Short Guide to Archaeology and the Planning Process

May 2004
:: General Guide to Archaeology in the Planning Process ::

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Disclaimer

This document is produced as a personal guide to applicants within the planning process, and to keep it simple I have only given an overview of the process. This should not be seen as a definitive document, as each case of development will be unique. The basic processes, terms and requirements will remain roughly the same though, and this will give you a good idea of what to expect AND what is been asked of you.

This document cannot be used as evidence for any legal procedures within the Archaeological Planning Process – Separate laws cover England, Ireland Scotland and Wales, and for reasons on simplicity I have not dealt with them separately and the views expressed are likewise simplified.

Please see this Guide for what it is; a short, easy to understand document that is there to help you understand what is happening – for further more specific information and advice enquirers should contact their curatorial archaeological adviser, especially as each site is different.

More information is available on the BAJR website (www.bajr.co.uk in the Resources and DeveloperWeb sections)

David Connolly, Director, BAJR
1. Why Archaeology?

The main role of Local Government Archaeology Services is to advise the Planning Department on the protection of archaeological remains within the planning process. This is ruled by planning policy guidance (PPG's) 15, 16 & 18 and, in Scotland, NPPG’s 5 and 18 and PAN 42 and the development plans. There is still a need to improve the protection of archaeological remains from development that falls outside the planning process, including agri-environmental schemes and works by statutory bodies such as Power or Water.

Even smaller permitted developments, especially in towns, can damage archaeological deposits.

When you lodge a planning application it will be appraised by the Local Government Archaeology Service and they will decide whether your proposed development will potentially cause damage to/or may encounter previously unknown archaeological sites or deposits.

The first question is often ...Why? This can be answered by the need for preserving where possible or recording if not, the fragile and finite resource of Heritage in the UK, whether it is a Neolithic Burial Cairn, a ditch that tells the thousand year story of a village, or a Farm building that tells us the history of agriculture over the past 200 years.

We all have a responsibility to the past, to preserve it for the future. Each time we destroy a site, it is a loss that cannot be replaced, as each place, each find is unique and helps to create the full picture of how we arrived at this point in time. It is often seen as a waste of time, as a tax, or just plain daft, however, more and more developers, architects and planners have realised that Heritage is an important part of all our lives and working with local government archaeologists can help to provide both community goodwill, positive publicity and a sense of building the future on the foundations of the past.

Archaeological investigations should never be seen as holding up development if they are carried out in plenty of time prior to development. It can actually inform the process and allow minor changes, for example to services and landscape layout, to be carried out. This then removes the need for further work, which will then mean there may be no need for larger excavation. The key words in heritage management in the 21st century are ‘preservation in situ’, this means that if a way can be found to protect the archaeology without excavation, then that is the preferred scheme.
Scheduled Ancient Monuments (SAM), Listed Buildings (Grade A or I/II and Designed Landscapes will normally be dealt with in consultation with the National Governmental bodies, Historic Scotland, English Heritage, CADW and Environment and Heritage Services (NI) or The Heritage Council (Eire).

The following document will outline the various forms of archaeological conditions that you may find attached to your development sites application. There is also a handy one-page guide at the end of this article, a glossary of terms, and links to other useful sites. Remember that early communication with the Planning authority regarding archaeology, will save time (and money) in the long term – see Council Archaeological Advisors as facilitators, there to help, not hinder your proposed development.

2. Predetermination / Early Discussions

In some cases, the planning archaeologist may feel that are not in possession of enough information to arrive at an informed decision on a planning proposal. In this case they will often require what is called a predetermination, it is also referred to in PAN 42 as early discussions between developers and planning authorities.

Predetermination may include desk-based assessments, intrusive evaluation, geophysics, field survey and other methods of collecting enough information on the site to allow for an informed decision to be made. Predetermination should be seen as pre-application, as the results of the work may or will have a bearing on the final development.

3. Environmental Impact Assessments

Increasingly, with large-scale developments and public works, a full EIA is carried out well in advance of a project. Where EIA is required, the developer must provide an environmental statement setting out the information specified in the Regulations about the site and the likely significant effects of the proposed development on the environment.

EIAs should detail the effects of a proposed development on "material assets and the cultural heritage". This will include the development’s effects on SAMs and their settings, other archaeological sites, the potential for the disturbance of presently unknown archaeological remains, listed buildings, historic gardens and designed landscapes, conservation areas and their settings. Often, an environmental consultancy, will provide in-house archaeologists to carry out the study, or may prefer to utilise a local company to undertake fieldwork.
4. Desk Based Assessments

A DBA often precedes evaluations in the field as a “nested” programme of works, each stage informing the next, and providing the information for a decision on the planning application. It is never the case that a DBA will be asked for as the sole condition, but as the first phase of a sequence.

The planning archaeologist may consider it appropriate to recommend to the local planning authority to begin a phased programme of works with a desk-based assessment. This will consist of thorough research of all existing information without any fieldwork.

The IFA standard (1994a) states: "Archaeological Desk-Based Assessment is defined as an assessment of the known or potential archaeological resource within a specified area or site on land, inter-tidal or underwater. It consists of a collation of existing written and graphic, photographic and electronic information in order to identify the likely character, extent, quality and worth of the known or potential archaeological resource in a local, regional, national or international context as appropriate."

The point of a DBA is to gather information on a site or area to access the potential for archaeological features and the presence, significance and quality of known sites. Available resources that can be utilised include local Sites and Monument Records, Local History Centre archives, Aerial Photographs, Historic Maps, Estate Records and other documents.

This will allow the contractor to produce a list of sites, with a description, potential, approximate date, references, and further recommendations. The DBA helps to prepare an informed strategy for any further work. Further work in most cases leads to targeted evaluation, mitigation or a full programme of works.
5. Field Surveys ::

A Field Survey often takes place prior to large development and may be part of an Environmental Impact Assessment (EIA), there will be no intrusive archaeology involved.

A survey is carried out in a methodical and organised manner, with all features of human activity marked onto a plan of the area, a photograph taken, with a sketch plan where appropriate and a brief description. Sites can be located using GPS, visually sketched on a map or surveyed with an EDM or Total Station. It may also be of use to perform a Fieldwalk in areas of potential, which involves archaeologists collecting surface finds to analyse distribution and predict site locations and types that may lie buried, often these can be targeted on known sites, but are only possible on suitable ground surfaces such as ploughed fields. (Farmers or landowner’s permission will always be required).

The survey is meant to identify and inform the potential for archaeological features, and in no way represents a final investigation. Think of it more as a preparation for the next stage, where the information that is gathered here will allow a more accurate prediction of archaeological potential and thereby cost implications.

A Field survey report should include at least a map of all the recorded sites, a list of their possible function or use, a short description and an assessment of their local or national significance. With this is possible to form a strategy for dealing with these sites.

6. Watching Briefs, Evaluations & Excavations ::

:: WATCHING BRIEF ::
You may be asked for a watching brief, which will take place during the construction phase of new building or the soil-stripping phase of a landscape preparation. This involves the presence of an archaeologist on-site to observe and identify any archaeological remains. The archaeologist would record any less-significant remains found, and is normally given around 2 hours per feature.

NOTE :: Important discoveries may require more extensive excavation which may cause a delay in your development, unless a rolling programme of works is built into your schedule to allow for this possibility.
Watching briefs can be required during the duration of your project during all soil movement or only on an occasional basis. If it is felt that there is little chance of archaeology being discovered on your site this can be a cost effective methodology. But remember that if significant archaeology is uncovered, a further phase of work will be required before planning conditions will be satisfied. It may therefore be more prudent to opt for an evaluation.

:: EVALUATION ::
This is usually an appraisal of the development site, which can cover a sample area from as little as 5% of the site as a whole, though it is usually more. (It all depends on the site, and the site potential)

An evaluation is intended to provide a better understanding of the archaeological implications of proposed works upon development site. Appropriately qualified archaeologists or an Archaeological Unit will carry out the evaluation to establish the presence of archaeology and the extent, depth, period, and quality of preservation. The work may involve original documentary research and limited trial excavation. This form of investigation might indicate that more information is required before a decision can be taken about an appropriate archaeological response to the proposed works. This may lead to a mitigation strategy or further excavation.

The evaluation report might indicate one of the following and allows the county archaeologist to recommend a future course of action:

- No further archaeological measures are necessary
- The need to conserve the archaeological features uncovered requires the proposed development to be revised so as to minimise impact.
- A further more detailed scheme of full archaeological investigation will be necessary prior to, or during, the proposed works.

In exceptional circumstances, the scheme as proposed should not proceed, as it would be detrimental to a previously unknown nationally significant archaeological monument.

:: FULL, RESCUE or RESEARCH EXCAVATION ::
This may only be necessary if no other alternative to preserving the archaeological site can be found and/or a valid research project has been established to investigate a predetermined goal.

The definition of an archaeological excavation is a programme of intrusive fieldwork with defined research objectives which examines, records and interprets
archaeological deposits, features and structures and, as appropriate, retrieves artefacts, ecofacts and other remains within a specified area or site on land or underwater. The records made and artefacts recovered during fieldwork are studied and the results of that study published in detail appropriate to the project design. This means that further study and research of objects, samples and other archaeological artefacts will require further funding to allow the full report to be collated (some help may be available for this from the National Bodies, but this is not common)

**NOTE ::** Rural excavations may have less depth of deposits, but can extend over large areas of the landscape. An Urban excavation may reveal a depth of deposits that can extend down for metres, as be extremely complex to excavate and record.

### 7. Historic Building Survey

:: FIELD SURVEY ::
A Field Survey often takes place prior to large development and may be part of an Environmental Impact Assessment (EIA), there will be no intrusive archaeology involved.

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The survey is meant to identify and inform the potential for archaeological features, and in no way represents a final investigation. Think of it more as a preparation for the next stage, where the information that is gathered here will allow a more accurate prediction of archaeological potential and thereby cost implications.

A Field survey report should include at least a map of all the recorded sites, a list of their possible function or use, a short description and an assessment of their local or national significance. With this is possible to form a strategy for dealing with these sites.

:: HISTORIC BUILDING SURVEY ::
Where it is proposed to demolish or alter a building of either known or potential antiquity OR if the building is list a survey of the structure may be carried out to record the building and to identify any medieval/post-medieval structure, which may be incorporated.

If a building incorporates medieval/post-medieval structure, dating from before 1700 A.D., preservation *in-situ* of such structure will very likely be required.
At present there are 4 levels of recording (though in reality these are only points on a sliding scale that will usually be set on a case by case basis). The Levels are broadly;

LEVEL 1 :: Photographs, sketches and a small note on structure and history.

LEVEL 2 :: Photographs, ground plan phasing, description of each room and exterior, description of development and history.

LEVEL 3 :: Photographs, floor plan phasing, main elevations, descriptions of each room and exterior, detailed description of development and history. Some samples may be taken.

LEVEL 4 :: Photographs, floor plan phasing, all elevations, detailed descriptions of each room and exterior, detailed description of development and history. Examination of building fabric, paint, wallpaper, mortar samples, intrusive investigation. research towards publication of structure.

Offering architect plans and elevations can be of help to HBR contractors, but they are not designed for the same purpose as archaeological records. They normally do not show changes in build, details of building material, window type, repair, blocking etc etc. This is the reason that new plans and elevations will be drawn up. It may be of use to consider using the archaeological plans and elevations as a base for the architect.

The disciple of Historic Building Recording is relatively recent, and it is essential that both the county planning archaeologist and the archaeological contractor brought in to survey the structure are confident in their ability to perform the task to the required standard as set out in the IFA Guidance document.

The IFA standard (1996) states:
"A programme of archaeological building investigation and recording will determine, as far as is reasonably possible, the nature of the archaeological resource associated with a specified building, structure or complex. It will draw on existing records (both archaeological and historical sources) and fieldwork. It will be undertaken using appropriate methods and practices which satisfy the stated aims of the project, and which comply with the Code of conduct..”

A minimum requirement for a report at any level should contain a non-technical summary, aims and objectives, methodology used, general structure description, any documentary and cartographic research, analysis and final conclusions. Dependant on the Level used, the correct level of drawings, photographs, maps etc, references and relevant appendices.
8. Human Burials

In some cases you may disturb human burials, either through required works near churches or the undiscovered remains of prehistoric or medieval peoples. There are clear laws regarding the unearthing of human remains – It is illegal to move or disturb human remains, with serious consequences if it is found that burials have been disturbed and unreported. Because of the possibility that the bones represent a recent murder victim, all discoveries of skeletal remains must be reported to either the Coroner or Procurator Fiscal (in Scotland) – (if in doubt, give your local police station and county archaeologist a call)

Most archaeologists believe that excavation and analysis of human remains can only be undertaken in search of information that has a real value to society, and the skeleton must be treated with innate dignity due to a fellow human at all times.

A survey showed the general public supporting this view and even went as far as to condemn the permanent storage of human remains. The Museum of London has recently suggested that most of the 20,000 burials they hold in curation, should be reburied after completion of study.

Burials will require special care in excavation and removal (it is not acceptable to partially remove a skeleton and leave the rest in the ground). However, once again it is better to leave the burials undisturbed where possible. To quote an epitaph on a Scottish tombstone; ‘My glass has run, Yours is running, Be warned in time, Your hour is coming’ – treat skeletons as you would want to be treated… we will all be there soon enough!

9. Post Excavation

Post excavation is an often-overlooked requirement on most excavations or archaeological investigations and survey. However it can take up as much, or more time, effort and money than the fieldwork.

A good rule of thumb is 1 day in the field = 1.5days in the office or lab.

Without a post-extraction strategy, the whole process of data retrieval in the field would become pointless. Archaeology is essentially a data collection an therefore this information must be collated, studied, recorded, archived and published to be of any use. The pottery must be examined by specialists, soil samples will be subjected to assessment for environmental data, carbonised wood may be sent for
C14 dating and bones will end up being catalogued and studied by osteologists. All the reports must be collated and written up, before a final account is prepared and published. Often a simple report is all that is required, detailing the work carried out in the field and a brief section on the finds, however, some sites might take years to fulfil the project design requirements. The more complex the archaeology and the richer the artefacts and ecofacts recovered, then the post-excavation will be a significant part of the budget. Ensure that an agreement is reached before any work starts that details the level of post excavation expected and your obligations in this phase of works.

Larger sites can be supported by government agencies, but this is usually the exception.

10. Mitigation & Preservation in-situ

Very simply, mitigation is a process by which the impacts of the development on the archaeological resource to best alleviate the negative effects on the archaeological resource. It should be stressed however that mitigation is not appropriate where significant archaeological remains are known to exist within a proposed development. Archaeological contractors will advise the developer, in conjunction with the planning archaeologist, the best way to fulfil the requirements of the condition, with the least damage to the archaeology. If it is not possible to alter site specifications, such as foundation type, service locations or demolition/major alteration of a historic building, then mitigation will involve the production of a project design that can minimise the impact on the archaeological resource. Preservation in situ is always the preferred option. You will be glad to know that the archaeological conditions are not imposed to provide limitless work for archaeologists, but to protect the limited and fragile resource of our shared heritage.

11. Conclusion

When the implications of an archaeological condition are understood and the project dealt with as early as possible in the application procedure there is little that can delay work on a development. Delays can happen if not enough time has been set-aside in the scheme of works to allow archaeological investigation.

Archaeology has a difficult role in having to advise the developer what is either beneath the ground, or behind a wall without actually knowing the answer. It is true however, that archaeologists are capable of predicting the potential of a site to a degree of accuracy by judging the type of site against similar categories, or viewing the landscape for historical topography (humps and bumps!). Sometimes though, there will be the unexpected.. a burial where no burial should be… a prehistoric hut that would never have been seen on the ground or from the air. In these cases, a strategy can be evolved to deal with this unforeseen circumstance, which deals with the remains, by either recording or in-situ preservation.
Most people are very interested in archaeology until they have to pay for it, but you must think of it as a useful part of your development, archaeology can give you more information than boreholes, can provide accurate plans of a building or produce detailed landscape surveys. The public relations boost gained from archaeological excavations during major development is another aspect that should not be overlooked. But most of all you must remember that we are all guardians of our heritage, whether it is an old cinema or a prehistoric standing stone, it is a testimony of who we are.
One Page Guide (or what should happen in an ideal world!)
(Remember that this is a very short guide that only gives the most general idea of the process)

1. In many cases, an appraisal of your application by the Planning Archaeologist has led to conditions being recommended to the Council Planning Department. It can be the result of other conditions however.

2. A document is sent to you setting out the background behind the application, the reasons for the archaeological conditions, and reporting arrangements. It will usually specify a minimum acceptable level of work or in many cases a brief. This document may be used to obtain estimates from archaeological contractors.

3. You will then contact a number of archaeological contractors or units, unapproved lists can be found either on the BAJR website under Who’s Who/Units or from the Planning Department, the Institute of Field Archaeologists Register of Archaeological Organisations or even the Yellow Pages. Provide them with a copy of the planning recommendations so they can produce a tender for you and a written scheme of investigation (WSI) for the planning archaeologist.

4. The Contractor will either send a copy of the WSI directly to the planning archaeologist or you will receive a copy and must forward it yourself, the WSI needs to be approved by the planning archaeologist, to assess that it meets the minimum requirements for this site.

5. No work can begin on the development until the WSI is approved, any work that involves groundbreaking or demolition (depending on the type of works), whether carried out by the developer or archaeologist that takes place prior to approval will constitute a breach of conditions.

6. Phased archaeological work will begin (DBA, Evaluation/Field Survey/Watching Brief etc), and the planning archaeologist may visit to ensure that best practice is being maintained.

7. Once the initial phases of archaeological works (Evaluation) have been completed, the planning archaeologist will either decide to recommend the signing off of the conditions, or will wait until the production of an initial report. Within a phased programme of works, the planning archaeologist will then discuss with the developer and archaeological contractor a suitable strategy if necessary to deal with archaeological features that will be affected by the development.

The preferred option is always preservation in situ – However, in the cases where there is no other alternative, and every avenue of preservation has been explored, then further phases of work will be required – and a mitigation strategy will be developed. This may even lead to full excavation in certain cases.

8. Responsibility for the execution and resourcing of the programme of archaeological work (including any post-excavation work) and for the archiving and appropriate level of publication of the results lies with the applicant with advice given by the planning archaeologist and contractor.

9. If significant archaeological remains are uncovered, the applicant is encouraged to make provision for public accessibility, either through local media involvement, school visits/talk, open days (dependant on site conditions), exhibitions or evening talks. Community involvement should be seen as a positive step in creating both a local sense of history and an important aspect for the development for community well-being.

10. Once the conditions have been met, the archaeological aspect of the planning application will be signed off.
English Heritage
North East Region
Bessie Surtees House
41 - 44 Sandhill
Newcastle upon Tyne
NE1 3JF
Tel: 0191 261 1585

London Region
23 Savile Row
London
W1S 2ET
Tel: 020 7973 3000

North West Region
Canada House
3 Chepstow Street
Manchester
M1 5FW
Tel: 0161 242 1400

East of England Region
Brooklands House
24 Brooklands Avenue
Cambridge
CB2 8BJ
Tel: 01223 582700

Yorkshire Region
37 Tanner Row
York
YO1 6WP
Tel: 01904 601901

South West Region
29 Queen Square
Bristol
BS1 4ND
Tel: 0117 975 0700

East Midlands Region
44 Derngate
Northampton
NN1 1UH
Tel: 01604 735400

South East Region
Eastgate Court
195-205 High Street
Guildford
GU1 3EH
Tel: 01483 252000

West Midlands Region
112 Colmore Row
Birmingham
B3 3AG
Tel: 0121 625 6820
Web: http://www.english-heritage.org.uk/default.asp

Historic Scotland
Historic Scotland
Longmore House
Salisbury Place
Edinburgh
EH9 1SH
Tel: 0131 668 8600
Web http://www.historic-scotland.gov.uk/index.htm

CADW (Wales)
Cadw
Welsh Assembly Government,
Cathays Park,
Cardiff,
CF10 3NQ
Tel: 029 2050 0200
Web: http://www.cadw.wales.gov.uk/

Heritage Council (Eire)
The Heritage Council
Rothe House
Kilkenny
Ireland
Tel: +353 (0)56 777 0777
Web: http://www.heritagecouncil.ie/index.html

Environment & Heritage Service (NI)
Built Heritage
Waterman House,
5-33 Hill Street
Belfast
BT1 2LA
Tel: +353 (0)28 9023 5000
Web: http://www.ehsni.gov.uk/

(IFAs)
Institute of Field Archaeologists
SHES
Whiteknights
University of Reading
PO Box 227
Reading, RG6 6AB
Tel: 0118 931 6446
Web: http://www.archaeologists.net/

Heritage Environment Local Management
HELM
English Heritage
Room 416
23 Savile Row
LONDON
W1S 2ET
Web: http://www.helm.org.uk/

Historic Environment Local Management
(RCAHMS)
RCAHMW
Plas Crug,
Aberystwyth,
Ceredigion,
Wales, UK,
SY23 1NJ.
Tel: 01970 621200
Web: http://www.rcahmw.org.uk/

(RCAHMS)
RCAHMS
John Sinclair House,
16 Bernard Terrace,
Edinburgh,
EH8 9NX
Tel: 0131 662 1456
Web: http://www.rcahms.gov.uk/

(IFAs)
Institute of Field Archaeologists
SHES
Whiteknights
University of Reading
PO Box 227
Reading, RG6 6AB
Tel: 0118 931 6446
Web: http://www.archaeologists.net/

Historic Environment Local Management
HELM
English Heritage
Room 416
23 Savile Row
LONDON
W1S 2ET
Web: http://www.helm.org.uk/

Glossary of common archaeological terms : compiled 28/04/2004

Rough Guide to Archaeology in the Planning Process from www.bajr.co.uk
**absolute dating**: Absolute dating is based upon a specific date range in years that the site or artefact can be dated to. *(see Relative dating)*

**appraisal**: Brief review (often within the planning framework) of the SMR and Historic Maps etc, to decide whether a development application has the potential for archaeology. The appraisal may or may not become a condition.

**archaeology**: The scientific study of past human life and change through analysis of material remains that humans have left behind (from the Greek root *archaeo*, meaning ancient and *logos*, meaning study)

**archaeological monitoring**: Archaeological monitoring involves an archaeologist being present in the course of carrying out development works (which may include conservation works), to identify and protect archaeological deposits, features or objects which may be uncovered or otherwise affected by the works. *(See Watching Brief)*

**aerial photograph (APs)**: Photographs taken from the air and used to identify archaeological sites either by low light for upstanding monuments or by differential crop growth on sites within arable fields.

**artefact**: An object or part of an object which has been used or created by a human and provides physical clues to the activity carried out by humans in the area of discovery (This can range from Pottery, Metalwork, Woodwork, Worked Stones through to mortar samples) *(See Ecofact)*

**assemblage**: A group of artefacts found together in a single context such as a grave or pit.

**BAJR (pronounced ‘Badger’)**: British Archaeological Jobs Resource; an independent web based organisation concerned with employment, development assistance, heritage resources and information.

**brief**: Often created to provide an outline of the requirements that must be addressed together with an indication of the scope of works that will be required. This allows the Contracting Archaeologist or Company to prepare a Written Scheme of Investigation detailing their approach to meeting the Brief Requirements. Can be called Project Outline.

**CADW (pronounced Cadoo)**: The government agency charged with the protection and care of the monuments and heritage resources of Wales

**C14**: Dating technique using the half-life of Carbon 14 from organic or former organic matter such as charcoal or bone.

**CSA**: Council for Scottish Archaeology. A charitable organisation established to preserve and promote archaeology in Scotland.

**CBA**: Council for British Archaeology. A charitable organisation established to preserve and promote archaeology in England and Wales.

**client**: The individual or organisation that has undertaken to fund the programme of archaeological works. Often the Client is the Developer or Applicant seeking planning permission.

**conservation**: The careful protection, preservation, restoration, and management of cultural resources, including artefacts, features, and even whole or partial archaeological sites.
**consultant**: An expert providing objective and independent advice to the applicant/developer on the basis of professional standards. Their work often entails seeking the best solution for their client through negotiation with the planning archaeologist. It is possible for a Contractor to be hired as a Consultant.

**context**: A single unit of excavation, which is often referred to numerically, and can be any feature, layer or single element of a structure. A pit for example would have a context number for the cut and a separate number for each fill within the cut.

**contractor**: A person or organisation commissioned to undertake archaeological research and fieldwork either to a brief or general requirement for archaeological investigation set by a planning archaeologist. The Contractor may be a sole trader or a large Unit with specialist staff.

**county Archaeologist**: An archaeologist employed by a County Council as the curatorial archaeologist responsible for that local government area. The County Archaeologist is responsible for archaeological matter within the County and will maintain the Sites and Monuments Record. (See also Curatorial Archaeologist, Planning Archaeologist and Heritage/Community Archaeologist.)

**cropmark**: An archaeological site no longer visible on the ground due to the removal of upstanding remains (often by ploughing). The sites are recorded from Aerial Photographs by differential crop growth over buried features such as pits, ditches and walls.

**cultural Resource**: Broad definition of a feature, site, structure or other form of heritage element that is deemed to be of value to the country either on a local, regional or national level. As with all resources, this term relates to both the fragile and irreplaceable nature of the resource.

**curatorial Archaeologist**: An archaeologist with responsibility for management of the archaeological resource. The work of such organisations or individual is one of cultural resource management. County Archaeologists, Planning Archaeologists, Sites and Monuments Record staff, English Heritage, Historic Scotland and CADW are all within this role. (See also County Archaeologist, Planning Archaeologist and Heritage/Community Archaeologist.)

**data structure report (DSR)**: The ‘Structure Report’, as defined by Historic Scotland, is designed to be the immediate product of excavation: an intermediate summary to define the questions and funding of post-excavation analysis.

**desk-based assessment (DBA)**: An assessment of both the known and potential archaeological resource within a specified area. A study is carried out on available sources such as SMRs, Map Evidence, Documentary Sources Aerial Photographs. The study will provide a background for a decision to be reached on the potential archaeological resource in a local, regional, national context within the review area.

**development control**: under the Planning Acts, the functions of the planning authority in deciding on planning applications and enforcing compliance with the planning laws.

**ecofact**: Material which can demonstrate the interaction between the environmental of the locality and the human exploitation within the locality, such as pollen samples, grain, nuts, fish etc. (see Artefact).

**English Heritage (EH)**: The government agency charged with the protection and care of the monuments and heritage resources of England

**environmental archaeology**: The study of the interface between the environment of a locality and the human activity within the area, accomplished through the study of soils, plant and animal remains.
excavation: Intrusive fieldwork with a clear purpose, which examines and records archaeological deposits, features and structures and recovers artefacts, ecofacts and other remains within a specified area or site. This will lead to both a further programme of Post Excavation and Publication and perhaps further excavation.

evaluation: A limited programme of non-intrusive and/or intrusive fieldwork, which determines the presence or absence of archaeological features, structures, deposits, artefacts or ecofacts within a specified area. This may take the form of an intrusive investigation of a percentage of the site, geophysical or topographical survey. The results of this investigation will establish the requirements for any further work. (see also Field Survey)

field survey: multi-disciplinary study of the long-term settlement history of a region and its environmental setting; closely related to landscape archaeology.

fieldwalking: A form of evaluation that provides details of surface features visible during a physical search of the site area and is a systematic observation of the ground surface during. The recovery of artefacts that may indicate periods of occupation is also an important part of this evaluation (also termed walkover survey)

geophysical survey: A method of seeing beneath the ground surface using a number of methodologies, including Ground Penetrating Radar (GPR), Resistivity and Magnetometry. It takes a specialist to both use the field equipment and interpret the data. When used with Topographic survey the results can be very effective, though it is very dependent on soil and geological conditions within the site area.

GIS: (Geographical Information System): a range of techniques using the graphic capabilities of computers for an integrated analysis of maps, images, sites and finds. GIS has rapidly become essential in the interpretation of fieldwork data and is used within Units and County archaeological offices to interpret the landscape to assess potential for archaeology within an area.

(GPS) Survey: (Global Positioning Satellite) Very often this can be used for both Field Survey to provide accurate location of newly discovered sites and also as a tool for topographic survey, to provide a fast method for recovering thousands of 3D coordinates. There are a range of GPS receivers available, from the handheld (with a accuracy of 20m+-) to the Satellite base station variety that can be millimetre accurate. It should be remembered though that GPS could be affected by the landscape, such as tree cover, mountains, tall buildings etc…

IFA: Institute of Field Archaeologists. It is an organisation for archaeologists in the United Kingdom that promotes professional standards and ethics for conserving, managing, understanding and promoting heritage.

in situ: in its original place.

historic building record: A structure that contains historic fabric or is of cultural significance may require an HBR to a number of Levels of detail. The levels range from a simple photographic and sketch survey to a detailed record that may even include paint analysis, dendrochronology, mortar sampling and full drawn record of every stone. (same as standing building record)

Historic Scotland (HS): The government agency charged with the protection and care of the monuments and heritage resources of Scotland

landscape archaeology: placing sites into a wider context using a full range of archaeological, environmental and historical information to interpret them on a regional basis on a long time scale.
**method statements:** see brief or project design

**planning archaeologist:** A person or organisation responsible for the conservation and management of archaeological evidence by virtue of official or statutory duty, including for example County or District Archaeological Officers and staff of national bodies such as English Heritage CADW and Historic Scotland.

**planning conditions:** conditions attached to a planning permission under the Planning Acts.

**project design:** A written statement on the project's objectives, methods, timetable and resources; providing the framework for the execution of the project, set out in sufficient detail to be quantified, costed, implemented and monitored. This would normally be prepared by an archaeologist or organisation undertaking the fieldwork, frequently in response to a brief or specification.

**project outline:** Another term meaning a Brief.

**relative dating:** Relative dating is the simpler dating technique of stating; ‘this is older than that’ - If you have a context dated to the 17th century then deposits beneath will be earlier though you may be uncertain how old precisely. (see also Absolute Dating)

**remote sensing:** the use of aerial or satellite reconnaissance and photography to discover and interpret archaeological sites and landscape features, whether visible on the surface or buried, and the use on the ground of geophysical instruments to locate buried sites.

**research archive:** Derived from the work done during the analysis phase the research archive will comprise: stratigraphical/structural, artefact, environmental and other catalogues and all other records as well as details of the methods and selection strategies used. (often this can be called the Deposited or Primary Archive)

**sections:** vertical records of stratigraphy revealed by excavation and recorded in drawings and photographs as evidence of the sequence of contexts on a site.

**site:** An area specific description of the area for an archaeological investigation, this is usually defined as an area of excavation but could refer to a building, or survey area.

**site archive:** This contains everything that is gathered during fieldwork and will be catalogued, ordered and indexed. It represents the original record of the project's results and will include the original photographs, plans, recordsheets, sample registers, notebooks etc. (very often muddy!!)

**sites and monuments record (SMR):** A database (usually computerised and sometimes online – see web SMRs) of all archaeological sites and find locations from a given area, usually a county, maintained by the County Council, and adopted by formal resolution.

**specification:** A written schedule of works required for a particular project (by a curator, planning archaeologist or client), set out in sufficient detail to be quantified, costed, implemented and monitored. Normally prepared by or agreed with the relevant curator.

**standing building record:** (see Historic Building Record)
stratigraphy: the building block of archaeology, where careful excavation and recording determines the precise sequence of events that took place to create the deposits, cuts and features that have been uncovered.

terminus ante quem, terminus post quem: reference points in the dating of a stratigraphic sequence on a site before which (ante) or after which (post) a context was formed. (similar to relative dating)

test pits: a series of small (usually 1m x 1m) excavations to give an indication of the underlying soil / deposit profiles. These may take place prior to full evaluation, or may be all that is required on the site.

topographic survey: A detailed analysis of the ground surface of the site, a contour plan (from a flat 2D plan to a 3D computer model) is produced and can help to recognise buried landscape features or features that are too slight or too large to see with the naked eye.

trial trenches: see evaluation

watching brief: A formal programme of observation and investigation conducted during any operation carried out for non-archaeological reasons within a specified area or site on land or underwater, where there is a possibility that archaeological deposits may be disturbed or destroyed. The programme will result in the preparation of a report and ordered archive.

web SMR: The online version of the county/national SMR giving details of the sites, find spots and other information known about the heritage of that area. (a list of Online SMRs is available on BAJR in the resource section)