Appendix 2

Archaeology and development guidance (SPD)

Foreword

The City of London has a rich and varied history stretching back to the earliest known occupation by the Romans. The long history of occupation and settlement has resulted in a unique depth of archaeological material.

The City of London is a world leading international financial and business centre. There is significant pressure to alter, adapt and develop new buildings to meet modern business requirements. The City has a rich architectural and archaeological history and is an important cultural centre. Heritage assets play a vital part in the identity of the City as a unique place with a dynamic and varied townscape. The results of archaeological research, investigation and excavations add colour and richness to the story of London, and demonstrate how the City continues to adapt and change to meet modern needs, whilst preserving its long history.

The redevelopment of buildings, particularly since the mid-nineteenth century, has resulted in the discovery of wide ranging archaeological evidence of past cultures. Some of these remains are of national or international significance, and are Scheduled Ancient Monuments, while others are protected through planning legislation. These provide invaluable evidence of buildings long demolished and give much information on the lives and occupations of the city's inhabitants as well as the environment in which they lived and worked. The consideration of the potential archaeological survival and its preservation is a material consideration in the planning process.

The historic environment is a finite and non-renewable resource, in many cases highly fragile and vulnerable to damage and destruction. The safeguarding of buried archaeological remains requires co-operation between developers, planners, archaeologists and all those involved in the development process. This guidance provides support in the interpretation of Local Plan policies relating to Ancient Monuments and archaeological remains in the City.

Scheduled Ancient Monuments

Scheduling evolved specifically for sites of an archaeological character. It is the oldest form of national heritage protection, dating from the 1882 Ancient Monuments Act, when a 'Schedule' of prehistoric sites deserving of state protection was first compiled. Historic England advises the Secretary of State on which sites should be added to it. Sites from all periods are now eligible.

What is Scheduling?

Scheduling is the selection of nationally important archaeological sites, which would particularly benefit from close management from Historic England. Archaeology is all around us, and Scheduled sites form a carefully chosen sample of the archaeological record.

While some change may be possible, there is a presumption that these sites will be handed on to future generations in much the same state that we have found them. Scheduling derives its authority from the Ancient Monuments and Archaeological Areas Act of 1979.

Scheduled Monument Consent

Where a site includes a Scheduled Ancient Monument, additional legislative procedures apply and specific advice will be given.

A monument which has been scheduled is protected against ground disturbance or unlicensed metal detecting. Written consent must always be obtained before any work on a scheduled monument can begin.

Application for Scheduled Monument Consent (SMC) must be made to the Secretary of State for Culture, Media and Sport before any work can be carried out which might affect a monument either above or below ground level. Some change may also require planning permission: the City Corporation's LPA Historic Environment Team can advise on the need for any permission.

Historic England gives advice to the government on each application and administers the consent system. In assessing applications, the Secretary of State will aim to ensure that the significance of protected sites is safeguarded for the long term.

Where specific types of work related to agriculture or gardening are already being carried out they are covered by Class Consents and allowed to go ahead without SMC.

Further advice regarding what it means when a monument is scheduled and what requires consent can be obtained from the Historic England Inspector of Ancient Monuments, London Office.

It is against the law to:

- Disturb a scheduled monument by carrying out works (outside Class Consents) without SMC
- Cause reckless or deliberate damage to a monument
- Use a metal detector or remove an object found at a monument without a licence from Historic England

Conviction for these offences can lead to fines.

For further information on Scheduled Monument Consent, see the Historic England Website – 'Scheduled Monuments: A Guide for Owners and Occupiers'.



Standards and Guidance for Archaeological Projects in the City of London

Introduction

This document is intended for those undertaking work with an archaeological impact in the City of London. It identifies the standards required of archaeological work within the City. It should be read in conjunction with any brief that is prepared as part of the planning process. It is important that this is followed in order that a planning condition can be judged to have been discharged satisfactorily.

The guidance provides a framework for archaeological projects in the City of London consistent with the European Convention on the Protection of the Archaeological Heritage (Valetta 1992), the National Planning Policy Framework (NPPF 2012), the London Plan (2015), the City of London Local Plan (2015) and professional best practice as articulated by the Chartered Institute for Archaeologists (CiFA).

All archaeological projects will be conducted in a scientific manner by properly qualified, experienced and competent archaeologists operating with sufficient resources and time to provide positive outcomes relevant to the specific purpose of the project, and proportionate to the significance of the archaeological interest.

There are several ways in which an archaeological project can deliver positive outcomes:

- Informing decision-making by identifying the heritage assets present on a site, their significance and the impact of development upon them
- Informing development design by identifying how harm to heritage assets can be minimised, and opportunities taken to enhance sense of place and local distinctiveness
- Investigating and recording threatened heritage assets, and publishing the results to advance understanding
- Enhancing the public enjoyment and understanding of local heritage

This document covers all stages of archaeological work: assessment, evaluation, geotechnical investigations which may affect archaeological remains, archaeological investigation, recording and excavation, post-excavation work, publication and archiving.

In line with other aspects of development, care must be taken to avoid adverse impacts on air and water quality or contamination of soils within or beyond the development site and to exercise the Duty of Care over waste materials arising from the site. Archaeological remains should be monitored to identify the potential for climate change impacts, such as drought, intense rainfall and higher average temperatures, to affect the preservation of remains.

The NPPF states that 'When considering the impact of a proposed development on the significance of a heritage asset, great weight should be given to the asset's conservation' (paragraph 132) and that 'non-designated assets of archaeological interest that are demonstrably of equivalent significance to scheduled monuments should be considered subject to the policies for designation' (paragraph 139). It states that 'The effect of an application on the significance of a non-designated heritage asset should be taken into account in determining an application' (paragraph 135). On such sites, the results of assessment and evaluation may influence the design of the development in order to preserve or protect a monument or remains. This may be achieved through limited basement coverage or sympathetic foundation design. Conservation proposals or proposals for enhancement and interpretation that could be carried out by the applicant as part of the development may also be identified.

Some development schemes will have minimal archaeological implications where existing basements or foundations are reused, or where archaeological remains may not survive on

the site. In such cases, the applicant will be requested to provide relevant information prior to, or at the time of making a planning or listed building consent application.

The City Corporation's LPA Historic Environment Team can advise on those organisations which are able to carry out both assessment and archaeological work.

Advice should be sought from the LPA Historic Environment Team at the earliest preapplication stage of the planning process, in order that the necessary consideration of the archaeological impact of the proposals can be assessed.



Policy context

The National Planning Policy Framework (NPPF) states: 'In determining applications, local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance. As a minimum the relevant historic environment record should have been consulted and the heritage assets assessed using appropriate expertise where necessary. Where a site on which development is proposed includes or has the potential to include heritage assets with archaeological interest, local planning authorities should require developers to submit an appropriate desk-based assessment and, where necessary, a field evaluation' (paragraph 128).

'Local planning authorities should identify and assess the particular significance of any heritage asset that may be affected by a proposal (including by development affecting the setting of a heritage asset) taking account of the available evidence and any necessary expertise. They should take this assessment into account when considering the impact of a proposal on a heritage asset, to avoid or minimise conflict between the heritage asset's conservation and any aspect of the proposal (paragraph 129).

'When considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset's conservation. The more important the asset, the greater the weight should be. Significance can be harmed or lost through alteration or destruction of the heritage asset or development within its setting. As heritage assets are irreplaceable, any harm or loss should require clear and convincing justification. Substantial harm to or loss of a grade II listed building, park or garden should be exceptional. Substantial harm to or loss of designated heritage assets of the highest significance, notably scheduled monuments, protected wreck sites, battlefields, grade I and II* listed buildings, grade I and II* registered parks and gardens, and World Heritage Sites, should be wholly exceptional' (paragraph 132).

Managing Significance in Decision-Taking in the Historic Environment Historic Environment Good Practice Advice in Planning: 2 (GPA 2)

The Historic England Good Practice Advice note provides information to assist local authorities, planning and other consultants, owners, applicants and other interested parties in implementing historic environment policy in the National Planning Policy Framework (NPPF) and the related guidance given in the Planning Practice Guidance (PPG). These include; assessing the significance of heritage assets, using appropriate expertise, historic environment records, recording and furthering understanding, neglect and unauthorised works, marketing and design and distinctiveness.

London Plan Policy 7.8 Heritage Assets and Archaeology

E - New development should make provision for the protection of archaeological resources, landscapes and significant memorials. The physical assets should, where possible, be made available to the public on-site. Where the archaeological asset or memorial cannot be preserved or managed on-site, provision must be made for the investigation, understanding, recording, dissemination and archiving of that asset.

City of London Local Plan Core Strategic Policy CS12: Historic Environment

Policy C\$12 relates to archaeological remains and sites with archaeological potential.

To conserve or enhance the significance of the City's heritage assets and their settings, and provide an attractive environment for the City's communities and visitors, by:

3. Protecting and promoting the evaluation and assessment of the City's ancient monuments and archaeological remains and their settings, including the interpretation and publication of results of archaeological investigations.



Archaeological Assessment and Impact Assessment

Introduction

A desk-top assessment should be prepared prior to the submission of a planning application in order that the archaeological implications of development can be fully considered. The information will enable the LPA Historic Environment Team to consider the proposals and to reach an informed decision.

The archaeological potential of the site will be considered in conjunction with other planning, listed building or conservation area matters. It should be an assessment of published and unpublished archive and historical material and indicate the presence of archaeological remains on the site and their nature, character, quality, date and extent. Prior to determination of any application, additional evaluation trial work, on site, may be required in order to further assess the presence or absence of remains, their extent, nature, quality and character.

Advice should be sought from the LPA Historic Environment Team early in the process (at the pre-application stage) to discuss the potential for archaeological impact and to agree the scope and focus of the archaeological assessment.

1. Desk-top assessment

Desk-top archaeological assessments are prepared by studying documentary, cartographic, photographic and archival material in order to assess the significance of known heritage assets, and the potential for new discoveries. The assessment should consider the archaeological potential of the site and the impact of any development proposals on surviving monuments or remains. Where more detailed or specific information is required, this will be drawn to the applicant's attention.

Desk-top assessments are expected to conform to the CiFA 'Standard for desk-based assessments'. Early consultation with the LPA Historic Environment Team is strongly advised to discuss the site, scope and focus of the assessment.

The assessment should consider the archaeological, environmental, topographical and historical significance of the site in the context of the City of London, and its local, regional or national context. This will include:

- Cover and Title Page Detailed site address, report type, organisation, author, date and any relevant planning references or site codes. The GLHER unique search number should be included.
- **Summary** A non-technical summary of the significance and archaeological potential of the site, as well as an assessment of the potential impact of the proposed development and any recommendations.
- **Site Location** Site location plan, based on the current Ordnance Survey 1:1250 map. Clearly show the site boundary, and include National Grid References on detailed location maps.
- Planning Framework Make reference to national, regional and local planning policy.
 - o Identify all statutory and non-statutory constraints upon the site or adjacent sites, that relate to the historic environment including:

- Listed buildings, Scheduled Ancient Monuments, undesignated heritage assets, World Heritage Sites, conservation areas, registered historic parks and gardens, and Tree Preservation Orders.
- Survey drawings of the ground and basement floors of the existing building or previous buildings on the site, with levels and sections, including foundations.
 Where appropriate, reference to the planning history should be made including any planning application or listed building consent drawings (including planning application numbers).
- **Geological and Topographical Information** Geological maps, geophysical or geotechnical data should be provided where available. Assessment of trial pit and borehole data from the site, where available, and in the immediate vicinity. This data should be marked on a plan.

Archaeological information

- o The Greater London Historic Environment Record, <u>GLHER@HistoricEngland.org.uk</u> held by Historic England holds up-to-date information on archaeological sites, artefacts, listed buildings and other heritage assets in the City of London, and is a primary resource for any archaeological assessment.
- o The assessment should include unpublished research reports and archives, held by The Museum of London Archaeological Archive. Methodology and results of archaeological work already carried out on the site and sites in the immediate environs. A summary of archaeological evidence with references and sites illustrated on a plan should be included. Where additional information is required, advice on the scope and focus of the assessment will be provided by the LPA Historic Environment Team. Any constraints on this information should be noted, such as the type of observation or investigation, limited site access, antiquarian observation or unprovenanced reports.
- In some cases, site conditions inferred from adjacent or similar sites can help to predict the nature and character of surviving remains.
- Historical Documents Historical documents held in museums, libraries or other archives, for example Guildhall Library, and the London Metropolitan Archive.
- Maps and Photographs Plans and maps of the site and its immediate environs, including medieval and early modern pictorial and surveyed maps. For example, Agas c.1562, Ogilby and Morgan 1676, Roque 1746, Horwood 1780, Goad's Insurance Plans, bomb damage maps and Ordnance Survey, 1st series and subsequent series, including preand post-war, as appropriate.
 - o A plan of the site on an Ordnance Survey base at a scale of 1:1250.
 - Plans of Roman and medieval London, using published or unpublished sources will also be relevant.
 - o Historic views, including paintings, drawings and photographs.
 - o Contemporary photographs of the site may be useful.
- Aerial Photographs where relevant
- **Site Visit and Appraisal** It is essential to visit the site being assessed. Describe and illustrate the current condition of the site, its topography and usage. Any potential non-archaeological constraints to field investigation should be identified.

The assessment of significance should have regard to Historic England's Conservation Principles: Policies and guidance for the sustainable management of the historic environment [2008]). It should include an assessment of all standing buildings, landscape features and structures.

Surfaces, ancillary buildings, boundary walls, gates, railings and other structures may be significant and should not be omitted from the assessment.

Any other relevant information may include details of access and the current use of the building.

Any constraints on these sources should be noted, for example, where primary information is not available or is unreliable.

2. Impact Assessment

Areas of archaeological potential on the site should be assessed including the type, likely date, nature and depth of remains, variations in the depth and extent of their quality and quantity across the site.

- The topography of the site should be described and shown on a plan. The academic and research potential of the remains should also be assessed with reference to current or potential proposed research themes.
- The degree of disturbance or destruction by existing or previous buildings or other structures on the site should be indicated. These may include basements, foundations, slab thickness, inspection pits, services, tunnels, etc. Contaminated areas should be defined, the degree of contamination assessed and any constraints on safe archaeological investigation established.
- Areas of archaeological survival and areas considered to have been destroyed on the site should be indicated on an Ordnance Survey plan at a scale of not less than 1:500.
 This should also be shown in a section drawing.
- The impact of development proposals, with reference to the architect's, engineers' and
 planning application drawings, as appropriate. Areas of proposed ground disturbance
 should be clearly indicated on plan and in section. This should include consideration of
 preliminary and enabling works.
- Consider if the proposed works could cause harm to adjacent heritage assets by altering their setting/surroundings. If so the impact should be assessed using Historic England Good Practice Advice 3: The Setting of Heritage Assets.
- Proposals for further evaluation work, for example, test pits or other investigations in specific areas in order to assess the survival, condition and nature of any monument, building or remains which may survive on the site or its immediate vicinity should be made where appropriate and areas of evaluation shown on a scaled plan.
- Details of how development proposals are to be designed in order to minimise
 disturbance to surviving remains, for example, site coverage, basements and
 foundations. Areas where preservation in-situ is to be achieved should be clearly
 marked. Areas where there is no development impact should be identified. This should
 be accompanied by a method statement outlining details of safeguarding and
 preservation and any long term management or monitoring.

3. Assessing potential and significance, and making recommendations

The information should be used to assess the archaeological and historical interest of the site. Such interest will include the significance of known heritage assets at local, regional and national levels and the potential for new discoveries. The potential for new discoveries will be a product of the archaeological, historical and topographical context of the site and the extent and nature of any modern disturbance,

Assessment of significance should have regard to Historic England's Conservation Principles. National designation criteria should be used to consider whether an undesignated heritage asset is or could be of demonstrably equivalent significance to a scheduled ancient monument. There should be reference to the relevant regional and other relevant research frameworks.

The nature and scale of the proposed development's likely impact on the archaeological and historical interest should be assessed. The likelihood that significant harm will result from the development will be a product of the site's known and potential archaeological interest and the impact of development upon that interest.

If the development could cause significant harm and there is not already sufficient information to establish the presence, significance, condition and nature of any heritage asset which could be significantly harmed then further information from assessment or evaluation may be needed to reach an informed planning decision. Archaeological evaluation should be appropriate and proportionate to the significance of the archaeological interest, the proposed development and have regard to site conditions and undertaken to an agreed Written Scheme of Investigation (WSI) submitted with a planning application or approved pursuant to conditions of a planning permission or listed building consent. Planning permission could be refused on the grounds of insufficient archaeological information.

4. Written Scheme of Investigation (WSI)

All archaeological investigations, building recording projects or other works concerning the historic environment should have a project design, known as a method statement or Written Scheme of Investigation (WSI). Clearly stated aims, objectives, risks, products and tasks are essential. When incorporated into a defined methodology, this allows for programming and planning decisions to be made, responsibilities to be made clear, and a successful project to run.

For projects initiated through the planning system, such as through a condition attached to planning permission, Listed Building Consent or Scheduled Monument Consent, a written scheme of investigation is a requirement. Written Schemes of Investigation are expected to conform to all current professional standards for the proposed fieldwork. It is best practice for those involved in pre-determination fieldwork to liaise with the LPA Historic Environment Team regarding the requirements and necessary consents prior to the implementation of any work.

Procedures

The LPA Historic Environment Team may write project briefs for major projects. This may be an informal brief setting out the justification for the project, its broad aims and an indication of the scope and scale of the work. Such guidance may need to be revised to take account of new discoveries, changes in policy or the introduction of new working practices or techniques.

A Method Statement or WSI is prepared by an archaeological practitioner, and sets out in detail how the requirements of the fieldwork will be achieved. The WSI should include all aspects of the investigation, from on-site arrangements and methodological approaches through to archiving and dissemination. This must be sufficiently clear about objectives, methods, standards, resources and timetable to provide a standard against which delivery of the project will be monitored.

A WSI should be submitted for formal approval in writing by the City Corporation prior to the commencement of works to meet the requirements of a condition of a planning application.

The WSI should be sufficiently flexible to allow for contingencies and re-assessment of priorities in the field. Investigations should be subject to a process of continuous review in the light of the research objectives. Any substantial deviation to the original document or methodology should be agreed in writing with the City Corporation.

A programme of archaeological work will not have been fully implemented until all on-site and off-site work including post excavation analysis, publication and archiving have been completed.

Historic England GPA 2 sets out advice on archaeological conditions and obligations for WSIs in paragraphs 36 and 37.

Contents

It is expected that those preparing WSIs will be familiar with the archaeology and history of the site and its environs. If no desk based assessment has been prepared for the site, the GLHER should be consulted prior to the writing of a specification. A GLHER unique search number should be included in all WSIs. A search on the Heritage Gateway or any similar data sharing website is not considered an adequate substitution for a GLHER search, and will not be accepted.

The Archaeology of Greater London (MoLAS, 2000), A Research Framework for London Archaeology (MoLAS, 2002) should be used in formulating research aims and objectives. Research frameworks for the surrounding administrative areas and national topics may be relevant. For sites close to the Thames the Greater Thames Estuary Research Framework will be of use.

The site should be inspected prior to the production of the WSI so that all practical issues surrounding the work can be addressed.

Those preparing WSIs should have sufficient experience to give full consideration to the appropriate means of investigating the asset, including the selection of appropriate techniques and sampling strategies such as trial trench densities and layouts. If required, specialist advice should be sought. Historic England and the CiFA have produced a number of technical guidance notes and papers on a wide variety of topics.

The timetable for the investigation should be included within the details of the agreed scheme.

A WSI for archaeological recording should include research objectives for the proposed work, should follow the findings of an archaeological assessment, and take account of the potential development impact. These will normally be defined in discussion with the LPA Historic Environment Team and after full consultation with the Greater London Sites and Monuments Record (GLSMR). Details will include all methodologies, levels of expertise, and estimated resources for fieldwork, analysis, publication/ dissemination, and archiving.

The WSI should contain, at a minimum, the following elements:

- Organisation, author and date
- GLHER unique search reference number
- Museum of London site code
- non-technical summary
- site location information (including map) and descriptions
- survey, evaluation trench or excavation location plans
- context of the project
- details of planning or other consents (e.g. Faculty or SMC) under which the work is being carried out, or if the works are prior to the determination of a planning permssion
- geological and topographical background
- archaeological and/or historical background
- general and site specific research aims and objectives
- reference to relevant legislation, including a statement of adherence to CIfA and Historic England guidance and standards documents
- field and recording methodologies
- collection and discard policies for artefacts
- a site specific sampling strategy for environmental deposits and ecofacts, including provision for obtaining absolute dates, as appropriate, prepared in consultation with the Science Advisor
- arrangements for immediate conservation of artefacts
- details for handling human remains
- policy statement for treasure
- post-fieldwork methodology
- report preparation methodology
- publication and dissemination proposals, including GLHER and OASIS deposition
- public outreach proposals where appropriate
- copyright information
- archive deposition details including timescale for deposition, and if available Transfer of Title documentation
- Timetable -including for post-excavation assessment and reporting, which should normally being completed within 12 months of the completion of fieldwork. For major projects the timescales may be longer and where post-excavation assessment recommends further work it should be stated that the timetable will be updated by that document
- details of site personnel, support staff and specialists, including CVs where appropriate
- health and safety considerations
- monitoring procedures
- contingency arrangements, if appropriate

Archaeological evaluation is often only the first stage of a programme of work and all parties should be aware of the possibility of a requirement for further archaeological investigation or preservation *in-situ*. Where further work is identified, a WSI would be required to be submitted for approval in writing prior to the commencement of work to meet the requirements of conditions of a planning permission.

If the project includes wider applications, such as GIS components or other means of capturing and recording spatial data, the methods to be used should be specified, including compatibility with the recipient archive.

There is an expectation that all projects will be conducted by properly qualified, experienced and competent archaeologists. Appropriate general accreditation would normally be a CiFA Registered Organisation or a project manager being a full member of the CIFA (MCIFA). Specialist roles and projects will require specific demonstrated expertise in a

particular topic (e.g. buildings archaeology, environmental archaeology, medieval pottery etc.) to a level broadly equivalent to a CMIFA, or for less experienced staff their work should be supervised by someone of that level.

Submission and Approval

A draft WSI should be sent to the LPA Historic Environment Team for comment before formal submission.

The applicant should fully understand the contents of the WSI prior to submission to the City Corporation. This will enable responsibilities to be transparent and any practical issues to be addressed before formal approval by the City Corporation. Any work on site should not commence until the requirements of the condition have been met and the WSI has been approved in writing by the City Corporation.

The WSI should clearly set out how the requirements of the brief are met, sufficient consideration of how impacts upon historic assets will be managed, and that there is appropriate competence, or experience to undertake the project.



Archaeological Fieldwork – on-site investigations

Introduction

Archaeological fieldwork, trial work and site investigation may be required to provide additional archaeological information, to inform foundation design or basement configuration of a development proposal, in accordance with advice set out in the NPPF and the City of London Local Plan 2015.

Site work may be necessary prior to a decision in areas of archaeological potential and where the proposed application has implications for surviving archaeological monuments or remains. It is used to verify the conclusions of an assessment and provide data on the nature, extent, date and character of the archaeological resource. It may not be possible to determine the application without the relevant archaeological information, and questions about the archaeological potential, or the impact of the proposed development may remain, even after initial appraisal and detailed desk-based assessment.

Prior to the commencement of any work on site, a WSI should be written and agreed in advance with the LPA Historic Environment Team.

Archaeological fieldwork covers the full spectrum of techniques from remote sensing and borehole investigation to survey and excavation. This guidance note is applicable to all mitigation strategies, evaluation and excavation site work undertaken. WSIs for archaeological excavations, evaluations, and watching briefs, prepared by an archaeological consultant or contractor should be carried out in full accordance with this guidance. Alternative approaches and methodologies may be acceptable, but should only be employed with the written approval of the LPA Historic Environment Team in order to ensure consistency of approach in accordance with professional standards and procedures.

Archaeological fieldwork will take place at different stages in the planning process. It may follow the recommendations of an archaeological desktop assessment, the first stage in assessing the archaeological potential and development impact of a site. Archaeological evaluation may be carried out to inform and support a planning application, to help design an appropriate mitigation strategy, prior to a decision on a planning application. In exceptional circumstances, where it is not possible to undertake pre-determination evaluation due to immovable constraints, evaluation may be included in the conditions of a planning permission. The extent of archaeological excavation will depend on the agreed mitigation strategy and the impact of the proposed development. Archaeological work will range from a programme of recording and protection to ensure preservation in-situ, to recording and excavation of archaeological remains affected by the proposed development. Archaeological investigations should include continuous assessment of the methodology and research objectives as well as the rapid feedback of information from spot dating and environmental analysis to inform the investigation strategy.

The Historic England Inspector of Ancient Monuments should be consulted for advice where statutorily protected archaeological remains, Scheduled Ancient Monuments, may be affected.

The LPA Historic Environment Team should be consulted for advice where work to listed buildings is proposed.

Evaluation

Evaluation work is the initial stage of investigation, and carried out in support of a planning application to enable an informed decision. Evaluation will seek to define and characterise the archaeological remains on a site. Where archaeological remains are discovered or

predicted, and the proposed scheme has an impact on those remains, further archaeological work will be necessary. This will be a mitigation strategy for preservation insitu, full excavation, or a combination of the two. The development proposal may be required to be redesigned to avoid or minimise the impact on archaeological remains, in accordance with the NPPF and the City of London Local Plan 2015.

Purpose

The Standard and Guidance for Archaeological Field Evaluations (ClfA, 2014) defines the purpose of Field Evaluation as the need to gain information about the archaeological resource in order to contribute to the:

- formulation of a strategy for the preservation or management of those remains; and/or
- formulation of an appropriate response or mitigation strategy to planning applications or other proposals which may adversely affect such archaeological remains, or enhance them; and/or
- Formulation of a proposal for further archaeological investigations within a programme of research.

Objectives and types of evaluation

The objectives of archaeological evaluation should be set out in a WSI agreed by the LPA Historic Environment Team prior to work commencing. Evaluation can be non-intrusive, for example, geophysical, chemical or survey techniques, as well as intrusive, for example, auger, borehole, monitoring of geotechnical work, test pits or trenches.

Scale and nature of evaluation

There is no single evaluation methodology appropriate for all situations. All field-work should follow the Archaeology Guidance for Fieldwork in this document. It is important to identify potential archaeological remains and site constraints, in the form of modern intrusions such as deep basements and foundations, before designing an appropriate evaluation strategy.

An evaluation should be of a scale to enable a sufficient sample of the site to be investigated. The sample must be large enough to confidently assess the principal aims and objectives of the fieldwork, as articulated in the WSI.

The evaluation should focus on the known or presumed impact of development proposals. There should be clear research objectives with a prediction of what the evaluation methodology can achieve, in order to assess the likely impact on archaeological remains and to help design an appropriate mitigation strategy.

In reporting the results of evaluation work, the accuracy of the original expectations and the appropriateness of the method should be assessed in order to illustrate what level of confidence can be placed on the information that will provide the basis for the mitigation strategy.

The investigation will not be at the expense of any structures, features or finds which might be considered to merit preservation in situ (or be in any way prejudicial to the protection of such remains), where potential mitigation, including preservation, is still being considered.

Within significant archaeological levels the partial excavation or half-sectioning of features and deposits, sampling, the recovery of dating evidence and the cleaning and recording of structures is preferable to full excavation.

The full excavation and investigation of archaeological remains should be discussed and set out in the WSI. Appropriate provision should be made for safe excavation of trenches to the necessary level by shoring the sides.

Methods to be considered in designing an appropriate evaluation strategy

- Contour survey
- Metal detecting
- Auger survey
- Borehole investigation (core samples)
- Chemical analysis
- Geophysical techniques
- Test pits (including monitoring geotechnical investigation)
- Single item samples
- Trench excavation targeted to answer specific questions of potential archaeological features

Project Design for Archaeological Evaluations

(Adapted from CiFA Standard and Guidance for Archaeological Field Evaluations, 1994)

- Site location plan at a scale of 1:1250, located to the National Grid Reference
- Scale plan of site with location of proposed impact, if known
- Geological and topographical background
- Archaeological and historical background
- Statement of expectation, using criteria for assessing national importance of; period, relative completeness, condition, rarity and group value
- Research objectives for archaeology, by period (in the form of questions)
- Statement of site-specific evaluation and field methodology
- Location of the areas for evaluation including reason and justification
- Method of recording (from identification only, single item samples, sample excavation, or bulk samples)
- Post excavation fieldwork methodology including finds and sample collection strategy
- Report preparation, contents, and proposed distribution
- Copyright
- Archive deposition
- Publication and dissemination proposals in addition to site report
- Timetable
- Staffing including relevant specialists
- Health & Safety arrangements
- Legislative or other constraints or caveats
- Monitoring procedures
- Contingency arrangements

Evaluation report

The report should be completed and submitted within 6 weeks of completion of fieldwork. The report should be laid out as follows:

Frontispiece

- Site name and address
- GLSMR number
- Title of report
- Organisation and author
- Date of report
- Site code
- Ordnance Survey national grid reference
- 1. Contents list
- 2. Summary non technical
- 3. Introduction
- 4. Planning background
- 5. Previous work(s) relevant to archaeology of site
- 6. Geology and topography of site
- 7. Research objectives
- 8. Methodology of site-based and off-site work
- 9. Results and observations, quantitative (including constraints of site, see below). Appropriate mitigation strategy
- 10. Assessment of results against original expectations (using criteria for assessing national importance of; period, relative completeness, condition, rarity, and group value) and review of evaluation strategy
- 11. Statement of potential of archaeology
- 12. Conclusions and recommendations for appropriate mitigation strategy
- 13. Publication and dissemination proposals in addition to site report
- 14. Archive deposition
- 15. Bibliography
- 16. Acknowledgements
- 17. Sites & Monuments Record form

The two complementary parts of prediction and results can work actively together to inform the most appropriate mitigation strategy, whether preservation *in-situ* or excavation or a combination of both.

Site considerations which may influence the investigation strategy and reporting include:

- was access to the building or site limited or were some areas inaccessible and for what reasons?
- o were test pits placed in optimum areas with regard to objectives of evaluation, such as type and character of archaeological survival predicted in archaeological assessment; extent of foundations, or potential impact of development proposals?
- o were test pit locations altered? If so, for what reasons, e.g., obstructions, drainage, access?
- o were test pits located away from areas of potential impact for access reasons? Will the results need to be interpreted and extrapolated?

o is the evaluation part of a phased evaluation, and what is the reason for this? For example site history, changes to scheme, part of a programme of geotechnical and archaeological evaluation.

Excavation

The LPA Historic Environment Team should be informed in writing at least one week in advance of commencement of fieldwork.

All members of the archaeological team (including external specialists) should have read and understood the WSI and this archaeological guidance, before work starts on site. Where the archive is to be deposited with the Museum of London, an Archive Deposition Form should be obtained and returned to the Museum before work starts.

Site preparation

The removal of the basement slab and makeup should be done under archaeological supervision.

All undifferentiated topsoil, or overburden of recent origin, will be removed down to the first archaeological layer. An exception to this would be where a focused soil-sampling strategy is proposed to record and collect data from reworked soil contexts above recognisable stratified archaeological contexts. If a mechanical excavator is to be used to remove topsoil, or modern material such as slab make up, this should normally remove spits of no more than 0.20m depth, moving along the length of the trench. Successive spits may be similarly removed until the first archaeological horizon is reached. This level should be cleaned in plan using a wide blade, ditching bucket or similar, with no teeth. If the machine has to re-enter the trench, care will be taken to ensure that it does not damage underlying remains. All machine work and demolition must be done under archaeological supervision, and should cease immediately when archaeological evidence is revealed. The machine must not be used to cut arbitrary trial trenches down to natural deposits without regard to the archaeological stratification.

It is important that enabling works such as temporary shoring, "grubbing out", hoarding erection, access road construction etc., are carried out under archaeological supervision and recording where remains may be affected.

Developers, working with their archaeological contractors, should identify what space, services and accommodation will be needed during fieldwork to ensure an efficient, safe and healthy working environment.

Early consideration should be given to on-site viewing, for example either by platforms or openings in the site hoarding.

Test pit preparation & archaeological evaluation

Following machine clearance, all faces of the test pits that require examination or recording will be cleaned using appropriate hand tools. All investigation of archaeological levels will be by hand, with cleaning, examination and recording both in plan and section. In the case of archaeological evaluations, the objective is to define remains rather than totally remove them. Full excavation will be confined to those deposits which have been agreed with the LPA Historic Environment Team through a project design and site meeting. Within significant levels partial excavation, half-sectioning, the recovery of dating evidence, sampling, and the cleaning and recording of structures is preferable to full excavation.

Excavation technique

Subsequent excavation will be by hand unless bulk deposits of little archaeological or environmental potential occur. In some circumstances, these could be removed mechanically, in consultation with the LPA Historic Environment Team.

It may be practicable to leave modern foundations in-situ. Where it is clear that modern foundations have removed archaeological remains, their removal may be desirable in order to gain access to archaeological levels. This should not be done if damage to archaeological remains is likely to occur.

Assessment of 'naturally deposited' levels may also be necessary where organic preservation has occurred. This is particularly important in dealing with peat, palaeochannels, and alluvial formations. These can provide valuable information about the natural environment before, during and after human occupation and can help questions such as why a location was selected for occupation, the impact it had on the environment, why it was abandoned, and the general environmental context of the City. Sampling strategies will be agreed with the LPA Historic Environment Team.

Preservation in-situ

Preference will be given to preservation *in-situ* for archaeological remains, of national or international importance.

Where archaeological remains are to be preserved *in-situ*, a specification will be agreed with the LPA Historic Environment Team to protect remains from deterioration, for example, from changes in groundwater levels or load impacts. Advice on the appropriate level of protection will be provided by the LPA Historic Environment Team.

Provision for public viewing or access should be part of the development proposals where possible and appropriate.

The objective of preserving monuments and remains *in-situ*, reburying, and sealing a site, needs to be achieved in a way that will maintain a site without deterioration. Recording previous impacts on archaeological remains and assessment of soil conditions can aid an understanding of their survival. Analysis of any previous archaeological excavation records and recording of known modern intrusions, such as foundations, can help establish factors which have affected archaeological survival.

Redevelopment of buildings and sites where there have been previous archaeological observations, recording or excavation, can provide the opportunity to assess the burial conditions and the effectiveness of the methodology which has preserved the archaeological remains. When a site has previously been archaeologically recorded (and therefore has an accessible archive) specific records should be made to compare the original and current findings and this objective should be incorporated in to the project design. There will also be sites where modern interventions such as piling, service trenches or pile probing have affected archaeological remains.

The following guidance is an outline of circumstances that may exist at different sites. Appropriate methods of recording and analysis should be included in a written scheme of investigation, and the results incorporated in the post-excavation report and publication. This guidance will be reviewed and developed as and when knowledge increases.

Sites which have not been fully excavated and where remains are buried.

Record the type, mass, and loading capacity of backfill materials used.

 Interpret the methodology used in reburial material, conditions, date of backfill, characteristics. Record the Ordnance Datum level of the water table. Measure water and soil chemistry.

Sites which have been affected by non- archaeological intrusions such as piling, pile probing, service trenches and test pits.

- Record (where possible) the date and type of foundations, the extent of destruction or disturbance. Have the foundations been designed to respond to local ground conditions?
- Record the physical condition of the archaeological remains. What impact have modern interventions had on their survival? For example, have the deposits slumped or apparently been deformed by modern interventions?
- Record soil and water chemistry of all archaeological strata to measure the impact of the physical environment through time. Compare remains which are in direct contact with modern intrusions with those removed from direct contact.

Sites where remains have been reburied and sites where intrusions such as piling, pile probing, service trenches, and test pits have been carried out.

- Record relative conditions of environmental evidence.
- Record relative conditions of organic remains, particularly timber.
- Record relative conditions of artefacts.
- Record evidence of chemical migration between ancient and modern deposits.
- Record post-depositional changes in ancient and modern deposits. Interpret evidence for indication of changes in hydrology through time.

Sites where remains are to be preserved in-situ

- A full post excavation record (including plans and photographs) should be made of the site at the end of the programme of archaeological work. This should include comments on the survival of 'modern' material, with a statement of the rationale behind the decision to preserve in-situ.
- An inert material should be introduced to protect the archaeological remains and act as a physical marker between the archaeological remains and the reburial material. 'Terram' may not be the most appropriate material, as in some cases this can act as a conduit for microbiological and other activity. Iron-free sand should be used as a 'buffer' material, except against very fragile materials such as plaster or mud brick.
- The loading capacity of the burial material should replicate the previous burial conditions so that excessive loading does not introduce new pressures and to minimise further impact on the archaeological remains that are to be preserved in-situ. Ideally, material which has been generated as part of the controlled excavation should be reintroduced into the areas from which it originated, or, if appropriate, material of less loading capacity.
- It is important that water movement across the site and the same water table are maintained. Where wet organic materials are to be preserved in-situ, they should be covered, kept wet, and reburied as soon as possible in order to ensure that the burial conditions are maintained.
- Where possible and appropriate hydrology monitoring points should be introduced which can be assessed at suitable intervals. This is to be agreed with the LPA Historic Environment Team.

Human Remains

Finds of human remains should be left *in-situ*, covered and protected. If removal is essential it can only take place under Faculty jurisdiction, Ministry of Justice licence, Environmental Health regulations, and if appropriate, in compliance with the Disused Burial Grounds (Amendment) Act 1981, or other local Act. It will be necessary to ensure that adequate screening and security is provided in such cases.

A strategy for the removal, assessment, analysis and reburial/retention of human remains must be agreed with the LPA Historic Environment Team and included in the WSI. Where human remains are suspected to survive the relevant permissions should be obtained before works commence.

Unexpected human remains encountered during excavations can be removed only once the relevant permissions have been received and the LPA Historic Environment Team notified. Copies of the permissions should be submitted to the LPA Historic Environment Team.

Treasure Act 1996

In accordance with the Treasure Act 1996, all finds of gold and silver and hoards of 10+ base metal coins must be recorded, removed to a safe place and reported to the local Coroner or the Finds Liaison Officer. Security measures must be taken to protect the finds from theft where removal cannot take place on the day of discovery.

Recording of standing structures

Where Listed Building Consent is required, it must be obtained before work commences on site. The LPA Historic Environment Team will advise on the need for consent. Exploratory opening up may be required as part of a Listed Building Consent and appropriate conditions may be imposed to ensure proper recording.

Assessment and understanding of any historic building, site or area should be the first stage in making decisions about future use, alteration or repair. This may involve different techniques such as historical assessment, detailed drawings or research, selective opening up works (listed building consent should always be sought and works kept to a minimum), non-destructive investigation, and observations to a pre-agreed method statement. Recording (for example, by photogrammetry or stone- by-stone elevation drawings), will be necessary to demonstrate or amplify conclusions about the quality and importance of structures.

The assessment should also consider context and setting along with any ancillary buildings, external spaces and buried components relating to the building. Fixtures and fittings, such as machinery on industrial sites, may also be significant and should be noted where relevant.

Recording methodology should be derived from Understanding Historic Buildings: a guide to good recording practice (Historic England, 2016) and agreed with the LPA Historic Environment Team.

Survey and geotechnical investigations

Topographical survey may be an appropriate method of recording sites or earthworks as part of, or prior to, preparing a scheme of archaeological fieldwork or repair to a monument. The survey may be carried out by digital or traditional methods, and the format of the interpretative drawings generated from the survey should be agreed with the LPA Historic Environment Team before commencement of site work.

Geophysical techniques (may be appropriate both as part of the evaluation process and to supplement evidence from other areas of the site. Methodologies, equipment and objectives of each type of survey should be clearly set out in the written scheme of investigation submitted to the LPA Historic Environment Team for approval. The methodology, equipment and objectives of metal detecting, either as part of initial evaluation or coincident with other investigations, should also be set out as part of the written scheme of investigation.

Archaeological monitoring and recording of geotechnical test pits and boreholes should be planned together as a method of rapidly assessing the potential of archaeological deposits and modern disturbance. It may be followed by archaeological test pits or boreholes in specific areas. It may not be possible to clean and record the archaeological profile of geotechnical test pits, due to health and safety or access constraints. Every effort should be made to establish the presence or absence of archaeological deposits by establishing the absolute ordnance datum (AOD) for the height of significant deposits, including the depth of modern intrusions, key stratigraphic components and natural deposits. Borehole data can be examined by an archaeologist for evaluation purposes. The collection of dating evidence in the form of material culture and ecofactual remains should be maximised at this stage to inform the design of an appropriate mitigation strategy.

Where work on the sub-tidal or inter-tidal zone of the Thames foreshore is proposed, information stored on the GLSMR and results of the Thames Archaeology Survey should be consulted. Where development proposals may affect the foreshore, a detailed survey should be carried out in advance of designing appropriate mitigation strategies. Written schemes of investigation for archaeological work should take into account the constraints of the working conditions, Health and Safety requirements and the need to agree access with the Port of London Authority and the Environment Agency.

Geoarchaeological or environmental sampling-terrestrial or riverine- may be the main emphasis of archaeological investigation. Areas of undisturbed deposits (which may be suballuvial, and foreshore deposits) may yield evidence of past environments. Where these areas are affected by a development proposal, justification for environmental sampling should refer to known or predicted human occupation.

Monitoring

The LPA Historic Environment Team may monitor works at any stage and, to facilitate this, the WSI should include monitoring points and written progress reports at agreed intervals in the timetable for on-site and offsite work.

The purpose of monitoring is to ensure compliance with the WSI and to enable appropriate interpretation or variation, for example in response to new discoveries or operational issues. The LPA Historic Environment Team will seek mutually agreeable solutions. Any concerns will be raised with site staff and the project manager and it is expected that the vast majority of concerns will be resolved in this way.

Unexpected discoveries

The purpose of assessment and evaluation is to provide as much information as possible of archaeological remains on a site and to reduce the possibility of unexpected discoveries. If unforeseen archaeological remains are discovered, which will impact upon the agreed WSI and there are timetable or resource issues or the remains are potentially of national importance, a site meeting will be called immediately with the client, the LPA Historic Environment Team and, if appropriate, the Historic England Inspector of Ancient Monuments. A strategy for preservation in-situ or excavation will be discussed, followed by negotiations with funding agencies to fulfil the agreed strategy.

Public accessibility

Public access is a key component of all results of archaeological investigation, in line with policy in the City of London Local Plan 2015 and current standards and guidance. Every effort should be made to bring the circumstances, results and analysis of archaeological work to the general public and such proposals will be considered favourably. Site hoarding displays, site access in the form of open days, viewing platforms where possible, publicity at local and national media level, and accessible illustrated digests and displays of the results of archaeological investigations will be considered positively.

Recording systems

Written Records

A unique number site code should be agreed with the Museum of London Archaeological Archive before fieldwork commences. This site code will be used in all project reporting, recording and archiving.

The recording systems adopted during the investigations must be fully compatible with those published by the Museum of London Archaeology Service (MoLAS 1994) and Museum of London. These have been used extensively across London for many years. No alternative recording system may be adopted without the prior agreement of the LPA Historic Environment Team. The site archive will be organised to be compatible with other archaeological archives in London. Individual descriptions of all archaeological strata and features excavated or exposed will be entered onto prepared pro-forma recording sheets which include the same fields of entry on the recording sheets of the Museum of London Archaeology Service. Sample recording sheets, sample registers, finds recording sheets, registered finds catalogues, and photographic record cards will also follow the Museum of London equivalents. This requirement for archival compatibility includes computerised databases.

Projects which make use of GIS based data systems, or other means of collecting and storing digital data will need to liaise with the Museum of London prior to the commencement of work, in order to ensure compliance and compatibility. The English Heritage document MoRPHE Technical Guide 1: Digital Archiving and Digital Dissemination (2006) should also be consulted.

The Museum of London deposition guidelines should be reviewed prior to the commencement of works to ensure that the archive is acceptable and compatible with others produced in Greater London. Provision should be made for archiving costs.

Drawn and graphic records

Plans prepared should include the following: a site location plan, based on the current Ordnance Survey (O.S.) 1:1250 map (reproduced with the permission of the Controller of HMSO) and indicating north; a trench plan at 1:100, of the location of areas investigated in relation to the investigation area and National Grid Reference. All sections should be located on a plan with O.S. co-ordinates.

The locations of the O.S. bench marks used and site TBM should be indicated. Tying site grids to standing buildings identified on O.S. maps is not sufficiently accurate. This data can be accepted in digital form onto the English Heritage GLSMR with the completed Sites and Monuments Report Form. A record of the full extent in plan of all archaeological deposits revealed in the investigation should be made: plans should be on polyester based drawing film, related to the National Grid, and be at a scale of 1:10 or 1:20 unless otherwise agreed with the LPA Historic Environment Team. 'Single context planning' should be used. The information should be digitised for eventual CAD applications. The GLSMR will accept .DXF or

.DWG format of the extent of the site and location of major features with the completed Sites and Monuments Report Form.

Upon completion of each evaluation trench, at least one long section should be drawn or a representative part as agreed with LPA Historic Environment Team. This should include a profile of the top of natural deposits, extrapolated from cut features etc. if the trench has not been fully excavated. Sections, including half-sections of individual layers or features, should be drawn as appropriate to 1:10 or 1:20.

The OD height of all principal strata and features should be calculated and indicated on the appropriate plans and sections. A 'Harris matrix' stratification diagram should be employed to record stratigraphic relationships. This record should be compiled and fully checked during the course of the excavations (Harris 1993). Spot dating should be incorporated onto this diagram during the course of excavations.

Recording of standing structures will vary in accordance with the intrinsic interest of the structure and its relationship to below-ground archaeology. Detailed stone by stone drawings of important features revealed in investigations may be required. Structures of little or no significance may appear on a site plan. The recommendations of *The International Council* for Monuments and Sites [ICOMOS 1990] should be followed. The intended level of survey and analysis must be stated in the specification or project design.

Photographic Record

A full photographic record of the investigations should be prepared to a specified photographic policy included in the written scheme of investigation submitted to the LPA Historic Environment Team for approval. This should include an images register, black and white prints and colour transparencies (on 35mm film or to a standard that matches the quality of a 35mm SLR film camera) and digital images, illustrating in both detail and general context the principal features and finds discovered. The photo- graphic record will also include working shots to illustrate the progress of the archaeological investigation. The transparencies will be mounted in suitable frames for long-term curation in preparation for deposition with the archive. Medium of large format photography and video recording may also be appropriate. Refer to the London Archaeological Archive and Research Centre (LAARC) standards on photography and digital data for guidance as to how to curate, store and submit digital imagery.

Where appropriate, a photogrammetric record should be made of complex structures, features, and horizons liable to be exposed or damaged in the course of the investigation, such as buildings or parts of buildings. Appropriate scales will be specified in the written scheme of investigation.

The LPA Historic Environment Team will occasionally request selected copies of photographs in order to raise the profile of the archaeological heritage. Permission will be sought to reproduce any images and copyright duly acknowledged.

Treatment of finds and samples

Different sampling strategies may be employed according to established research targets and the perceived importance of the remains being investigated. A site-specific sampling strategy should be included in the written scheme of investigation submitted to the LPA Historic Environment Team for approval. This should be part of an iterative process of review, analysis and feedback to excavators during the progress of the fieldwork. For example, spot-dating of pottery and the results of sample flotation analysis should be incorporated into the running matrix to aid on-site interpretation. Any changes or development of the sampling strategy should be documented with the rationale and agreement for the change. Sampling for date, structure, and environment are particularly

important. Sample size should take into account the frequency with which specific material is likely to occur, and the preservation conditions. Bulk sieving should be employed for recovery of environmental evidence to ensure that complete samples are collected and assessed for significant deposits. The Museum of London Specialist Services maintains a regional service for post-excavation which can be commissioned to undertake appropriate levels of work.

Scientific dating and analysis

The strategy for sampling archaeological and environmental deposits and structures may include soils, timbers, pollen, diatoms, animal bone, and human bone. A high priority will be given to the sampling of alluvial and other anoxic deposits (such as peat) where organic materials may be preserved. The sampling strategy will be developed in consultation with the LPA Historic Environment Team who may also seek advice from the Historic England Regional Science Advisor. Subsequent on-site work and analysis of the samples and remains should be undertaken by the contractor's environmental archaeologists.

Investigators should be aware that some dating techniques require specific work whilst in the field that cannot be conducted once the site has been completed. Sampled deposits should be subject to appropriate specialist analysis. The written scheme of investigation should indicate the likely need and methodologies for such analysis. Advice on the suitability of sampling techniques, how to retrieve and store samples, sample selection, mathematical modelling of results and laboratories for specialist analysis should be sought early in the project. Strategies should consider the site-wide research questions, the potential significance of the deposits under investigation, and sampling targets, although in some instances the environmental investigation of a site will be the principal aim of a project.

The sampling strategy should state the type of features to be targeted, along with the material to be recovered and the recovery technique to be employed. Targets for sampling can include a wide range of archaeological and environmental deposits and remains, including soils and sediments, timber structures, pollen, charred plant remains, insects, diatoms, animal bone, and human bone. A high priority will be given to sampling anoxic deposits where organic materials may be well preserved.

Where appropriate, timbers should be subject to dendrochronological analysis and radiocarbon dating. Optically Stimulated Luminescence (OSL) and archaeomagnetic dating should also be used where appropriate.

As far as possible, the assessment of sampled deposits should form part of an iterative process, providing feedback to excavators during the progress of the fieldwork (e.g. spotdating of select deposits or the results obtained from flots).

Suitable deposits and structures for scientific dating should be considered, for instance using dendrochronology, radiocarbon, archaeomagnetic or luminescence dating techniques; in some instances this will be a requirement. Investigators should be aware that some dating techniques require specific work whilst in the field that cannot be conducted once the site has been completed.

Finds treatment

In the City the finds retrieval policies of the Museum of London should be adopted. All identified finds and artefacts should be retained according to the method statement, and selection, retention, and retrieval policy appropriate to the material type and date. No finds will be discarded without the prior approval of the LPA Historic Environment Team.

All finds and samples should be treated in a proper manner and to standards agreed in advance with the approved recipient museum. They should be exposed, lifted, processed, cleaned, conserved, marked, bagged and boxed in accordance with the current standards and guidelines. All metal objects should be x-rayed and selected for conservation (except in those cases where it is agreed with the LPA Historic Environment Team that this will not be necessary).

On-site conservation, where required, will be the responsibility of the archaeological contractor.

Ceramic (pottery, clay tobacco, building material fabric and brick form) reference collections, housed at the Museum of London Archaeological Resource Centre, should be consulted for descriptive and analytical purposes to ensure that terminology is consistent across the region. The Museum of London Archaeology pottery codes must be used in all specialist reports in order to ensure that terminology is consistent across the region.

The British Museum and other local Museums may also hold important comparative collections of material and these should be consulted as appropriate.

The archaeological organisation responsible for the works should ensure that contracts are in place with internal and external specialists to cover all necessary processing, conservation, and specialist analysis through the assessment and analysis stages of the project.

Access and safety

Access to the site should be granted to the LPA Historic Environment Team in order to monitor the work and to ensure that it is being conducted to proper professional standards and in accordance with the consents. This will be done through site inspections and regular progress reports.

All relevant health and safety legislation, CDM (Construction Design and Management), COSHH (Control of Substances Hazardous to Health regulations and codes of practice should be respected. It is the responsibility of the organisation undertaking the work to ensure that their Health and Safety Policy is up-to-date with current legislation (SCAUM 1997). Risk assessments should be drawn up for all activities, including making arrangements for the site to be monitored as necessary. This requirement is a non-archaeological constraint on archaeological investigation as health and safety factors will take precedence over archaeological concerns.

There is a duty of care for the applicant to provide all reasonable information on contamination and the location of live services before site works commence, in order that work can be carried out efficiently to enable the archaeological organisation to provide an accurate specification.

Where there is reason to believe that the ground, or adjacent buildings, may be contaminated or unsafe the applicant must have made arrangements for pollution sampling and testing before archaeological work on sites can take place, with guidance from the relevant Dept of the Environmental Services team.

If contamination is discovered, a strategy for the sampling and recording of archaeological deposits and structures needs to be designed in agreement with Environmental Services and the LPA Historic Environment Team.

Evaluation test pits, trenches or other excavated areas should be reinstated to a methodology agreed with the LPA Historic Environment Team before work commences. If, for any reason, it is proposed to discontinue work during the progress of the archaeological

investigations, suitable arrangements must be made to protect and support exposed areas of archaeology until long-term arrangements can be made.



Post-excavation programme and performance indicators

The LPA Historic Environment Team may monitor works at any stage. To facilitate this stage, monitoring points should be agreed before post-excavation work starts, as part of the overall timetable.

Reporting follows on from an agreed investigation or study, where the results are interpreted and presented. This includes any assessment or analytical work undertaken, dissemination of the results, deposition of the archive into the recipient depository and providing information to the Greater London Historic Environment Record.

The reporting of the results of archaeological investigations is crucial in furthering understanding of the historic environment. In order to share knowledge and increase understanding with the widest possible audience, all reports will be lodged with the Greater London Historic Environment Record so that public access is assured.

Most reports are prepared and submitted in support of applications for planning consent, or as a requirement of a planning condition.

It is expected that the organisations that undertook the field investigations will continue to see projects through to the final stages of reporting, dissemination and publication so that continuity of a project and its archive is maintained.

Reports, Archives and Arrangements for archive deposition

Arrangements for the curation of the archive, including the transfer of title or deposit agreement, should be agreed with the appropriate recipient museum prior to starting fieldwork.

The finds and records from London excavations provide an immensely valuable public resource. The owners of finds and records should be urged to donate these to the appropriate Museum as a matter of best practice in the public interest: In most cases this will be the Museum of London. Arrangements for the curation of the archive should be agreed prior to starting fieldwork. Where the archive is to be deposited with the Museum of London, this should be set out in the Deed of Transfer or Deposit Agreement which should be included in the written scheme of investigation submitted to the LPA Historic Environment Team. An Archive Deposition Form should be obtained and returned to the Museum of London Archaeological Archive and Research Centre before work commences.

Archives will be deposited in accordance with an agreed timeframe, usually 12 months following the completion of works.

Reasonable access to finds and records from archaeological investigations will be given, at the request of the LPA Historic Environment Team, to nominated individuals or archaeological organisations before they have been formally deposited if it is considered that the information therein is imperative to other research.

Integrity of archaeological archives

The integrity of the site archive should be maintained. All finds and records should be properly curated by a single organisation, and be available for public consultation in accordance with Standards in the Museum Care of Archaeological Collections' MGC 1992, Towards an Accessible Archaeological Archive: The Transfer of Archaeological Archives to Museums: Guidelines for Use in England, Northern Ireland, Scotland and Wales SMA 1995. For deposition with the Museum of London the General Standards for the Preparation of Archaeological Archives deposited with the Museum of London should be followed.

The archives for evaluation, watching brief and excavation work should be fully integrated even when the works have been carried out by different archaeological organisations. This should be taken into account in the written scheme of investigation.

Temporary storage

The archaeological organisation will be expected to have the resources required for the secure temporary storage of collections prior to transfer to the appropriate recipient museum. This will normally be during the period of post-excavation analysis and publication. This storage must be secure and appropriate to the material contained within the site's archive.

Contents of archive

The minimum acceptable standard for the site archive is defined in the MoRPHE Project Planning Note 3 and General Standards for the Preparation of Archaeological Archives Deposited within the Museum of London.

It should include all materials recovered (or the comprehensive record of such materials - see below) and all written, drawn, and photographic records including a copy of all reports (desk-based, evaluation, survey work, or other), relating directly to the investigations undertaken. It should be quantified, ordered, indexed, and internally consistent before transfer to the recipient Museum. It should contain a site matrix, a site summary, artefact and environmental assessment, and analysis reports.

Copyright should be clearly identified at the time of transfer. Appropriate guidance set out by the Museums and Galleries Commission, the Society of Museum Archaeologists, and appropriate recipient museums should be followed in all circumstances.

Security copying

The recipient Museum's guidance on the needs of digital storage and archival compatibility will be sought and followed.

Access to archives

Pursuant to these agreements the site archive will be presented to the archive officer or appropriate curator of the recipient Museum for accession within 12 months of the completion of fieldwork (unless alternative arrangements have been agreed in writing with the LPA Historic Environment Team). Access to finds and records from archaeological investigations should be given, at the request of the LPA Historic Environment Team, to designated archaeological organisations at any time, before they have been accessioned by the appropriate recipient museum, if this is considered necessary to enhance the understanding or interpretation of the archaeology of the City. Access to all records and other material, (written, illustrative and digital) should be given where evaluation work has been undertaken by a different organisation and any associated costs should be incorporated into the written scheme of investigation.

Archive not donated to museum

If the archive is not to be donated to an appropriate Museum, arrangements must be made for a comprehensive record of all materials (including detailed drawings, photographs, and descriptions of individual finds) to be deposited at an appropriate Museum, in lieu of the archive.

Publication and dissemination of results

A short summary of the results of the work, even if negative and GLSMR report form, must be bound into a report for submission to the LPA Historic Environment Team as soon as possible after the completion of archaeological works. The site summary should be a non-technical summary in plain English, which will enable the LPA Historic Environment Team to inform local societies and others about the results of the archaeological investigations or survey. The appropriate archaeological report forms should be used and guidance followed for delivery of digital data.

The minimum requirements for public dissemination is the submission of the GLSMR report form to be submitted to the City as soon as possible, or within six months of the completion of fieldwork; and a paragraph summary of the results for publication in the London Archaeologist 'Excavation Round-Up'. Such publication will meet the 'minimum requirements' set out in Appendix 7 of MAP2 1991, and derive from a 'phase 2 review' as defined in that document. Where appropriate, reports should be formatted so that details of the proposed development impact can be separated from the archaeological information and enable archaeological information to be made available to the GLSMR within 6 months of the completion of fieldwork.

Copies of all reports should be sent to Guildhall Library.

Where the above mentioned 'Phase 2 Review' indicates the need for further assessment and analysis, the recommendations set out in the Management of Archaeological Projects 1991 should be followed. At the completion of the assessment and updated research design stage, and on completion of the publication text, the LPA Historic Environment Team will advise on whether the archaeological conditions of the planning permission will be met, or whether approval of appropriate key stages, target dates and overall timetable for completion of the project to publication stage, is required. This may depend on the size and complexity of the project.

The proposed publication and dissemination of results should be agreed with the LPA Historic Environment Team. Contingency arrangements (such as an agreed percentage of the field costs) to provide for this element of the work, should be made before field-work commences, and include the costs of page tariffs for certain journals. Site works should not commence until the LPA Historic Environment Team has expressed itself satisfied that suitable arrangements have been made.

Post Excavation & Updated Project Design Reports

Reports

Certain types of projects, most commonly archaeological excavations but increasingly archaeological building recording work, require a formal review phase, where results are assessed according to their significance and potential to further understanding of the historic environment. As part of this assessment phase, the work needed to complete any further study or analysis is identified.

Reports are prepared for submission in support of planning applications, to inform the decision making process, as part of the reporting process following archaeological investigation and to satisfy conditions of a planning permission.

All archaeological reports submitted with a planning application or submitted pursuant to a condition of a planning permission, will be public documents. Archaeological reports are

also sent to the Greater London Sites and Monuments Record for inclusion in the regional database and library. Reports are also available in Guildhall Library.

Reports should follow a similar format for ease of access as set out below. Where post-excavation assessment and analysis stages are necessary, E.H. Management of Archaeological Projects 2 (MAP2) guidance should always be followed.

The primary addition to the Post-excavation report is the inclusion of an Updated Project Design, which puts forward proposals for analytical work necessary to bring the site to publication. This will include details of tasks, resources, personnel and programming. The updated Project Design should also contain a synopsis of the publication proposals for the site. The Updated Project Design should cover all components of a project, including any field evaluation. This is particularly important for large projects undertaken in several phases of work or those inherited from other organisations, so that all elements of the site are included when considering proposals for analysis and publication.

Update the OASIS form when the post-excavation assessment is complete

Any archaeological conditions attached to a planning consent will not be recommended as satisfied until the details of the Updated Project Design have been agreed and a timetable produced which includes a date for archive deposition. Written assurance will also be sought that an appropriate level of resourcing is available to complete the tasks leading to publication.

The report should be submitted within an agreed timeframe, usually within 12 months of completion of fieldwork.

Research and Analysis Programme Monitoring

The LPA Historic Environment Team may monitor analysis and research work at any point. It is recommended that monitoring points are tied into the work programme at appropriate stages within an agreed overall timetable.

The format for publication should follow the requirements of the individual journal or publishing house (see Archaeology Publication).

Suggested format of archaeological reports

Frontispiece

- Site name
- City of London
- GLSMR Number (if applicable)/ Planning Application number /Site Code Ordnance Survey national grid reference

Title of report e.g. Archaeological Assessment Report/Impact Assessment Report Evaluation Report

- Archaeological Evaluation of Geotechnical Investigations Excavation Report
- Archaeological Watching Brief Report
- Organisation Author
- Date of report
- 1. Index
- 2. Summary non-technical
- 3. Introduction

- 4. Planning background
- 5. Previous work relevant to archaeology of the site, relevant historical and archaeological background
- 6. Geology and topography of site
- 7. Research aims and objectives
- 8. Methodology of site-based and off-site work
 - Details of stratigraphic sequence
 - Specialist reports in full, including any recommendations for further work
 - Plans, sections and photographs as appropriate
 - Harris Matrix where appropriate
- 9. Results/observations quantitative analysis
- 10. Potential of archaeology/observations to answer research objectives
- 11. Conclusions and recommendations for an appropriate mitigation strategy
- 12. Publication and dissemination proposals, if relevant at this stage
- 13. Archive deposition including date of deposition and Transfer of Title details, if applicable
- 14. Conclusions
- 15. Bibliography
- 16. Acknowledgements
- 17. GLHER/OASIS form

Submit one digital PDF/A file of the report and GIS data to the LPA Historic Environment Team within the timeframe agreed in the Written Scheme of Investigation, usually 6 weeks of completing fieldwork. The LPA Historic Environment Team will pass a copy of the report to the GLHER.

If a report is required in response to a planning condition, the archaeological consultant of the contractor is responsible for submitting copies to the LPA Historic Environment Team.

A copy of the report should also be deposited with the appropriate Local Studies Library and to any relevant Local Archaeological or Historical Society.

Archaeological Publication

Introduction

A report must always be written to record and disseminate the information gained as a result of archaeological investigations, even if the results are negative. The scale of publication will depend on the survival and type of archaeology recorded. There is a minimum level of publication for all investigations.

This consists of submitting a GLSMR report form to the GLSMR and a paragraph summary for the London Archaeologist 'Excavation round-up'. These should be provided within 6 months of completion of site work and revised at post-excavation assessment and final publication stages if necessary. An interim report should also be written as this helps to disseminate results promptly to those involved with the development, as well as for local societies, local and regional journals. Where significant discoveries are made, notes should also be sent to national journals.

Publication proposals should be discussed with the LPA Historic Environment Team, initially at post- excavation assessment stage when the significance of the archaeology can be determined.

It is the responsibility of the archaeological contractor to negotiate with the editors of the journals or publishing houses for acceptance of publication texts and to arrange for the appropriate publication grant to be provided.

Purpose

The report of archaeological investigations should sum up what is already known at this stage and what further work will be required to present the results of recording and analysis. For larger projects, it is a commitment and an opportunity to state what level of work can be achieved within a given timetable. Approval and agreement of the programme may therefore lead to the fulfilling of a condition of a planning consent, upon completion of all subsequent work leading to publication and archiving.

Format

The principle of the post-excavation assessment and updated project design is established by Historic England in MAP 2. This stage of archaeological work should be seen as transitional and as a gateway to the substantive analysis and publication of the results. It should be a short executive summary, and be backed up by tables and appendices where appropriate. It should concentrate on research objectives which can be achieved through realising the potential of the integrated results and result in a targeted and resourced publication and dissemination proposal. Where new or additional analytical techniques are relevant, these should be put forward with a brief justification. It is not appropriate to include unsynthesised data.

Title page

- Address
- site codes
- Registered plan number
- author
- date
- 1. Executive summary

Plain English description of the major findings of the investigation and how these and further work can answer the research questions

2. Contents List of subtitles and page numbers

3. Introduction Background to project including planning history

4. Archaeological background

Summary of local and national context and known

comparisons

N.B. site codes and other codes should also have full text

references

The original research aims by period and theme at the onset of 5. Research aims

fieldwork

Brief statement of main results of excavation, and current 6. Results of fieldwork

understanding

7. Quantification Stratigraphic, Finds, Environmental, Dating, Other results of

assessment

8. Statement Assessment of how the different and combined categories of of potential

evidence integrate to answer the research questions (Include

new areas of research suggested by the evidence)

9. Significance Using national and regional evaluation criteria headings, an of data

assessment of the significance of the evidence with reference

to published academic works

10. Analysis & Further analysis required, how and who will do it, reporting

methodologies for different analysis (including historical

resources and programme chart with time and personnel, and

refereeing arrangements

11. Acknowledgements

12. Bibliography

proposals

Historic Environment Record

The results of all archaeological work will be made available to historic environment colleagues and the general public through inclusion in the Greater London Historic Environment Record.

Provide all digital copies of reports as PDF/A documents, which makes them suitable for longterm archiving. PDF/A comprises two levels: PDF/A-1a (fully compliant with the ISO standard 19005-1) or PDF/A-1b (minimal compliance). Either level of PDF/A is acceptable for deposition with the GLHER. PDF/A files can be created by a number of commercially available software packages. Further information can be found on the website for the PDF/A Competence centre - http://www.pdfa.org.

It is expected that the GLHER will be provided with Geographic Information System (GIS) or Computer Aided Design (CAD) files for the project showing:

- Site outline, and
- Trench/test-pit location(s)

Files can be submitted in .dwg, .dxf, or .shp formats. Please ensure that the file contains, or indicates:

- The Site Code.
- Scale, and

- Accuracy of recording
 - o 1: Outline derived largely from a gigial source, i.e CAD or GIS image,
 - o 2: Outline digitised from a hard copy or screen images, or
 - 3: Site address/estimated extent for sites where no or poor mapping survives or where only a site address is available (e.g. non-archaeological excavations to lay sewers in the mid-19th century by the Corporation of London, but which identified archaeological remains).

Complete an OASIS form (Online Access to the Index of Archaeological Investigations - http://ads.ahds.ac.uk/project/oasis/) at the end of the relevant stages of reporting. A copy of completed OASIS forms should be appended to the back of each report submitted.

Update the online OASIS form with publication dates and details once these have been finalised. A copy of this updated OASIS form should also be sent to the GLHER so that bibliographic details are noted.

Ensure that site summaries are submitted to the annual 'round-up' of the London Archaeologist and any appropriate county and period based national journals.

Agree the level and outlet for publication and dissemination of significance results with the LPA Historic Environment Team. The scale of publication will be based on the significance and interest of the findings.

The City Corporation welcomes alternative ideas for the dissemination of archaeological investigation results, and would encourage practitioners and consultants to explore additional means of engagement, such as web-based publications, social media, displays and lectures.

Public Archaeology

Consideration should be given to publicising the results of the project through a range of outlets, from conventional archaeological publications to, for example, site viewing platforms, interpretation panels and lectures, open days and school visits, radio and television programmes, videos and popular publications.

Learning is central to sustaining the historic environment. It raises people's awareness and understanding of their heritage, including the varied ways in which its values are perceived by different generations and communities. It encourages informed and active participation in caring for the historic environment (Historic England 'Conservation Principles', 2008).

The vision is that commercial investigation and explanation of the historic environment should be commissioned and conducted in a way that makes opportunities for the appropriate scale and form of public participation in professionally led projects the norm not the exception (Realising the benefits of planning-led investigation in the historic environment: a framework for delivery', a report by the Southport Group, July 2011).

Introduction

The popularity of archaeology, and the value placed upon it by individuals and communities is irrefutable. Archaeology and History have a significant role to play in building a sense of place amongst established and new communities. Understanding can develop a sense of pride, which in turn leads to a place being more greatly valued and appreciated.

Whilst the appropriate level of publication of archaeological work is a development context must be the result of any investigation, there is much to be gained through the immediate communication of fieldwork and its results to the local community. The immediacy of archaeological excavation or other forms of field investigation has a particular fascination, but discoveries made during the post-excavation and analysis can also be interesting, as well as the final conclusions and interpretation of a project.

The City of London Local Plan includes within policies for the dissemination of the results of archaeological work. It is therefore reasonable to secure public involvement in the archaeological process, where appropriate, within the WSI.

It is recognised that every project is different, and as such imaginative proposals from both the developer and archaeological professionals that involve local communities and innovative, creative means of disseminating results are welcomed. Engaging the public should not be seen as an onerous obligation, but as a means of education, promotion and publicity that is beneficial to both the archaeological professional and the developer.

There already exist a number of heritage outreach days and events in London that may provide a platform on which to base your own outreach activities, such as the Festival of British Archaeology (sponsored by the Council for British Archaeology), London Open House weekend, Heritage Open Days.

Project preparation

Prior research, such as that carried out in a desk-based assessment, may assist in identifying important features of a site that will be of particular interest within the project. Collating a good sequence of early maps and pictorial views as well as background history and earlier discoveries may inform the interpretation and display of the site, as well as the broader presentation and marketing of the development scheme.

If outreach projects are proposed, it is suggested that end users and stakeholders are consulted early in the development process. Working with the identified target groups in the planning stages will result in a more successful project, and will help ensure that whatever is being developed has a real and lasting relevance to the local people and their experiences. Developers and site contractors will also need to be engaged in this process, so that site needs and constraints can be accommodated.

It is strongly encouraged that communicating to new and diverse groups be made a priority, so that new audiences can be reached and developed.

Whatever form of public dissemination or engagement is envisaged, it is crucial to secure resourcing and programming, prior to the commencement of site works.

On-site viewing

One of the easiest and most cost effective means of engaging the public, particularly on urban or sub-urban sites, is to allow people the opportunity to observe excavation areas through open days or invitation only events. This should be accompanied by an explanation of the work being undertaken, which can then be updated to show the evolution of the project and significant finds. Links to project websites and use of social media, are strongly encouraged.

Means of on-site viewing could include:

- Viewing platforms
- Viewing windows in fences
- Interpretation cabins
- Artefactual and environmental displays
- Photographic displays
- Explanatory panels
- Explanatory leaflets
- Site lectures
- Site tours
- Open days

Off-site viewing

Not all sites are readily accessible to the general public; nonetheless remote engagement is often achievable. An added advantage of offsite displays and access is that communication can continue after site based work is complete.

Remote access to sites has the added advantage of being able to engage audiences that would not usually be reached, either because of geography or access restrictions to the site itself.

ICT projects

Websites, web cameras, blogs, pod casts, social networking sites and many other forms of digital communication can be easily used to disseminate site information, and may reach new audiences. Dynamic, creative and regularly updated websites are able to maintain public interest throughout the archaeological process and with appropriate links can provide additional publicity for the development scheme.

Temporary displays

There are many potential opportunities for creating temporary displays in local communities. Local libraries, museums, resource centres are a few of the places where small scale displays, exhibiting work in progress or current finds, could be placed. It is often possible to arrange for displays to be created within public space in the completed development.

Temporary displays need not be restricted to artefact display cases, but can also consist of or include photographic exhibitions; interactive computer displays, or leaflets, for example.

Talks and lectures

The City Corporation strongly encourages archaeological practices and others to share their discoveries with local archaeological and history societies. Many of the societies have lecture series that could be capitalised on, and are very keen in having local sites presented to them, which creates a greater sense of ownership into the history of their localities.

Consideration should be given to introducing sites that demonstrate a regional or national significance to a larger audience. The London and Middlesex Archaeological Society (LAMAS), for example, holds annual conferences on both archaeology and local history that welcome speakers.

Permanent displays and urban design

On sites where preservation in situ has been achieved and the remains are on display, interpretive planning, site interpretation and exhibition design will need to be considered. Similarly, where sites have been removed, or remains reburied, the City Corporation encourages the use of graphic panels, mobile downloads or other forms of display to communicate what was once present. Archaeological contractors or consultants are urged to seek advice from specialist heritage interpretation groups if such facilities are not available in-house.

With certain projects, particularly those in which there is a close working relationship between historic environment professionals and designers and architects, there is a greater potential for incorporating elements of the site's history into the concept of the development. Creating open space or utilising landscape design, for example, may mark where archaeological remains lay and public art or motifs may be inspired by archaeological finds. In certain instances, designers may be able to incorporate substantial remains or finds into their schemes.

The media

Media coverage of archaeological findings is encouraged, as this has the potential to reach a large audience quickly and easily, depending on the level of publicity. Whilst recent onsite discoveries are often the most interesting, stories on the results of post-excavation analysis and artefact discoveries can continue to be fed to the media after investigations have been completed. The potential for positive public relations for the developer should not be discounted.

Outreach and education

Working with schools and school groups can be a very rewarding experience, and is strongly encouraged, particularly when there is a nearby school or the archaeological works is taking place on school grounds.

It is crucial to establish working relationships with teachers prior to the development of educational packages, so that they can be engaged in that process. Key to this is identifying

areas within the national curriculum that can be linked to the archaeological work – not just history, but maths, science, art, citizenship and many other subjects can be relevant. Local museums may already have links with school groups or have education officers that can be utilised.

Public archaeology

Providing people with the opportunity to actively engage with archaeological work and discovery is to give them a unique and valued experience. Involvement in the archaeological process can have a significant effect in people developing a sense of ownership with an area, and as a result feeding back into themes of identity. It is also an opportunity for people to develop new skills and abilities.

Some sites may have the potential to use volunteers from local societies or schools during the fieldwork process. This need not be restricted to work once excavation is underway, which is often subject to pressures of time and resource, but could involve the digging of test pits, survey, or building recording in advance of large-scale site works. Care must be taken to ensure that use of volunteers on a site is appropriately managed and does not supplant professional archaeologists.

Hands-on activity does not need to be confined to work on site; for example artefact handling, pot-washing, environmental sorting and archive preparation can all be adapted to use volunteers.

