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Historic Environment Division

Guidance for the Creation and Care of Archaeological Archives in Northern Ireland

July 2024



Historic Environment Division's Aim

“Helping communities to enjoy and realise the value of our historic environment”

We do this by:

- Recording, protecting, conserving, advising, promoting and enhancing its value
- Utilising and growing our specialist knowledge and expertise in collaboration with a wide range of groups and individuals
- Contributing to the Executive's objectives as laid out in the Programme for Government

Our historic environment provides authentic and attractive places which increase our pride, character and identity, lead to improved wellbeing and community engagement, and to prosperity through tourism, investment, skills, regeneration and creativity. It is a precious and finite resource available to present generations, and with appropriate management, to future generations.



This document provides guidance for the creation and care of archaeological archives in Northern Ireland. It should be read in conjunction with Guidance for conducting licenced archaeological excavations in Northern Ireland (DfC, 2024), Guidance for the treatment and care of human remains

from archaeological excavations in Northern Ireland (DfC, 2024) and other associated guidance documents which can be obtained from the Department for Communities website: **Historic Environment | Department for Communities (communities-ni.gov.uk)**

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Preamble

Historic Environment Division (HED) within the Department for Communities (DfC) is the government lead on the historic environment of Northern Ireland. This document has been prepared by HED, in partnership with the Chartered Institute for Archaeologists (CIfA), the Institute of Archaeologists of Ireland (IAI) and National Museums Northern Ireland. It deals with the creation and care of archaeological archives, and how these activities will be conducted in order to meet agreed professional standards in Northern Ireland.

DfC requires all licensed archaeological work in Northern Ireland to

- comply with professional standards
- be led by a competent and experienced archaeologist
- be conducted giving due regard to supporting professional guidance.

Professional Standards and Guidance

Professional standards provide a set of principles and define the required outcomes of an archaeological activity that must be met. The supporting guidance provides practical advice on how those outcomes should be achieved, in accordance with current good practice.

CIfA and IAI both provide standards and guidance relating to archaeological archives:

- CIfA's Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives can be found at www.archaeologists.net/codes/cifa
- IAI's Code of Conduct for the Treatment of Archaeological Objects in the context of an archaeological excavation can be found at www.iai.ie/codes-of-conduct/

As the guidance documents provided by these institutes apply across various jurisdictions, with differing legislative basis, policies and procedures, it is recognised that they also need to work alongside specific national or regional requirements.

This detailed guidance, specific to Northern Ireland, has been produced by HED (as the regulatory body with responsibility for excavation licensing), in collaboration with CIfA and IAI. It aims to provide clarity for practitioners on meeting the required professional standards, and both institutes recommend their members adhere to it when working in Northern Ireland.

Over time, as the three organisations revise and update their related documents, every effort will be made to ensure ongoing alignment.

In addition to this guidance on the creation and care of archaeological archives, HED, in partnership with ClfA and IAI, have also produced the following:

Guidance for conducting licensed archaeological excavation in Northern Ireland. Department for Communities (DfC, 2024)

Guidance for the treatment and care of human remains from archaeological excavations in Northern Ireland. Department for Communities (DfC, 2024)

Guidance for the creation and management of digital archaeological archives in Northern Ireland. Department for Communities (DfC, forthcoming).

1. Introduction

1.1 Definition of archaeological archives

An archaeological archive comprises all records and objects recovered during an archaeological project and identified for long-term preservation, including artefacts, ecofacts, environmental remains, waste products and scientific samples, as well as written and visual documentation in paper, film and digital form.¹

Archives consist of 2 main elements:²

- The **documentary archive** comprises all records made during an archaeological project (**including digital** records)
- The **material archive** comprises all objects (artefacts, building materials or environmental remains) and associated samples.

1.2 The professional standard

All archaeological projects that include the recovery or generation of data and/or archaeological materials (finds) must result in a stable, ordered, accessible archive. All archaeologists are responsible for ensuring that the archive is created and compiled to recognised standards, using consistent methods, and is not subject to unnecessary risk of damage or loss. It is the responsibility of all curators of archaeological archives to ensure that archives are stored to recognised standards for long-term preservation and made accessible for consultation.³

This professional standard is based on the authoritative documentation on archaeological archives:

- A Standard and Guide to Best Practice in Archaeological Archiving in Europe (ARCHES)
- Archaeological Archives. A guide to best practice in creation, compilation, transfer and curation

It is expected that this professional standard will be implemented on all excavations conducted under a Licence to Excavate for Archaeological Purposes in Northern Ireland (NI). This document provides advice on the specific NI requirements to meet the standard.

1.3 Purpose of archaeological archives

Archaeological archives are a valuable source of information about our past and an essential element of the archaeological resource. Excavation of archaeological sites is necessarily a destructive process, and the archive will often be the only thing which survives from a specific site. The archive – documentary, digital and material, is therefore critical as a knowledge base, essential in interpreting and understanding the site, and in providing information and material for future study as new techniques evolve. A well-prepared archive will facilitate research and also enable display, for example through museums, which will in turn encourage public engagement and wider enjoyment of the archive.

1 K Perrin, D H Brown, G Lange, et al, A Standard and Guide to Best Practice for Archaeological Archiving in Europe (ARCHES), Europae Archaeologia Consilium (EAC) 1, 2014. https://www.europae-archaeologiae-consilium.org/_files/ugd/881a59_dc8871c3c9d84100a17a_c3b763a7f407.pdf

2 D H Brown, Archaeological Archives. A Guide to Best Practice in Creation, Compilation, Transfer and Curation, Archaeological Archives Forum, 2012. https://archives.archaeologyuk.org/aaf_archaeological_archives_2011.pdf

3 ClfA, Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives, 2014 https://www.archaeologists.net/sites/default/files/CIFAS%26GArchives_4.pdf

This document assists those preparing archaeological archives in Northern Ireland to meet the recognised standards, ensuring the archives are as accessible to as wide an audience as possible and enabling the benefits to be delivered.

Links to relevant documents and further guidance can be found in Appendix C.

2. Legal and planning policy requirements

2.1 Excavation licensing

Archaeological archives are most commonly generated by excavation associated with development work, for example new road schemes or housing, but they can also derive from other projects, such as research excavations or fieldwalking. Under Article 41 of the Historic Monuments and Archaeological Objects (NI) Order 1995 (HMAOO) there is a legal requirement to obtain a Licence to Excavate for Archaeological Purposes from DfC for conducting excavations in or under any land (whether or not such excavation involves the removal of the surface of the land) for the purpose of searching generally for archaeological objects or of searching for, exposing or examining any particular structure or thing of archaeological interest.⁴

The licence is issued subject to agreement of a Programme of Works (POW) or written scheme of investigation (WSI), which must include details on how the project archive will be produced to the required professional standards. The licence also has legally binding conditions attached, including for the adequate resourcing of any archiving requirements which arise from the excavation, introduced in 2019.

It is the responsibility of licensee[s] (both the individual and the employing body) to ensure that archives are created and maintained to the standards set out in this document. The cost implications of this must be taken into account when embarking on any archaeological project that requires an excavation licence and must be factored into tendering/funding applications.

Further information can be found in Guidance for Conducting Licensed Archaeological Excavations in Northern Ireland (DfC, 2024).

2.2 Planning conditions

Where excavations take place as a requirement of the planning process for development works, DfC is a statutory consultee in the planning process and HED advises the planning authorities on archaeological matters. Standard planning conditions relating to archaeological matters require that the excavation archive is prepared in accordance with the approved programme of archaeological work, to ensure that it is produced to a suitable standard for deposition.

Further information can be found in Development and Archaeology: Guidance on Archaeological Works in the Planning Process.⁵



Processing finds and samples on site during excavation at Drum-clay crannog, Co. Fermanagh

⁴ Historic Monuments and Archaeological Objects (Northern Ireland) Order 1995, Article 41

⁵ DfC, Development and Archaeology: Guidance on Archaeological Works in the Planning Process, 2019. <https://www.communities-ni.gov.uk/publications/development-and-archaeology-guidance-archaeological-works-planning-process>

3. Ownership and deposition of archives

3.1 Preparing archives for deposition

At present DfC is not in a position to accept transfer or deposition of archaeological archives deriving from excavations. Moving forward, DfC is exploring options towards making provision for archaeological archives to be stored and made accessible in a central repository, in line with the provisions of Article 4 of the European Convention on the Protection of the Archaeological Heritage.⁶ Further guidance on transfer of title and deposition will be made available at an appropriate time as part of that development work.

While such a repository will not be available in the short term, the preparation of archives deriving from current excavations to recognised standards will enable efficient transfer to this facility when it becomes available. For archives which have been created from 2025 onwards, their deposition will only be accepted if they meet the standards and guidelines as set out in this document.

It is recognised that there are significant archives, built up over previous decades, which are currently in the care of those organisations who conducted the excavations. It is not intended that those organisations should retrospectively apply the guidance in this document to those legacy archives. However, in line with internationally accepted standards, it is important that those archives are stored in appropriate conditions to ensure their ongoing stability, and prevent deterioration or damage, until such times as a regional repository may be provided.

3.2 Ownership of the material archive

Ownership of archaeological objects normally rests with the landowner unless relevant legislation dictates otherwise. In practice, at present most archaeological archives derived from excavation are retained and stored by the organisation which conducted the excavation.

In cases where the landowner wishes to retain the full or partial archive, this must be fully documented. Items must be appropriately recorded, analysed, packed and conserved (as necessary) as part of the archive creation process before their return to the landowner. The licensee[s] must advise the landowner on the correct storage of materials.

Treasure

An item declared as treasure is usually not retained with the full excavation archive. In this case its storage or display location must be recorded as part of the documentary archive.

Section 3.14 of the Guidance for Conducting Licensed Archaeological Excavations in Northern Ireland provides information on the procedure when objects classified as treasure are found, and further specific guidance is also available in Advice for Finders of Treasure in Northern Ireland.⁷

⁶ Council of Europe, European Convention on the Protection of the Archaeological Heritage (Valletta Convention), 1992.

⁷ DfC, Advice for Finders of Treasure in Northern Ireland <https://www.communities-ni.gov.uk/articles/advice-finders-treasure-northern-ireland>

3.3 Ownership and copyright of the documentary and digital archive

The archaeological unit which created the archive usually retains copyright of the documentary and digital archive unless otherwise stated in the contract between the project funder and the licensee[s].

Whilst HED are not currently in a position to accept deposition of full documentary or digital archives, it is a condition of the excavation licence that specific elements are submitted to HED and made available to the public through the Historic Environment Record of Northern Ireland (HERoNI). HERoNI requires the right to research, study, display, publish and provide public access to the information submitted, subject to a copyright agreement, in perpetuity, giving permission to distribute this submitted archive material as required, with credit given to the original copyright holder. Copyright agreement forms are available to download from the Archaeological Excavation Licence Documents section of the DfC website.⁸

It is the responsibility of the licensee[s] to ensure that all necessary permissions for the public dissemination of the full contents of the Comprehensive Report, the GIS dataset, and (from 2025 onwards) the Excavation Archive Inventory workbook, have been obtained, particularly from sub-contracted specialists. Permission to identify contributors by name should be written into briefs when employing sub-contractors. A copy of the copyright agreement must be included with the documentary archive.

It is assumed by DfC that when the Comprehensive Report has been classified as final the contents are available for dissemination to the public. DfC will, however, honour any reasonable confidentiality clauses placed on a report or GIS dataset, such as a six-month non-publication clause. The HED Excavation Licencing Team should be advised upon submission if the document contains information that needs to remain confidential and agree upon the period required.

⁸ Archaeological Excavation Licence Documents | Department for Communities (communities-ni.gov.uk)

4. Recovery and recording of finds during excavation

4.1 Programme of works

All applications for an archaeological excavation licence must be accompanied by a Programme of Works (POW), which must address the archive that will be produced by these works, including strategies for finds retrieval, environmental sampling, and selection, retention and dispersal. These must be site-specific and appropriate for the nature of the site and may need to be updated during the course of the works. Provision for conservation and environmental services should be in place in advance of excavation. All work must be undertaken in accordance with the approved POW and any variation to this discussed and confirmed in writing with HED. Licensee[s] must make their clients aware of the requirements for post-excavation and archiving works, and potential associated costs.

4.2 Excavation

The licensee[s] must ensure in advance that they have the necessary resources to recover, record, research and maintain the excavated finds in a stable condition. Access to appropriate specialist advice should be secured and they should be consulted as necessary during fieldwork to ensure that recovery, on-site treatment, and recording are carried out to the required technical standards as and when necessary. Adequate provisions must be made for sites (such as cemeteries, urban or wetland sites) likely to produce large quantities of archaeological objects, human remains, or objects requiring specialist conservation or care, such as organics including leather, wood, textiles, worked bone, antler or horn.

A conservator or other relevant specialist may need to be on site to give advice on the excavation of fragile objects and to lift particularly delicate or awkward objects that require specialised techniques for removal from the ground, for example waterlogged material, coin hoards, urn burials or fish traps.

During archaeological excavations all the artefacts and ecofacts recovered become part of the working excavation archive and must be systematically documented at the time of recovery as part of a coherent excavation recording system. They must be processed, bagged and boxed by the archaeological team in accordance with current Institute for Conservation (ICON) guidelines First Aid for Finds.⁹ The packaging of all items must be labelled with all relevant site information, including the excavation licence number.



Preparing an intact urn to be lifted

⁹ D. Watkinson and V. Neal First Aid for Finds, 1998. The fourth edition of First Aid for Finds will be available online from late 2024 see First Aid for Finds (icon.org.uk) for updates

5. Post-excavation care and conservation of finds

5.1 Responsibilities of the licensee[s]

Licensees are responsible for ensuring that archaeological objects, human remains, and faunal remains are cleaned, conserved, documented, packed and stored in a way that will not lead to any deterioration in condition while in their care, in accordance with the guidelines in First Aid for Finds. Licensees are also responsible for ensuring that environmental or soil samples are correctly stored and processed.

If archaeological objects are to be sent to a specialist for analysis or for conservation, arrangements for the transport and care of material must be agreed between the licensee[s] and the specialist and/or conservator. The licensee[s] is responsible for ensuring that all the appropriate documentation is completed and maintained, objects are packed, delivered, and returned safely, and that they are fully reported upon. Guaranteed delivery must be used if postal or courier services are used for transport.

Sending items outside the UK

An Export Licence (Objects of Cultural Interest) must be applied for and granted by Arts Council England before items are sent outside the United Kingdom. Unprocessed soil samples also require an export licence as they may contain archaeological artefacts. Animal bone requires a licence where it may have been modified, such as by butchery or burning.

Human remains do not require an export licence unless they have been altered and turned into cultural objects by human modification.

5.2 Assessment

The standard of care given to any material, artefact or collection should not be affected by its financial or aesthetic value or any other subjective quality. All artefacts and ecofacts must be assessed to consider the need for laboratory conservation, however the licensee[s] must ensure that any necessary initial steps are taken to stabilise items and prevent deterioration, prior to conservation taking place. The licensee[s] is responsible for arranging the assessment of excavated objects for conservation by a professionally qualified conservator.

The finds assemblage should be assessed by competent specialists. An excavated assemblage may be reduced or reorganised during analysis; for example, if some objects are assessed as natural/unworked rather than as an artefact. It is important that documentation is maintained and updated throughout this period of analysis, to prevent future confusion arising.

5.3 Conservation

Any recommendations with regards to cleaning and conservation should be implemented as soon as possible after recovery to ensure that objects are stable, for example that active corrosion of metal objects is treated, fragile items such as jet, shale, amber or textiles are cleaned, conserved and stabilised as relevant and waterlogged organic materials, such as textiles, wood, or leather, are conserved appropriately. Specialist advice should be sought if it is thought cleaning will destroy important evidence regarding the function of an object, cause degradation of intricate detail or inhibit future scientific analysis.

All metal objects should usually be X-rayed as part of the conservation assessment, to aid identification, show details, and inform any conservation treatment or selection, retention and dispersal decisions.

Conservation documentation must be retained within the archive and must include details of assessment, treatment, a photographic record, copies of X-radiographs as appropriate and recommendations for storage conditions. Any relevant conservation reference numbers should be annotated on an object's associated packaging or labelling and also recorded in the Excavation Archive Inventory Workbook.

It should be noted that archives created from 2025 onwards will only be accepted for deposition in any central repository, when available, if necessary conservation has been completed and has an accompanying conservation report.

5.4 Organic residue analysis (ORA)

Pottery displaying evidence of organic residues should not be cleaned prior to seeking specialist advice. Such examples should be handled with nitrile powder-free gloves and be wrapped in either tin foil or acid-free tissue and placed in either labelled paper or self-sealing polythene bags (when wet) until specialist advice can be obtained.

6. Selection, retention and dispersal

A selection strategy must be devised and applied to the working excavation archive to determine which archive components, including documents, digital files and material objects, will be included in the permanent archaeological archive.

The aim of selection is to ensure that the archaeological archive contains everything required to establish the significance of the project and support future research, outreach, engagement, display and learning activities. Selection should be focused on choosing what is to be retained to support these future needs, rather than deciding what can be dispersed and there will generally be a presumption in favour of retention.

A selection strategy should be drawn up with input from all relevant stakeholders, particularly members of the project team, in accordance with the aims of the project. The entire assemblage of objects, and the overall significance and nature of the site must be taken into consideration when selecting items for retention and dispersal. Unworked, naturally occurring objects such as natural stone, water-rolled flint and whole flint nodules should be recorded but are not usually retained.

Where large volumes of bulk material have been collected, for example shell or ceramic building materials (CBM), sampling of a representative selection of diagnostic forms and types, or unique or unusual examples, for retention in the archive will normally be expected, with the remainder being deselected and dispersed or appropriately disposed of. Sampling must only be undertaken after appropriate recording and analysis, and on the advice of a relevant specialist and in consultation with the licensee[s] and HED. All selection and dispersal criteria and procedures must be carefully documented, and an appropriate method of dispersal (which may include disposal through destruction), implemented and recorded. Appropriate dispersal forms are available from HED and completed forms must be retained with the documentary archive.

Guidance on Selection in Archaeological Archiving¹⁰ provides further information and the ClfA Toolkit for Selecting Archaeological Archives¹¹ includes helpful templates. Appendix A below provides suggestions for categories of items which may be considered for rationalisation for dispersal/disposal. A selection policy for Northern Ireland, with specific selection, retention and dispersal guidance is currently in development and will be provided in due course.

10 A Oniszczuk, C Tsang, D H Brown, et al, Guidance on selection in archaeological archiving. Europae Archaeologiae Consilium (EAC) 3. https://www.europae-archaeologiae-consilium.org/_files/ugd/881a59_3cc74daa74e24a8fb2580869cd209f82.pdf

11 ClfA, Toolkit for Selecting Archaeological Archives <https://www.archaeologists.net/selection-toolkit>

7. Marking finds (physical numbering)

7.1 General requirements for marking finds

It is essential to maintain the connection between an archaeological object and its archaeological context, from excavation through post-excavation to archiving. During post-excavation, the licensee[s] is responsible for ensuring that the most appropriate method is selected for marking or labelling an object. **Marking and labelling should be undertaken after the selection, retention and dispersal policy has been applied.** Time and resources will be required, and this must be taken into account when preparing the budget for post-excavation work.

Appendix A (section 13.1) provides a summary of what items should, and should not, be marked. Note that before marking, the artefact's individual condition must be considered along with factors that may mitigate against marking, including the presence of organic residue, the porosity, stability or texture of an object's surface, or insufficient surface area.

7.2 Items to be marked

Please refer to Appendix A for details of those items which are usually marked. Objects will normally be numbered and marked as individual finds. Full details of appropriate techniques for marking objects can be found in the Collections Trust's Labelling and Marking Museum Objects guidance¹². (Please note, however, that this document refers to all types of museum objects, and therefore some of the techniques will not be suitable for archaeological objects. **Self-adhesive labels must not be used.**)

A helpful video demonstrating the use of the Paraloid sandwich technique can be found on the National Museums Scotland website.¹³

Key principles for finds marking which must be adhered to are:

- **Format:** The surface of finds should be directly marked using an appropriate barrier method (the Paraloid sandwich technique), with the licence number followed by the finds number in the format 2023.187.65 (where 2023.187 is derived from the licence number AE/2023/187 and 65 is the finds number).
- **Location:** All finds marking must be discreetly placed so as not to spoil the appearance of the object or obscure important details. Where an object clearly has a 'front' and a 'back' side or decorated and plain surfaces, the number must be placed on the back or plain surface.
- **Legibility:** Numbers must always be visible to the naked eye, and neat, clear, and legible.
- **Reversibility:** The principle that it should be possible for marking to be removed intentionally from an object, leaving as little trace as possible, must be adhered to.

¹² Collections Trust, Labelling and Marking Museum Objects, <https://collectionstrust.org.uk/resource/labelling-and-marking-museum-objects-booklet/>

¹³ National Museums Scotland, <https://www.nms.ac.uk/about-us/our-services/training-and-guidance-for-museums/collections-care-training/object-labelling/labelling-a-metal-or-ceramic-object/>

Occasionally instances may arise where it is appropriate to mark objects which are not usually marked (see Appendix A), but this should only be done after consultation with the relevant specialist and a conservator.

As well as marking the individual items, the packaging must be clearly labelled as described in section 8 below.



Examples of appropriate marking using the Paraloid sandwich technique

7.3 Items which are not to be marked

Please refer to Appendix A for details of those items which are not generally marked. Where items are not to be marked it is particularly important to make sure that the packaging is clearly labelled, or a label is appropriately attached, as described in section 8 below.

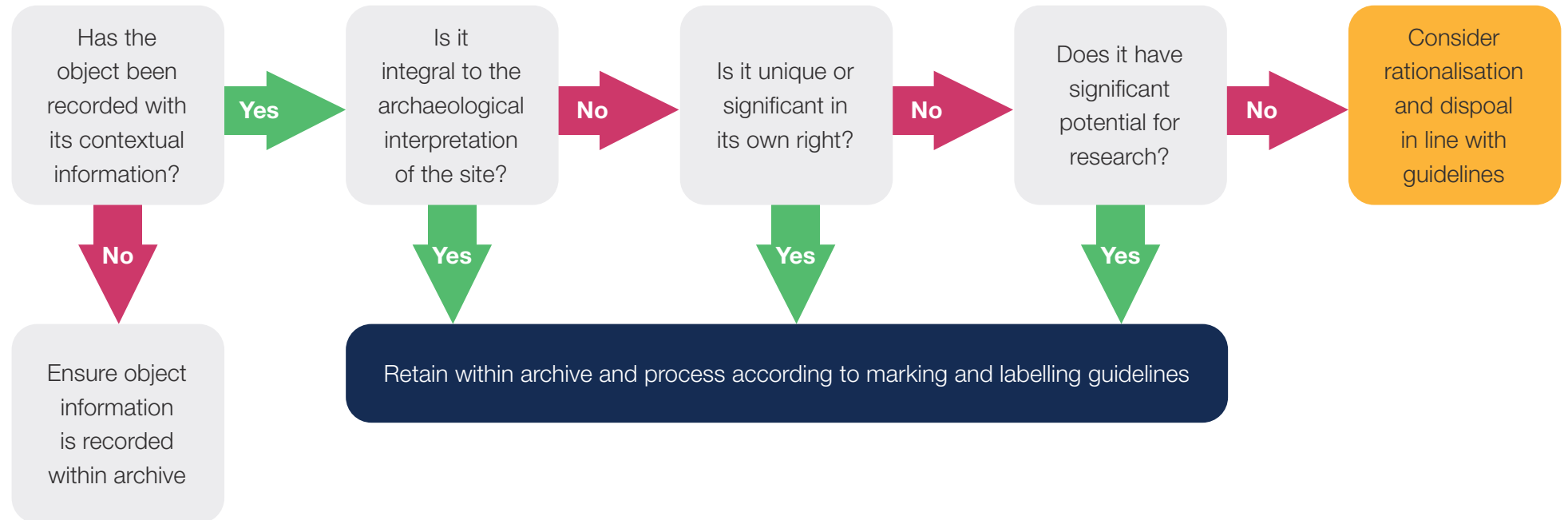
7.4 Bulk finds from a single context

In general, it is expected that finds will be allocated individual numbers, however in some instances, for example on sites where large volumes of particular types of finds are uncovered, it will be more appropriate to allocate bulk numbers. Due to the unique nature of each excavation and context, the decision to apply bulk find numbers must be made on a case-by-case basis. Generally, **bulk numbering must only be used for finds of the same material and type from a single context.** Examples of items which are commonly allocated bulk find numbers include undecorated clay pipe bowls or stems, fragments of building material (eg brick, tile, slate), flint debitage, water-rolled worked flint from raised beach deposits and pottery sherds dating from the 19th century onwards.

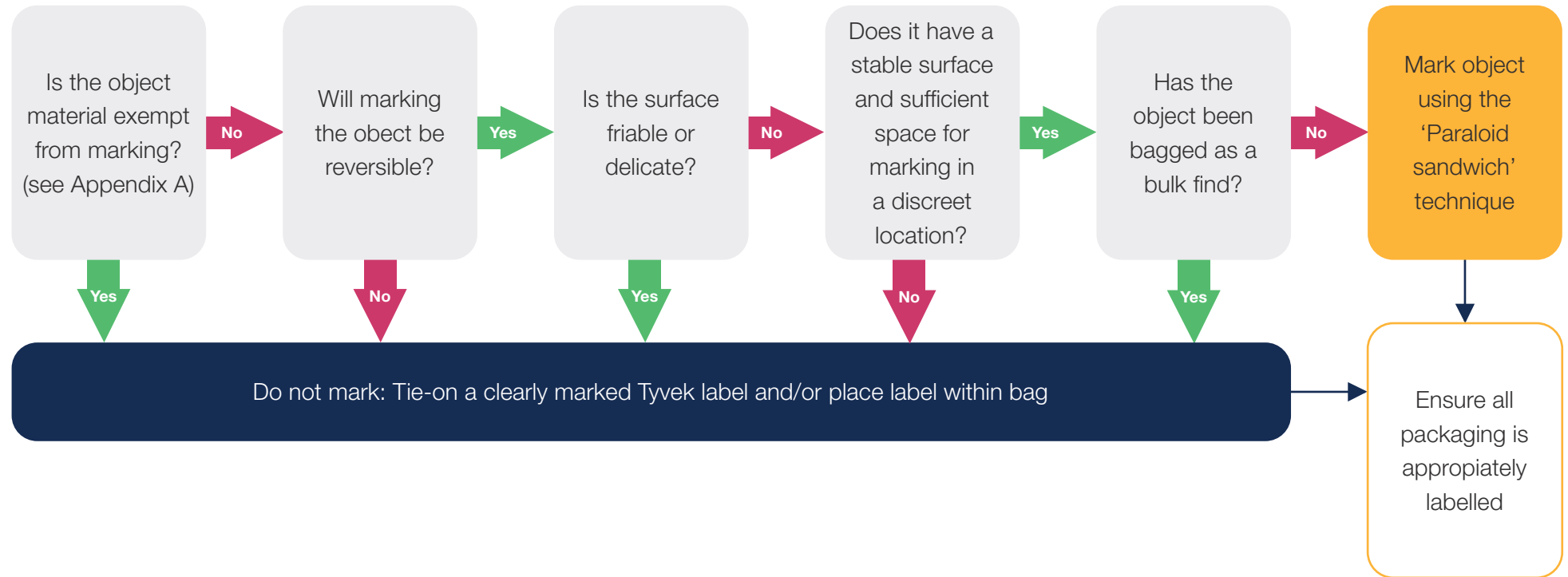
Bulk finds will be allocated a single number, but the labelling on the packaging must note the number of individual finds within the bag, and weight of the contents. Suffixes may be added to the numbering used, to identify individual items if they are removed from the packaging for individual analysis, recording etc and then separately repackaged.

If required, HED staff can provide further guidance on a site-specific basis regarding which items can be treated as bulk finds.

7.5 The decision-making process for rationalisation of finds



7.6 The decision-making process for marking finds



8. Packaging and labelling of finds

Before packaging, all objects must have received the appropriate cleaning and/or conservation treatment, and wet or damp items dried in a controlled manner. **All items must be appropriately packaged using conservation standard materials**, following guidelines such as Standards and Guidance in the Care of Archaeological Collections, and in particular the Factsheet on Collections Packaging and Silica Gel,¹⁴ or First Aid for Finds. See also Guidance on the Treatment and Care of Human Remains from Archaeological Excavation in Northern Ireland (DfC, 2024) for specific guidance on the packaging of human remains. All packaging must be clearly labelled.

8.1 Bagged finds (including bulk finds)

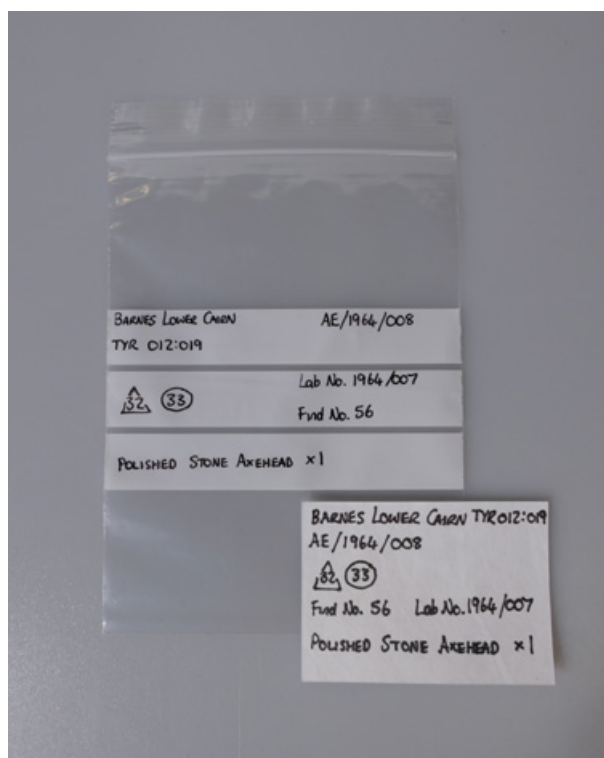
Finds bags should be at least 200-gauge self-sealing or resealable polythene bags with three white write-on panels. Bags must not contain mixed materials or contexts and care must be taken that bags are not overfilled, to prevent damage to the artefacts or the bags splitting.

All bags containing finds should generally be perforated to prevent the build-up of harmful micro-environments (with some exceptions – ie cremated human remains). Where necessary to cushion and protect fragile objects, a protective layer of conservation-grade polyethylene foam, such as Plastazote, should be added. The contents should not be wrapped and should also be clearly visible from the outside of the bag.

Bags must be marked with the licence number, site sub-division (where relevant), context number and find, sample or other registered number.

If the artefacts within the bag are not physically marked, an acid-free paper or Tyvek label, with the same information as on the bag, must also be placed inside the packaging, written using a fine-tipped, archival-quality permanent black pen ('Sharpies' are not considered appropriate for long term archival use).

For bulk finds, the weight, and the number of items within the bulk group must also be written on the packaging. Where individual items from the group are diagnostic, have been illustrated or referred to within a report on the archive, they should be bagged separately and labelled or marked as appropriate.



An appropriately labelled finds bag and insert label

¹⁴ Society for Museum Archaeology, Standards and Guidance in the Care of Archaeological Collections, 2020 <http://socmusarch.org.uk/training/smart-project/>

8.2 Boxed small finds

In general, small finds need to be housed in more protective storage than bulk finds, as they are usually more delicate in nature. More robust small finds may be placed in a perforated polythene bag with a cushioning layer of conservation-grade polyethylene foam. However, in many cases it will be more appropriate to securely house the item in a box. This may be a small box of acid-free, archival quality, or a small clear box (eg 'crystal' acrylic boxes) depending on the size and nature of the object.

Conservation-grade polyethylene foam inserts of an appropriate size, with a cut-out in the shape of the object, if necessary, can be used to provide support and cushioning.

Where appropriate, acid-free tissue can also be used for cushioning and support, but items must not be wrapped or enclosed in it.

Where a clear box is used the find should ideally be visible through the lid of the box, to remove the need for regular opening of the box. In practice, however, this is difficult to achieve, and usually it will be necessary to lightly cover the item with a protective layer of foam or tissue paper to prevent movement within the box. Crystal boxes should be labelled with black film-marking pen.

Where boxes are large enough, it may be possible to print a photograph of the object inside, and attach it to the outside of the box, to reduce the need for opening.



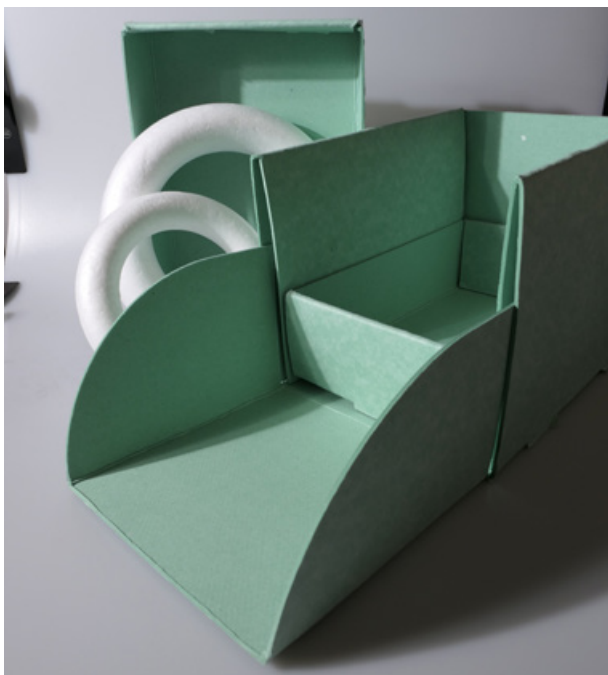
An example of appropriately packaging and labelling small or fragile artefacts

8.3 Pottery and ceramics

The nature of the fabric will affect how the pottery should be packed. In general pottery and other ceramics should be packed in such a way as to minimise movement and friction damage to the objects. They may be packed in perforated self-sealing polythene bags, unless being retained for organic residue analysis.

Fragile or friable pottery, eg prehistoric pottery, should be packaged appropriately to prevent damage or further fragmentation of the sherds. This can include cushioning (but not wrapping) sherds with acid-free tissue and placing them in a polythene bag or archival-quality box with an accompanying acid-free label. Depending on the size and nature of the pottery it may be possible to place multiple sherds together in the one bag, but advice should be sought from a conservator.

Complete, substantially intact or reconstructed individual vessels must be boxed separately within archive-quality boxes with adequate packaging and support.



An example of a custom box and support rings for packaging pots or skulls

8.4 Stone

Lithics should be sorted by context and then by form before bagging. Care must be taken not to over-fill boxes with lithics as they will become too heavy to handle safely and may not be capable of supporting the weight long-term. Boxes must not weigh more than 10kg.

8.5 Metal objects

Metal objects should be packed in accordance with current conservation guidelines and specialist advice. Ensure that all x-radiography has been carried out as appropriate and the associated images and records are fully cross-referenced to the objects.

In general, archaeological metalwork must be individually packed in **perforated** polythene bags or crystal (acrylic) boxes, with added appropriate padding and support. Acid-free tissue paper can be used as padding, but items must not be wrapped in it. **Lead must not be packaged using organic materials** (ie acid-free tissue paper, cardboard boxes, etc).

Ideally the object should be visible through the lids of crystal boxes, if used, to remove the need for opening to conduct condition checks. However, it may be necessary to lightly cover the item with a protective layer of conservation-grade polyethylene foam or tissue paper to prevent movement within the box. Very small crystal boxes, which are difficult to label with full information, should be placed within a labelled and perforated outer bag.



Individual metal artefacts, packed and ready to be placed into a larger box with silica gel and a humidity indicator card

Archaeological iron needs to be kept below 12% Relative Humidity (RH) in order to remain stable and all other metals below 30% RH. If these conditions cannot be achieved, dry silica gel in a well-perforated polythene bag should be placed in an air-tight plastic box containing the individually packaged metal finds, accompanied by an RH indicator strip. The weight of the silica gel should be marked on the perforated bag. A weight of 20% silica gel per total volume of contained air-tight space can be considered sufficient. The silica gel must not come into direct contact with the archaeological object.



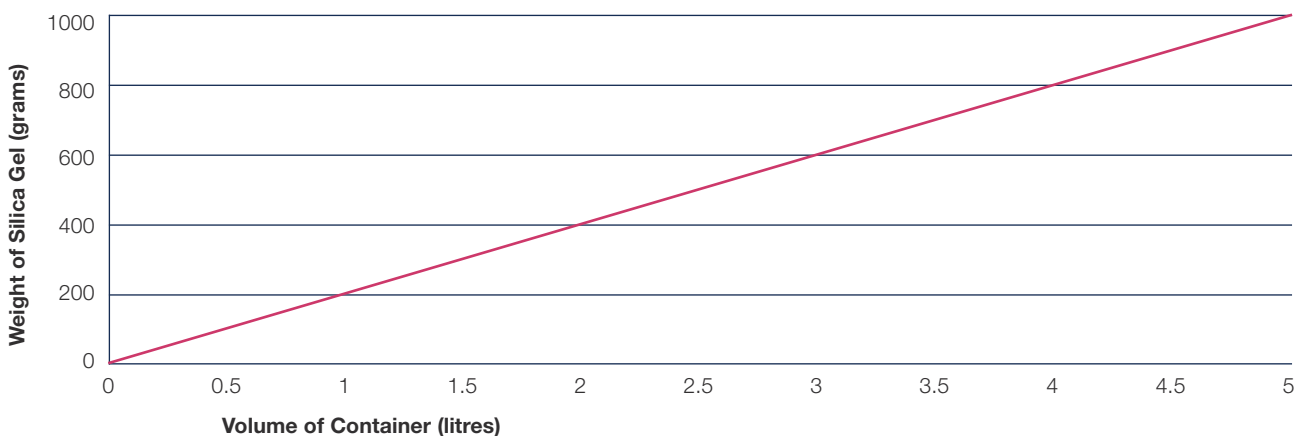
Metal artefacts carefully packed into a labelled storage box, with humidity indicator card visible

Regular condition checks should be made on metals, with silica gel being recharged or replaced when needed. A note should be placed on the outside of the box stating when the silica gel was last replaced.



Examples of packaging materials for metal objects, including airtight boxes, silica gel (both indicating and non-indicating mix in perforated and labelled bags) and a humidity indicator card

Weight of Silica Gel Required (20% Vol)



8.6 Organic materials

Organic materials - ie textiles, leather, wood, horn and worked antler and bone - should be assessed by a conservator with all recommended treatment carried out. The conservator will package the material once treated and can also give advice regarding labelling.

8.7 Samples

Processed environmental samples may be included as part of the archive (dried and labelled flots, prepared thin-sections, and sub-samples). Any artefacts or organic material retrieved from sorted residues should be integrated into the site archive according to its material and type as relevant, noting which processed sample it originated from.

The advice of the relevant specialist must be sought and implemented to ensure appropriate packaging and storage conditions for material such as plant macro and micro-fossils.

Unprocessed bulk soil samples must not be retained, except in exceptional circumstances and by prior agreement with HED, specifying the reasons for retention.

8.8 Large/heavy items

Where an object is too large or heavy for standard packaging – for example, large timbers or stone objects – it may be more appropriate to store directly on a shelf or plastic pallet, cushioned underneath by a layer of conservation-grade polyethylene foam or similar. If labels are being attached to objects which cannot be marked directly, unbleached cotton tape should be used with a Tyvek label.

9. Recording the excavation archive

Compiling a comprehensive record of the excavation archive is an essential post-excavation task and is necessary to make the archive meet the FAIR principles of being Findable, Accessible, Interoperable and Reusable. Even sites which do not uncover archaeological remains will still have an archive which records the works which have been conducted. The ClfA Selection Toolkit¹⁵ provides specific guidance on archaeological archives from sterile projects.

9.1 Completing the Excavation Archive Inventory workbook

All items within the excavation archive must be recorded, using the Excavation Archive Inventory workbook, which is supplied by HED in Excel format. The workbook includes separate tabs for the material, documentary, and digital components of the archive, which must all be completed. Processed environmental samples to be included as part of the archive (dried and labelled flots, prepared thin-sections, and sub-samples) must also be recorded in the workbook.

The workbook is accompanied by detailed guidance to facilitate its completion. Some fields have standardised terminologies which have been agreed with National Museums NI and these must be used.

9.2 Recording the storage location of all items

The Excavation Archive Inventory workbook must record the location(s) where the material and the documentary archive are being stored, including:

- Any finds or samples stored in specialist laboratories or stores.
- Any finds, including treasure, that have been accessioned by a museum – giving name of museum and accession number.
- Any finds or samples that have been returned to the owner or the site from which they originated.
- Any disarticulated human remains that have been re-buried.
- Any items that have been dispersed or disposed of – see section 6.

9.3 Submission of Excavation Archive Inventory workbook

The Excavation Archive Inventory workbook must be submitted to HED as part of the submission and classification of the Comprehensive Excavation Report (see section 12 of Guidance for Conducting Licensed Archaeological Excavations in Northern Ireland (DfC, 2024) and must be fully completed to facilitate future access and research.

¹⁵ ClfA, Toolkit for Selecting Archaeological Archives <https://www.archaeologists.net/selection-toolkit>

10. Preparing the material archive for long-term storage

Prior to long-term storage, objects must be clean and stable, have undergone conservation, and be packaged in accordance with any specialist guidelines. The archive should be ordered according to its material type, packing and storage requirements.

A summary packing list must be completed on a separate tab in the Excavation Archive Inventory workbook. This will state the number and sizes of boxes and containers in which the different categories of material are stored, the numbers of items in each box, and the number and type of any large, unboxed finds. Any particularly large objects should have their estimated size and weight listed.

10.1 Storage boxes

It is important to consider the economic use of space when packaging objects, both for individual items and for packing the archive into larger boxes for long-term storage. However, archives from multiple sites must not be boxed together - instead, where there is only a small quantity of archive material, a smaller size of box should be used.

Boxes must not be overloaded and objects must not be tightly packed, and in all cases the box size should be appropriate to the nature (material, weight, shape and size) of the contents.

Size and Type

HED recommend the use of archival-standard acid-free polypropylene packing boxes complete with lids and locking handles (but not airtight unless used for metalwork), such as 'Really Useful' boxes, which are suitable for conservation purposes.

It should be noted that archival standard boxes will be required for any potential future deposition of all archives created from 2025 onwards. The standard box sizes to be used are listed below. Boxes of less than 5 litre capacity may vary in dimensions. There are also larger box sizes that may be used – HED staff should be consulted. Oversized items should be packed in appropriately sized boxes or may be retained on a pallet if agreed with HED.

Dimensions (W x H x D)	Capacity
290 x 230 x 120	5 litre
395 x 255 x 155	9 litre
480 x 390 x 200	18 litre
710 x 440 x 165	33 litre
480 x 390 x 310	35 litre
710 x 440 x 230	50 litre
710 x 440 x 310	64 litre

The base of the box should be lined with conservation-grade polyethylene foam, or crumpled acid-free tissue paper. Empty space within the box should be filled with crumpled acid-free tissue paper to minimise movement within the box while it is being handled. Bubble-wrap should not be used for long-term storage as it can trap moisture and leave indentations on softer items such as pottery and wood.

To help minimise any deterioration of the archives, the storage boxes must be stored in areas which exclude daylight, or, where this is not feasible, black polythene can be used to cover shelves.



Examples of recommended sizes of plastic storage boxes

Maximum weight

Consideration should be given to the weight of the box when packed. The maximum overall weight should not exceed 10kg. Where this is not feasible, boxes over 10kg should clearly display caution labelling on the exterior. To ensure the efficient use of storage space, half-filling larger boxes should be avoided – it may be better, as in the case of heavier materials such as flint, to use two 18-litre boxes rather than one 35-litre box. Non-conservation-standard or damaged boxes or containers must not be used and will not be accepted for future deposition.

10.2 Packing techniques

The most appropriate approach to packing boxes for long-term storage will to a certain extent be guided by the size and nature of the archive and by the required environmental conditions of the materials. In general, and where feasible, considering size or robustness, items should be packed by material, then object type and then finds number. Packing in a logical manner will ensure easier access to items for further research or for condition checks.

- Archives from different sites should not be placed together in a single storage box.
- Larger archives: Objects of different material types (ie pottery, glass etc) should be packed into separate boxes.
- Smaller archives: Mixed materials (with the same environmental requirements) from a single archive may be placed into a single box but packaged in such a way that they may be easily separated and are not susceptible to damage (ie do not layer stone objects on top of ceramics).
- Metalwork, provided it is placed in an air-tight container and packaged as described in section 8.5, may be placed within a larger storage box with items from the same archive. Care should be taken to ensure that metalwork packed in this way is easily accessible to allow for regular humidity checks.
- Boxes must not mix finds of significantly different robustness and, if layering (using additional padding with conservation-grade polyethylene foam between layers) within boxes, heavier and more robust items should be placed in the bottom and lighter items on top.
- Finds which have been illustrated in the final report should be packed in separate marked containers within the storage box and clearly labelled to be easily identifiable.
- Custom boxes may be useful for packing certain individual items, such as reconstructed/whole pots or skulls.
- Human remains must not be packed with other items – Guidance for the Treatment and Care of Human Remains from Archaeological Excavations in Northern Ireland (DfC, 2024) provides further information.

10.3 Contents list and storage box labelling

Contents list

A list of all items in the storage box, printed on acid-free paper, must be placed inside each packed box. This can be extracted from the HED Excavation Archive Inventory workbook and must include the following headings (see example below, which includes sample content).

Box labels

Each box must be labelled with a fully completed standard box label, using the template provided at Appendix B. Only archival-quality foil-backed, self-adhesive labels must be used. Boxes must then be numbered in sequence as well as giving the total number of boxes relating to that specific project archive (ie box 1 of 7, box 2 of 7 etc).

Archive Inventory Number	Box Number	Registered/Finds number	Object Name	Number of items
HERNI.AE.2023.187.1	1 of 5	7	Lithic (Core)	1
HERNI.AE.2023.187.2	1 of 5	8	Lithic (Core)	1
HERNI.AE.2023.187.3	1 of 5	10	Lithic (Flake)	1
HERNI.AE.2023.187.4	1 of 5	11	Clay pipe	1
HERNI.AE.2023.187.5	1 of 5	12	Clay Pipe	1

10.4 Storage conditions

Proper care and storage of the archive is crucial to its long-term preservation. The storage area and the condition of the artefacts must be checked on a regular basis. Monitoring and recording of the storage environment is important, particularly where artefacts require special environmental conditions. It is essential that all silica gel is closely monitored and replaced/recharged as necessary.

Storage requirements

- Objects must be kept in suitable packaging and stored in a secure, designated space with controlled access.
- Storage used for housing the archive should be at minimal risk of destruction or damage by vibration, contamination, fire, flood, or theft.
- Precautions should be taken against rodents, insects and other pests, and traps should be checked and monitored regularly to warn of any infestation.
- Storage areas should be away from supply systems such as gas, electricity and water mains and should have fire detection systems in place.
- There should be no smoking, eating, or drinking permitted in the artefact handling or storage areas.
- Movement of objects after storage should be minimised.
- Finds should not be kept on the floor, even if contained in a box.
- All objects should be stored in darkness, away from direct light or heat.
- Temperature and relative humidity in the storage area should remain as stable as possible, minimising sharp fluctuations.
- Metals should be stored at a stable temperature between 15° to 22°C, and ideally below 12% RH for ironwork and 30% RH for other metalwork. (See section 8.5 for appropriate action where these conditions are not achievable).
- Organic finds (leather, textile, wood, worked bone) must be conserved before being packed for long term storage, and ideally stored between 15° and 22°C and 50% to 60% RH (but see further information in Appendix A).

At present, HED are not inspecting archives when undertaking the classification of the Comprehensive Report. However, from 2025 onwards, HED intend to periodically inspect the archives held by licensees to ensure that these are being created to meet the archives guidelines. In cases where archives are

consistently found to not meet the guidelines, HED may choose to instigate inspection of individual archives for each submission of a Comprehensive Report for classification, until it is demonstrated that archives are being consistently created to meet standards.

11. The Documentary Archive

The documentary archive will include the original written records created throughout the course of the excavation and post-excavation work but must be subject to selection before being finalised, to ensure that duplicates or irrelevant items are removed. The Documentary Archive tab on the Excavation Archive Inventory workbook must then be completed.

11.1 Items to be included in the documentary archive

The list below covers common record types generated during excavation and post-excavation, although not all projects will generate all the items listed, and some projects may produce additional material.

	Physical archive	Digital archive
All site registers (such as context, drawing, finds, photographic, samples, skeleton etc)	✓	May be included if created in a digital format or if scanned
All record sheets (such as context sheets, sample sheets, skeleton and record sheets)	✓	May be included if created in a digital format or if scanned
Site notebooks	✓	X
All original drawings, whether created during fieldwork, analysis, or for publication	✓	May be included if created in a digital format or if scanned
All photographs (born digital)	X	✓
All specialist reports and associated documentation	✓	✓
All original X-radiographs	✓	✓
C14 dating records and certificates	✓	✓
Copyright agreement form	✓	✓
Programme of Works (POW) and any addendums	X	✓
Post-excavation Assessment Report (PEAR) and any addendums	X	✓
Comprehensive Report (Final)	✓	✓
Grey literature reports	X	✓
Reference list to any published reports	X	✓
Box contents list (inserted in each box)	✓	✓
Completed Excavation Archive Inventory workbook	X	✓
GIS dataset in required format	X	✓

Items not to be included in the documentary archive

- Notes to staff and routine correspondence
- Administrative documents
- Financial documentation such as tender submissions, costs, invoices, receipts salary details
- Employment contracts or staff details

11.2 Packing the documentary archive

The documentary archive must be appropriately packed and stored to ensure its long-term preservation. This requires the material to be stored in a dry, office environment where it will not be susceptible to becoming damp or mouldy.

Documents should be arranged by type in a logical and then chronological order. Where numbered, for example context sheets, these should be arranged in numerical order, or if grouped by area, this should be made clear within the documentation.

Papers

- Acid-free paper (that is with a neutral to mildly alkaline pH) should be used for items to be included in the documentary archives.
- Original records must be included in the archive rather than photocopies although where copies are annotated with relevant information these may be included.
- All records must be removed from metal ring-binders and all metal items such as staples or paperclips must be removed. Plastic clips or treasury tags may be used.

- Paperwork should not be folded.
- Paperwork should be stored flat and in appropriately sized folders, which must be acid-free and pH neutral. Where plastic wallets are used, they must be made of conservation grade material.
- Similar items should be grouped and packaged together (eg all context sheets together). Folders must not be over-filled. Larger bundles of documents may be carefully tied with archive tape and placed in boxes.
- Remove self-adhesive labels such as 'post-it' notes from any documents
- Include a separate title page to mark groups of documents.
- Folders should be labelled in the top right-hand corner using fine-tipped, archival-quality permanent black pen to clearly to record the contents. This must include the excavation licence number and site name.

Boxes

- Folders of papers should be placed in archival-standard document boxes (typical size 40cm length x 28.5cm breadth x 14.5cm depth, although larger boxes for up to A3 sized material are available).
- A contents list must be placed in each box, printed on acid-free paper (that is, with a neutral to mildly alkaline pH).
- Boxes should be labelled using self-adhesive labels, using the proforma provided at Appendix B.

Drawings

- Drawings should be labelled in pencil with the excavation number and site name.
- Drawings should be kept flat, rather than rolled. Where folders are used to group items together, they must be labelled in the top right-hand corner using fine-tipped, archival-quality permanent black pen to clearly record the contents. This must include the excavation licence number and site name.
- Drawings should be packed in appropriately sized archival quality document boxes, as described above for papers. Boxes should be labelled using self-adhesive labels, using the proforma provided at Appendix B.
- Larger drawings (all sizes above A3) may be rolled and stored in archival-quality triangular roll storage boxes. These must be labelled using fine-tipped archival-quality permanent black pen, and record the excavation licence number, site name and number of drawings inside.

Photographic Archive

It is assumed that photographs are now all created digitally, both on site and during post-excavation, and these will form part of the digital archive. There is no requirement to print digital photographs.

If you are processing a legacy archive which contains printed photographic material, slides etc, please contact HED for specific advice. Duplicated images, poor quality images and personal photos must be removed and an index of all photographs retained within the archive must be included.

12. The Digital Archive

The digital archive is an integral part of the excavation archive, particularly as increasingly large proportions are born digital. Please see section 11.1 for details of which items should be included in the digital project archive.

Guidance for the Creation and Management of Digital Archaeological Archives in Northern Ireland (DfC, forthcoming 2025) will provide further information.

13. Appendices

13.1 Appendix A: Marking, packing and storing objects

Appropriate marking, packing and storage of artefacts is essential. This guidance aims to provide a pragmatic approach to storage, recognising that archaeological units are not usually set up to provide archival-grade long-term storage, and that there is currently no regional repository available for the items to be transferred to. It is the intention that implementing this guidance should be practical and achievable. HED staff, in partnership with National Museums NI, are happy to provide specific advice on how best archaeological units can aim to achieve this.

Specific information for each type of material is provided in the tables below, but there are also general storage principles which should be applied:

- Storage areas should exclude daylight as far as possible. Where this is not achievable, boxes/shelves should be covered with heavy-duty black polyethene to block light.
- Archives must be kept dry.
- Rapid fluctuations in humidity and temperature can be very damaging to artefacts, and should be avoided. Storing objects in a buffered environment (such as a plastic box) will contribute towards achieving stability, but a pro-active approach should be taken to implementing measures to reduce fluctuations in the wider storage environment (for example having a well-insulated storage room, having a climate controlled store for the most sensitive objects and/or using a dehumidifier to manage the risks of humidity fluctuations).
- Storage conditions should be kept under review – for example by using a temperature/humidity data logger. This will allow issues to be identified and consideration to be given to implementing practical ways to improve conditions.
- The condition of artefacts must be monitored on a regular schedule for any sign of salt efflorescence/powdery surface forming, or any deterioration. If this occurs, or if in any doubt the advice of a conservator must be sought.
- Where silica gel is used (in a perforated bag) it should be accompanied by a humidity indicator card and monitored and replaced/recharged as necessary.
- All references to foam padding requires conservation-grade polyethylene foam.

STONE

Type	Consider rationalisation	To be marked?	Where to mark	How	Packaging materials	Ideal Storage
Knapped flint objects (including cores)		✓	Discreet position, unworked face if possible, not on worked edges	Using the Paraloid Sandwich Technique	Perforated bag, foam padding	35% - 65% RH 15° - 22°C
Flint debitage and unworked burnt flint	✓	Do not mark		Archival black pen on Tyvek label in bag	Perforated bag	35% - 65% RH 15° - 22°C
Small, worked stone artefacts		✓	Discreet position, unworked face if possible, not on worked edges	Using the Paraloid Sandwich Technique	Perforated bag, foam padding	35% - 65% RH 15° - 22°C
Large, worked stone (porous or friable) eg sandstone, limestone, basalt	✓	Do not mark		Archival black pen on Tyvek label, tied on with unbleached cotton tape or string	Foam padding	35% - 65% RH 15° - 22°C
Large, worked stone and slate (stable or non-porous)	✓	✓	Discreet position, unworked face if possible, not on worked edges	Using the Paraloid Sandwich Technique and Archival black pen on Tyvek label, tied on with unbleached cotton tape or string	Foam padding	35% - 65% RH 15° - 22°C

CERAMICS

Type	Consider rationalisation	To be marked?	Where to mark	How	Packaging materials	Ideal Storage
Ceramic Building Material (CBM) eg brick, tile	✓	✓	Discreet position, not on fracture break or friable surface	Using the Paraloid Sandwich Technique	Perforated bag, foam support/padding	35% - 65% RH 15° - 22°C
Clay Pipe	✓	✓	Discreet position, not on decorated or broken face	Using the Paraloid Sandwich Technique	Perforated bag, foam support/padding	35% - 65% RH 15° - 22°C
Crucibles		Do not mark		Archival black pen on Tyvek label in bag or box	Perforated bag, foam support/padding, crystal box	35% - 65% RH 15° - 22°C
Moulds		✓	Discreet position, not on fracture break or friable surface	Using the Paraloid Sandwich Technique	Perforated bag, foam support/padding, crystal box	35% - 65% RH 15° - 22°C
Pottery (pre-19th century)		✓	Undecorated surface, not on fracture break	Using the Paraloid Sandwich Technique	Perforated bag, foam support/padding	35% - 65% RH 15° - 22°C
Modern pottery (19th-21st century)	✓	✓	Undecorated surface, not on fracture break	Using the Paraloid Sandwich Technique	Perforated bag, foam support/padding	35% - 65% RH 15° - 22°C
Pottery for residue analysis		Do not mark		Archival black pen on Tyvek label in bag	Foil Wrap, perforated bag, support/padding	35% - 65% RH 15° - 22°C

METALS

Type	Consider rationalisation	To be marked?	Where to mark	How	Packaging materials	Ideal Storage
Iron	✓	Do not mark		Archival black pen on Tyvek label in bag	Perforated bag, crystal box, foam padding, sealed box, perforated bag of silica gel, humidity indicator card	<12%RH 15° - 22°C
Lead	✓	Do not mark		Archival black pen on Tyvek label in bag	Perforated bag, crystal box, foam padding, sealed box, perforated bag of silica gel, humidity indicator card. Do not use organic materials for packaging.	<30%RH 15° - 22°C
Other metals (gold, silver, bronze, copper etc)		Do not mark		Archival black pen on Tyvek label in bag	Perforated bag, foam padding, sealed box, perforated bag of silica gel, humidity indicator card	<30%RH 15° - 22°C
Slag & other metal working debris	✓	Do not mark		Archival black pen on Tyvek label in bag	Perforated bag	35% - 65% RH 18° - 22°C

ORGANIC FINDS

Note: Acid-free archival-quality cardboard boxes may be considered for storage of human remains, worked bone artefacts, shell or textile. Please seek advice from a conservator and discuss with HED if this approach is being taken.

An RH of 50% - 60% is the ideal for the storage of organic finds, and should be aimed for where possible: the guidance below recognises that in practice this can be difficult to achieve in most existing archaeological stores.

Type	Consider rationalisation	To be marked?	Where to mark	How	Packaging materials	Ideal Storage
Human Remains		Do not mark		Archival black pen on Tyvek label in bag	Perforated bag (unless cremated), foam padding	35% - 65% RH 15° - 22°C
Worked Bone artefacts		✓	Discreet position, not on decorated or broken face	Using the Paraloid Sandwich Technique	Perforated bag, foam support/padding, crystal box	35% - 65% RH 15° - 22°C
Faunal remains (pre-19th century)		Do not mark		Archival black pen on Tyvek label in bag	Perforated bag	35% - 65% RH 15° - 22°C
Faunal remains (19th-21st century)	✓	Do not mark		Archival black pen on Tyvek label in bag	Perforated bag	35% - 65% RH 15° - 22°C
Shell	✓	Do not mark		Archival black pen on Tyvek label in bag	Perforated bag	35% - 65% RH 15° - 22°C
Wood		Do not mark		Archival black pen on Tyvek label tied on with unbleached cotton tape or string	Perforated bag or container with appropriate padding	35% - 65% RH 15° - 22°C
Leather		Do not mark		Archival black pen on Tyvek label in bag	Perforated bag, crystal box, foam padding	35% - 65% RH 15° - 22°C
Textile		Do not mark		Archival black pen on Tyvek label in bag	Perforated bag, crystal box, foam padding	35% - 65% RH 15° - 22°C

GLASS

Type	Consider rationalisation	To be marked?	Where to mark	How	Packaging materials	Ideal Storage
Vessel & Window Glass (pre-19th century)		Do not mark		Archival black pen on Tyvek label in bag	Perforated bag, support/padding, if necessary sealed box, perforated bag of silica gel, humidity indicator card	35% - 65% RH 15° - 22°C
Vessel & Window Glass (19th-21st century)	✓	Do not mark		Archival black pen on Tyvek label in bag	Perforated bag, support/padding, if necessary sealed box, perforated bag of silica gel, humidity indicator card	35% - 65% RH 15° - 22°C
Other Glass artefacts (Beads etc)		Do not mark		Tie-on Tyvek label and/or Tyvek label in bag completed in black archival pen.	Perforated bag, foam support/padding, crystal box, if necessary sealed box, perforated bag of silica gel, humidity indicator card	35% - 65% RH 15° - 22°C

OTHER MATERIALS

Type	Consider rationalisation	To be marked?	Where to mark	How	Packaging materials	Ideal Storage
Plastic	✓	Do not mark		Archival black pen on Tyvek label in bag	Perforated bag	35% - 65% RH 15° - 22°C
Rubber	✓	Do not mark		Archival black pen on Tyvek label in bag	Perforated bag	35% - 65% RH 15° - 22°C
Composite material finds	✓	Consult Specialist		Consult Specialist	Consult Specialist	Follow Specialist Advice
Daub	✓	Do not mark		Archival black pen on Tyvek label in bag	Perforated bag	35% - 65% RH 15° - 22°C
Render and Mortar	✓	Do not mark		Archival black pen on Tyvek label in bag	Perforated bag	35% - 65% RH 15° - 22°C

13.2 Appendix B: Box label template

Only archival-quality foil-backed, self-adhesive labels must be used. Labels should preferably be printed, but if handwritten need to be legibly filled out in BLOCK CAPITALS using a fine-tipped archival-quality permanent black pen. Labels must be stuck to the left side of both the short and long side of the box.

Box number		Total no. of boxes	
Site name			
License Number		Site Code	
Company			
Site Director			
Material type (s)			

13.3 Appendix C: Links to relevant documents and further guidance

Links

HED licence application documents

<https://www.communities-ni.gov.uk/publications/archaeological-excavation-licence-documents>

Development and Archaeology: Guidance on Archaeological Works in the Planning Process

<https://www.communities-ni.gov.uk/publications/development-and-archaeology-guidance-archaeological-works-planning-process>

Archaeological Investigations on Major Road Improvement Schemes DEM156/15

<https://www.infrastructure-ni.gov.uk/publications/management-archaeological-investigations-major-road-improvement-schemes-dem-15615>

Exporting objects of cultural interest

<https://www.gov.uk/guidance/exporting-or-importing-objects-of-cultural-interest#exporting-objects-of-cultural-interest-from-northern-ireland>

Arts Council of England Export Licence

<https://www.artscouncil.org.uk/export-controls/export-licensing#section-1>

CifA regulations, standards and guidelines

<https://www.archaeologists.net/codes/cifa>

Collections Trust

<https://collectionstrust.org.uk/resource/labelling-and-marking-museum-objects-booklet/>

IAI guidelines

<https://www.iai.ie/guidelines-technical-reports/>

Treasure

Advice for finders of treasure in Northern Ireland | Department for Communities (communities-ni.gov.uk)

What have I found? | National Museums NI

The Society for Museum Archaeology.

Resources: Standards and Guidance and Material Factsheets

<http://socmusarch.org.uk/training/smart-project/>

Waterlogged Wood

<https://historicengland.org.uk/images-books/publications/waterlogged-wood/>

Zooarchaeological Sampling Guidelines:

Best Practice for the Treatment, Analysis and Curation of Animal Bones from Archaeological Excavations

<https://www.tiipublications.ie/advanced-search/results/document/?id=3168>

TII Palaeo-environmental Sampling Guidelines.

Retrieval, analysis and reporting of plant macro-remains, wood, charcoal, insects and pollen from archaeological excavations

<https://www.tiipublications.ie/advanced-search/results/document/?id=2667>

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13.4 Appendix D: Glossary of key terms

Archaeological programme of works

(POW) – A written document prepared by a qualified archaeologist or archaeological consultant. The document describes the archaeological works in detail and sets out detailed methodology for the investigations. Also sometimes referred to as the written scheme of investigation (WSI) or method statement (MS).

Archaeological excavation – An archaeological investigation involving controlled, methodological and intrusive fieldwork that examines, records and interprets archaeological deposits, features and structures.

Archaeological excavation archive – An archaeological excavation archive comprises the retrieved material (artefacts, building materials or environmental remains) and associated samples (of contextual materials or objects) and all records and reports created during all phases of an archaeological project, including those in hard copy and digital format.

Archive Inventory Number – A unique number generated through filling in the HED Excavation Archive Inventory workbook.

Archaeological Materials – All materials recovered during excavation, including:

- Artefacts, such as glass, leather, metalwork, pottery, textile, wooden artefacts, worked antler and bone, and worked stone.
- Biological remains, such as animal bone and botanical material.
- Waste products, such as industrial residue and off-cuts.

- Material extracted during analysis, such as thin-sections, microfossil slides and dendrochronological specimens.

Bulk finds – This term can be applied to finds found in some quantity, for example building material, animal bone, shell and slag. In some site-specific circumstances, it may be appropriate to assign a single archive number to a bulk find, for example, a large number of pot sherds or lithics from a single context.

De-selected material – The parts of the **working excavation archive** not selected for inclusion in the **archaeological excavation archive**.

Digital Archive – All documents and records in digital form, including correspondence, contracts, specifications, notes, records, pro-forma, indexes, catalogues, reports, maps, plans, section drawings, elevations, site photographs, object images, CAD files, databases, digital aerial photograph interpretations, geophysical and other survey data, GIS files, audio records, images, satellite imagery, spreadsheets, text files, analytical results and 3D data.

Dispersal – The process of dealing with **de-selected material**, including incorporation into handling boxes, donation to reference collections, or destruction. All **stakeholders** should be included in determining methods of dispersal.

Documentary archive – All documents and records in paper or film form, including correspondence, contracts, specifications, notes, records, pro-forma, indexes, catalogues, reports, maps, plans, section drawings, elevations, site photographs, object images and X-radiographs.

Ecofact – A find which comes from something living, for example animal bone or plant material and which has not been modified by human activity.

Historic Environment Record of Northern Ireland (HERoNI) – The public record maintained by HED of all recorded historic environment assets in Northern Ireland. It includes archaeological sites and monuments, historic buildings, industrial heritage, historic parks, gardens and demesnes, defence heritage and maritime heritage sites.

Labelling – Writing or printing the licence number, site name, context number and finds number on a bag in which the item is placed, on an acid-free label within the bag and/or on a tag attached to the item.

Licensee – The individual and co-licensed company or organisation granted a licence to excavate for archaeological purposes under the terms of the Historic Monuments and Archaeological Objects (Northern Ireland) Order 1995.

Marking – Writing the finds number directly onto the object.

Post-excavation – The assessment and reporting which happens after excavation, including specialist analysis, archive preparation, report production and publication.

Sample – A quantity of material or a deposit collected for analysis – including but not limited to: environmental, charcoal, clay, mortar, peat, plaster/render, sand, soil, stone, wood.

Selection – The process of applying a **selection strategy** to a **working excavation archive** to determine which archive components, including documents, digital files and material objects, should be included in the **archaeological excavation archive**. The aim of selection is to ensure that the final archive contains everything required to establish the significance of the project and support future research, display, outreach, engagement and learning activities.

Selection policy – A non-project-specific, generic methodology for selection. As such, a selection policy may inform decisions about deselected materials but should not be used to determine a project-specific selection strategy.

Selection strategy – The methodology detailing the excavation project-specific selection process, agreed by all **stakeholders**, that will be applied to the **working excavation archive** in order to create the **archaeological excavation archive**.

Site code – Usually 3 letters allocated to the site during the excavation.

Small finds – Also referred to as special finds or registered finds. The term can be applied to objects regardless of size and can be applied to items for a number of reasons, including but not limited to:

- The object requires specific conservation and/or storage requirements.
- It is an object which may have dating implications for the site, such as a coin or a specific artefact type.
- It is an unusual object type in the context of the site being excavated.

Specialist – An individual who is competent in, and specialises in, collecting, recording, analysing, interpreting and/or reporting on specific materials, objects, or scientific data. A specialist will have developed expertise through extensive study in their particular field, working to accepted standards of practice and ethics, and reporting in reputable peer-reviewed sources. They should also be accredited in line with any recognition schemes in place for their field of expertise.

Stakeholders – The individuals or institutions with a defined interest in the archaeological work being conducted, or who are impacted by the outcomes. Examples include the licensee[s] undertaking the project, HED, museums, representatives of the developers or landowners, and specialists working on the project

Storage box – The numbered box into which the site archive is placed for long-term storage.

Working excavation archive – The records and materials gathered during an archaeological excavation and retained for analysis prior to selection for the **archaeological excavation archive**.



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