invasive to undergraduate and postgraduate students and volunteers.



### 3. Outcomes

At the end of the placement the bursary holder will have gained knowledge and practice in the technical skills needed to undertake Historic Building Surveys and Geophysical Analysis independently. They will learn how to communicate the practical skills that they have gained to other individuals, both within and outside of the archaeological profession. They will gain knowledge in presenting all the above information alongside desk based assessments in written technical reports. The individual will be able to assist in the management of such projects, including requirements such as risk assessments and will understand mitigating issues and procedures. The role of the Centre for Applied Archaeology and the Greater Manchester Archaeological Unit will be clearly understood at the end of the placement.

It is expected that the post holder would be able to apply for jobs within the archaeological industry with specific focus on the built environment with particular reference to building surveys and geophysical surveys. They would be able to undertake a post graduate research with the skills that they have gained.

### 4. Learning Activities

- 1) Conduct archaeological building surveys on a range of typologically different building types. (including: Photographic Survey, Measured Survey: both plan and elevation)
- 2) Produce digital drawings and images for insertion into technical reports from the original site drawings using software such as Adobe Photoshop and Illustrator.
- 3) Produce a technical report of the original fieldwork detailing and recording the nature and extent of the buildings.
- 4) Produce Historic Map Regressions and apply historical analysis, phasing and survey results into a technical report.
- 5) Conduct Geophysical surveys of archaeological sites using both resistivity meters and magnetometers.
- 6) Use geophysical software to analyse fieldwork results and provide valid conclusions in a technical report.
- 7) Produce analyse and work to risk assessments.
- 8) Pass information regarding both the sites information and the technical skills to other individuals, principally members of the public.

These activities will be repeated continuously during the term of the placement.

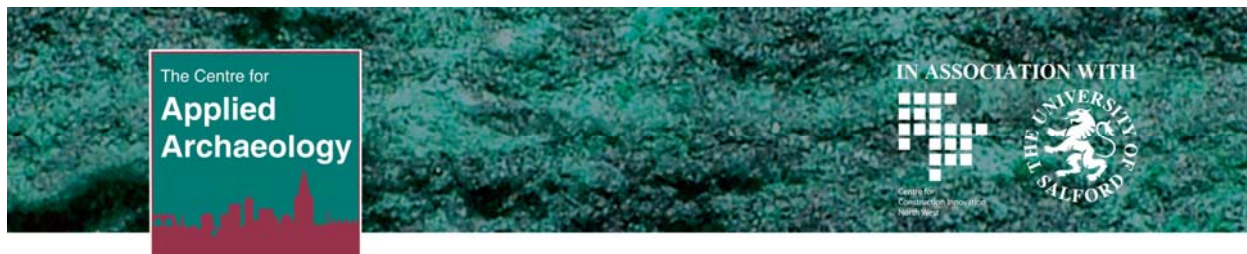
### 5. Propose Learning Targets and National Occupation Standards.

Proposed learning goals	National Occupational Standards (NOSs) to be met	Learning activities and tasks	Who will support the bursary holder with this goal?
<i>1. Learn how to operate safely and</i>	<i>AJ10 10.1-10.3</i>	<i>Completion of Health and Safety Checklist, completion of risk assessments; receive</i>	<i>A Thompson</i>

<i>follow Health and Safety and security procedures in the workplace; to be able to respond to emergencies and assist in the security of the workplace.</i>		<i>training in organisation's Health and Safety procedures.</i>	
<i>2. Learn how to conduct non-intrusive on site field surveys (buildings) and to maintain the standard and integrity of the equipment.</i>	<i>AC3 3.1-3</i>	<i>Completion of onsite recording; including photography, measured survey plans and elevations, laser scans, total station scans, written descriptions etc.</i>	<i>Brian Grimsditch and Adam Thompson (lead)</i>
<i>3. Learn how to conduct non-intrusive on site field surveys (geophysical) and to maintain the standard and integrity of the equipment.</i>	<i>AC3 3.1-3</i>	<i>Complete setting out of grid areas, completion of individual grids using both magnetometers and resistivity metres, successfully download information to desktop computer or data logger.</i>	<i>Brian Grimsditch (lead) and Adam Thompson</i>
<i>4. Learn to interpret the original data collected during the surveys.</i>	<i>AD1 1.1-3</i>	<i>Identify archaeological features, geological and modern features on the geophysical scans. Identify phasing and power systems etc in building surveys in a consistent manner.</i>	<i>Brian Grimsditch and Adam Thompson and Mike Nevell (lead)</i>
<i>5. Learn how to produce archaeological reports and other forms of dissemination from the</i>	<i>AC1 1.1-4 AH4 4.1-3</i>	<i>Using survey data to produce accurate report on the work undertaken, showing method, aims, conclusions and produce drawings and images. Give workshops to volunteers</i>	<i>Mike Nevell and Adam Thompson (lead)</i>



surveys.			
6. Learn how to teach volunteers the basic principles of non invasive surveys.	AH4 4.1-3 AK2 2.1-3	Give workshops to volunteers, assist in seminars, assist in conference organisation evening talks etc.	Brian Grimsditch
7. Learn how to assist in the management and setting up of projects.	AB1 1.1-3 AB 2 2.1-2	Assist in the production of the risk assessments, written schemes of investigations/project designs etc.	Adam Thompson
8. Learn about the industrial and vernacular architecture within the northwest.	AK3 3.1-3	Attend workshops, lectures and seminars. Assist in publication research, conduct surveys within the region and produce reports.	Mike Nevell
9. Learn how to deal with data sets.	AF3 3.1-3	Produce photo catalogues, transfer total station data, transfer laser scanner data.	Adam Thompson and Brian Grimsditch
10. Learn how to manage your own professional development.	AK3 3.1-3	Produce and participate in lectures and seminars; experience dealing with people at different professional levels; manage your own time and resources; understand and apply standards and best practice.	Adam Thompson



## 6. Timing

The post will be one year in length, over a period of 210 working days made up as follows:

260 working days less  
 24 days holidays  
 8 bank holidays  
 8 days sickness  
 10 days other

## 7. Schedule

The first month of the project will be given aside to undertake health and safety/risk assessment training alongside finding out the previous level of experience and knowledge of the individual. The next 6 months will be given towards undertaking the onsite non intrusive surveys – Buildings and Geophysics intermingled with each other. Report writing, software, illustration and analysis production will occur immediately onwards, through to the end of the project. Teaching of volunteers will take place if the candidate has made enough progress - this would take approximately one month of their time. General knowledge on the historic building typologies of the northwest will continue for the entire length of the project.

Historic Building Survey - Measured (on site)	20 days
Historic Building Survey - Photographic (on site)	13 days
Historic Building Analysis and report production	40 days
Historic Map Regressions	15 days
Historic data collection (map searches, local studies libraries etc)	30 days
Geophysical Survey – Magnetometer (On site)	20 days
Geophysical Survey – Resistivity (Onsite)	20 days
Geophysical Analysis and Report production	20 days
Drawing Software training	10 days
Risk Assessment training	3 days
Spread sheet data entry, consultations, letter writing	6 days
Site Visits	5 days
Team Meetings	5 days
Liaisons, meetings, visits to partner organisations	5 days
<b>Total</b>	<b>210 days</b>

## 8. Person Specification

Applicants should have archaeological experience at PIFA level, and should be able to demonstrate a sound knowledge of British archaeology. Experience of working on a range of archaeological sites would be essential, and it would be desirable for applicants to have some experience of contributing to specialist report writing or post-excavation assessment and analysis.